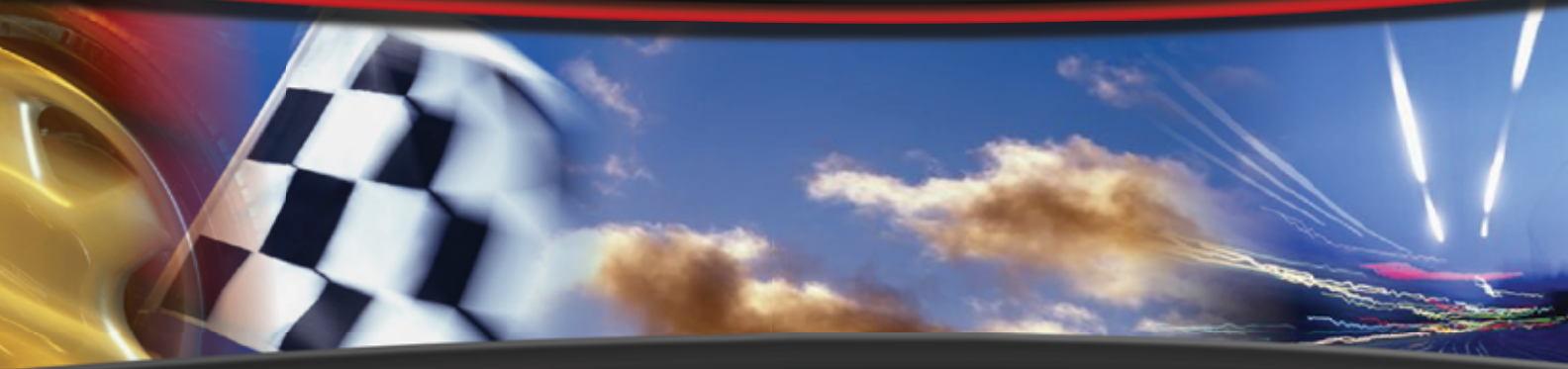


Annual Report **2005**



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**QUANTUMTECSTAR**  
...from concept to production

# QUANTUMTECSTAR

...from concept to production

## Profile

Quantum is a leader in powertrain engineering, system integration, manufacturing, and assembly of packaged fuel systems and accessories. We provide these services and products for specialty vehicles and applications including fuel cells, hybrids, alternative fuels, hydrogen refueling, new body styles, mid-cycle vehicle product enhancements, and high performance engines and drivetrains for Original Equipment Manufacturers ("OEMs") and OEM dealer networks.

We are uniquely positioned to integrate advanced fuel system and electric drive system technologies for fuel cell and hybrid vehicles based on our years of experience in vehicle-level design, vehicle electronics, and system integration. We also design, engineer, and manufacture complete hybrid and fuel cell vehicles.

Prior to our merger with Starcraft Corporation, now called Tecstar Automotive Group, our primary business consisted of the design, manufacture, and supply of packaged fuel systems to OEMs and other customers such as the U.S. Army and aerospace companies, for use in fuel

cells, hydrogen hybrids, and alternative fuel vehicles. Quantum's technologies include fuel storage, fuel metering, and electronic control systems.

With the acquisition of Tecstar, our business now also includes complete automotive supply operations, primarily consisting of automotive vehicle design, specialty vehicle equipment design, powertrain engineering, second-stage manufacturing of specialty vehicles, and engineering and design of concept vehicles.

## Providing Solutions

Quantum has assembled the major disciplines to design, develop, validate, certify, and commercialize components, powertrains, advanced fuel and propulsion systems, hydrogen refuelers, and complete vehicles. We provide a total system view in developing and manufacturing products for automotive OEMs, aerospace customers, the U.S. Army, industrial clients, and the performance aftermarket. Our products provide solutions from concept to production.

## Industries



Hydrogen & Alternative Fuels



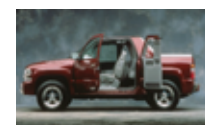
Hydrogen Refueling



Defense & Military



Aerospace



Mainstream Automotive



Industrial & Commercial



Automotive Aftermarket



General Motors Sequel Fuel Cell Electric Hybrid



AMV Aggressor Fuel Cell Hybrid for the Military

August 12, 2005

## **Dear Stockholders,**

Fiscal 2005 was a year that included a number of important accomplishments for Quantum. The foremost was our strategic acquisition of Starcraft, which positions Quantum as a complete tier one OEM supplier for fuel cell and hydrogen vehicles, hybrids, and specialty equipment and limited edition vehicle programs.

Starcraft, which we now refer to as Tecstar, complements and enhances Quantum's capabilities with its tier one automotive design and assembly experience. We believe that we are now uniquely positioned to not only participate in, but to help drive the anticipated commercialization of fuel cell vehicles. We also believe that the acquisition of Tecstar Automotive Group provides a strong foundation for the design, integration, and assembly of not only fuel cell vehicles, but also specialized and hybrid vehicles. We believe that the acquisition significantly enhances our ability to provide our customers advanced systems, high performance and styling products and services, and vehicles from concept to production.

Our Quantum-Tecstar integration efforts are progressing as anticipated. We have leveraged existing facilities to expand upon customer programs and have consolidated activities in our administrative and operational areas to take advantage of cost savings and utilize each other's competencies. Perhaps the most significant aspect of our integration efforts has been to combine our sales and marketing team. We are meeting with automakers worldwide to present our full array of technologies and capabilities and exploring opportunities to be the auto world's supplier of choice as an experienced one-stop-shop for a wide variety of programs. We believe that our expanded operational and resource base is appealing to automakers that seek partners that offer full service capabilities.

## **2005 Accomplishments**

This year's accomplishments, along with the Tecstar acquisition, highlight our transition into specialized vehicle design and assembly, while continuing to advance our capabilities in hydrogen and hybrid fuel system application and packaging. Over the past year, we:

- Acquired Starcraft, a tier one second-stage specialty vehicle manufacturer;
- Provided design, integration and assembly services to approximately 15 OEMs and government agencies for over 36 vehicle platforms or other applications ranging from dedicated hydrogen fuel systems to specialty assembly packages;
- Reported record levels of contract revenue related to the hydrogen economy and fuel cell vehicle commercialization;
- Provided a specialized hydrogen storage system that allowed General Motors' Sequel fuel cell vehicle to achieve a 300 mile driving range;
- Produced and delivered the "Quantum Aggressor," a high performance off road fuel cell hybrid electric vehicle to the U.S. Army, which we designed and built from the ground up;
- Produced and delivered the "Quantum MP Hybrids," two hybrid vehicles to be evaluated by the U.S. Army as a low cost, fuel efficient solution for military base transportation;
- Delivered next generation hydrogen storage systems to Toyota for its second fuel cell vehicle platform;
- Initiated production of the hydrogen hybrid vehicles for South Coast Air Quality Management District's hydrogen fleet;

- Developed and integrated the hydrogen fuel system and the special styling accessories in collaboration with General Motors, on the H2HUMMER, which was unveiled by California Governor Arnold Schwarzenegger as part of his efforts to develop and bring attention to his “Hydrogen Highway Network” initiative;
- Were awarded a patent for transportable hydrogen refueling systems and are currently building a complete transportable hydrogen refueling system for the U.S. Army based on this patent;
- Received a contract from General Motors to produce natural gas pick-up trucks through model year 2006; and
- Were added to the Russell 2000 and 3000 indexes, which are widely used by investment managers and institutional investors for index funds and as benchmarks for a variety of investment strategies.

We believe that this growing list of accomplishments, technologies, and capabilities positions Quantum as a leader in system integration, powertrain engineering, manufacturing, and assembly of packaged fuel systems and accessories for specialty vehicles and applications including fuel cells, hybrids, alternative fuels, hydrogen refueling, new vehicle platforms, mid-cycle vehicle product enhancements, and high performance engines and drive trains for our customers.

## **Progress Toward Fuel Cell Vehicle Commercialization**

We have seen a heightened level of commercial and government activity over the past twelve months relating to fuel cells and hydrogen. We believe the foundation for a hydrogen economy against a backdrop of increasing oil prices and growing concerns over long term energy supply is solidifying and on the rise. Our real excitement emanates from the internal progress we have made in advancing technologies to meet commercialization requirements, broadening our capabilities, and developing and producing real solutions for the hydrogen economy stakeholders.

As we transition from research and development to commercialization, we have reduced the material costs in our hydrogen storage tanks by approximately 70% since 2001 and have increased our tank manufacturing capacity by 150% since 2003 through our customers’ programs and our own internal initiatives. We are currently under contract with the U.S. Department of Energy to advance our hydrogen storage technology toward commercialization by developing improved materials, optimizing manufacturing processes, and lowering system costs. We are also anticipating programs for aerospace applications that may further advance our tank technology and contribute toward its commercialization. Additionally, several of our hydrogen storage systems are currently being developed for “production intent” programs from our automotive customers.

We believe that the momentum of the hydrogen economy is gaining not only within the OEMs, but beyond them as well. Hydrogen refueling infrastructure stakeholders, government agencies, and elected officials are also participating in a wide variety of hydrogen initiatives.

Approximately 30 hydrogen-refueling stations were opened worldwide during the past twelve months. Some of these are open for retail service, such as the station opened by Shell Hydrogen in Washington D.C. There are now 100 hydrogen-refueling stations worldwide. In California alone, where Governor Schwarzenegger is actively promoting a “Hydrogen Highway Network,” there are 16 operational hydrogen stations with plans for 23 more by 2007, and a total of 50 to 100 more planned to open by 2010. In addition to signing an executive order that calls for the establishment of a hydrogen refueling infrastructure throughout California, Governor Schwarzenegger continues to support hydrogen technologies and has stated that he believes that hydrogen fuel technology is one of the “environmental technologies [that] will allow us to conserve energy, cut pollution, and protect our natural resources.”

The Federal government continues to promote hydrogen as a viable fuel of the future with funding for research and development, hydrogen infrastructure implementation, codes and standards, and education programs. The U.S. Department of Energy currently has five hydrogen fleet and infrastructure demonstration and validation projects underway around the country. The U.S. energy bill, which is currently being considered by Congress, includes provisions for development, demonstration, and the ultimate commercialization of hydrogen and fuel cell technologies. The U.S. Department of Energy currently has five hydrogen fleet and infrastructure demonstration and validation projects underway around the country.

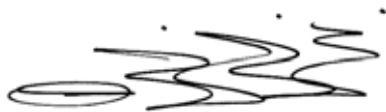
## Looking Forward

The promise of the hydrogen economy is brighter today than at any point in our history. We are more confident than ever that Quantum is positioned to continue to be a prominent player in the hydrogen economy. Our strategy is to continue to design, integrate, and assemble hydrogen and other packaged fuel systems and drive packages for fuel cell vehicles, hybrids, alternative fuels, and other emerging applications. We also plan to strengthen our position as a tier-one automotive supplier and industry leader in providing vehicle-level design, powertrain engineering, power electronics, electric drive systems, system integration, and design and assembly of packaged fuel systems. We also intend to utilize our vehicle manufacturing and second-stage assembly capability to capture early limited production business as fuel cell and hydrogen-powered hybrid vehicles move toward mass commercialization. We expect to leverage our relationships with several domestic and international automotive OEMs to increase the revenue of our second-stage assembly products and services.

We believe we are currently in the strongest position we have ever been in to capitalize on these opportunities. We have over 700 employees strategically located in 16 facilities supporting research and development activities, product development and production, vehicle assembly, and business development. Our customer base continues to grow and the structure of our operations and organization allows us to swiftly react to changes in our markets. Our financial condition is excellent with a healthy cash and working capital position, available credit facilities, and a strong stockholders' equity position.

Our progress in fiscal 2005 was not possible without change. Our employees have responded well to this change and have performed admirably through the integration efforts. I am proud of their accomplishments this past year and look forward to the opportunities for more successes next year and beyond. We remain focused on bringing value to our stockholders. On behalf of all our employees, thank you for giving us the opportunity to serve you.

Best regards,

A handwritten signature in black ink, appearing to read "Alan P. Niedzwiecki". The signature is stylized with a large, sweeping initial "A" and "N".

Alan P. Niedzwiecki  
President & CEO

**Form 10-K**

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**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

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**FORM 10-K**

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**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended April 30, 2005

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File No.: 0-49629

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**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.**

(Exact name of Registrant as specified in its charter)

Delaware  
(State or other jurisdiction  
of incorporation or organization)

33-0933072  
(IRS Employer  
Identification Number)

17872 Cartwright Road, Irvine, CA 92614  
(Address of principal executive offices, including zip code)

(949) 399-4500  
(Registrant's telephone number, including area code)

**Securities registered pursuant to Section 12(b) of the Act:**

None

**Securities registered pursuant to Section 12(g) of the Act:**

**Common Stock, \$0.001 par value per share**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the Registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes  No

The aggregate market value of the Common Stock held by non-affiliates of the Registrant as of October 29, 2004 was approximately \$201.3 million, based upon the closing sale price of the Registrant's Common Stock on such date, as reported on the Nasdaq National Market. Shares of Common Stock held by each executive officer and director and each person owning more than 10% of the outstanding Common Stock of the Registrant have been excluded in that such persons may be deemed to be affiliates of the Registrant. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

Number of shares outstanding of each of the issuer's classes of common stock as of June 20, 2005: 51,747,657 shares of Common Stock, \$.001 par value per share, and 999,969 shares of Series B Common Stock, \$.001 par value per share.

**Documents Incorporated By Reference Into Part III:**

Portions of the definitive Proxy Statement for the Registrant's fiscal 2005 Annual Meeting of Stockholders to be filed pursuant to Regulation 14A within 120 days after the Registrant's fiscal year end of April 30, 2005 are incorporated by reference into Part III of this Report.

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**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.**

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## FORWARD-LOOKING STATEMENTS

Some of the information in this annual report and in the documents that we incorporate by reference contains “forward-looking statements” that involve risks and uncertainties. These forward-looking statements come within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, and are subject to the “safe harbor” created by those sections. These statements relate to, among other things: our market and business strategies; our plans to develop and commercialize our products; our ability to provide engineering and manufacturing services to our customers; our ability to integrate acquisitions and realize expected synergies thereof; our plans to expand our customer base; our ability to establish and maintain necessary strategic relationships; our ability to maintain our competitive advantage; our ability to secure the necessary certification of our products and comply with applicable standards; our ability to establish and effectively operate our manufacturing sites; our ability to attract and retain necessary employees; our ability to protect our intellectual property; our position in our markets; government support of hydrogen vehicles and establishing infrastructure to support them; and the future growth of the fuel cell vehicle industry and specialty automotive equipment industries. All statements included in this annual report and the documents that we incorporate by reference, other than those that are historical, are forward-looking statements. These statements include words such as “may,” “could,” “will,” “should,” “assume,” “expect,” “anticipate,” “plan,” “intend,” “believe,” “predict,” “estimate,” “forecast,” “outlook,” “potential,” or “continue,” or the negative of these terms, and other comparable terminology. Actual results could differ materially from those anticipated in these forward-looking statements as a result of a number of risks and other factors, including those described below, elsewhere in this annual report and in the other filings we make from time to time with the SEC.

The following risks and other factors, in addition to those identified in this annual report under the heading “Risk Factors,” could cause actual results, and actual events that occur, to differ materially from those contemplated by the forward-looking statements:

- the possibility that we will not fully realize the anticipated benefits of the merger with Starcraft;
- our ability to successfully integrate the operations of Starcraft with our operations;
- the combined company’s ability to execute its business strategy;
- the combined company’s reliance on General Motors;
- the growth of the specialty vehicle and hydrogen economy markets;
- changes in general economic and business conditions;
- the combined company’s financial condition and liquidity, as well as its future cash flows and earnings;
- the combined company’s level of operating expenses;
- the effect, interpretation or application of new or existing laws, regulations and court decisions;
- the availability of funding;
- developments in technology by the combined company and its competitors;
- catastrophic events and natural disasters such as fires and floods;
- acts of war or terrorist activities; and
- other economic, political and technological risks and uncertainties.

All forward-looking statements contained in this annual report are made only as of the date hereof. We are under no obligation—and we expressly disclaim any such obligation—to update or alter our forward-looking statements, whether as a result of new information, future events or otherwise. You should not place undue reliance on forward-looking statements.

## PART I

### Item 1. Business.

#### Overview

We are a leader in powertrain engineering, system integration, manufacturing and assembly of packaged fuel systems and accessories for specialty vehicles and applications including fuel cells, hybrids, alternative fuels, hydrogen refueling, new body styles, mid-cycle vehicle product enhancements and high performance engines and drive trains for Original Equipment Manufacturers (“OEMs”) and OEM dealer networks. We are uniquely positioned to integrate advanced fuel system and electric drive system technologies for fuel cell and hybrid vehicles based on our years of experience in vehicle-level design, vehicle electronics and system integration. We also design, engineer and manufacture hybrid and fuel cell vehicles.

Prior to our merger with Starcraft Corporation (“Starcraft”) on March 3, 2005, our primary business consisted of design, manufacture, and supply of packaged fuel systems to OEMs for use in fuel cell, hydrogen hybrids and alternative fuel vehicles and other fuel cell applications. With the acquisition of Starcraft, our combined business now additionally includes Starcraft’s automotive supply operations, primarily consisting of second-stage manufacturing of specialty equipment for pick-up trucks and sport utility vehicles (SUVs), engineering and design capabilities for concept vehicles, and distribution of automotive accessories through OEM dealer networks.

#### Background

We were incorporated in Delaware in October 2000 as a wholly-owned subsidiary of IMPCO Technologies, Inc. IMPCO conducted our business through various departments, first as a division (the Automotive OEM Division) and most recently as a subsidiary (Quantum Fuel Systems Technologies Worldwide, Inc.). On July 23, 2002, IMPCO distributed to its stockholders, on a pro-rata basis, all of the shares of Quantum common stock owned by IMPCO. Each IMPCO stockholder received one share of Quantum common stock for each share of IMPCO common stock owned as of July 5, 2002, the record date for the distribution. Immediately prior to the distribution, IMPCO transferred to Quantum substantially all of the operations, assets and liabilities constituting IMPCO’s automotive OEM business.

Immediately following the completion of our spin-off from IMPCO, our strategic alliance with General Motors became effective. As of June 20, 2005, General Motors has an 8.6% equity position in our company.

On November 23, 2004, we entered into an Agreement and Plan of Merger to acquire Starcraft in a tax-free stock-for-stock exchange. The merger was completed on March 3, 2005. In connection with the merger, each share of Starcraft common stock that was outstanding at the effective time of the merger was converted into the right to receive 2.341 shares of Quantum common stock. Total Quantum shares issued in connection with the merger amounted to approximately 21.0 million shares and represented approximately 40% of the total Quantum shares outstanding following the completion of the merger. As a result of the merger, Starcraft became a wholly-owned subsidiary of Quantum. As Starcraft’s continuing operations primarily consist of second-stage manufacturing and engineering activities under its Tecstar operations, we now refer to the entire operations acquired from the merger (including Starcraft and its subsidiaries) as the Tecstar Automotive Group.

Under the purchase method of accounting, the total consideration for the transaction was \$146.5 million and consisted of the exchange of Starcraft shares for our common stock valued at \$134.6 million, cash payments for Starcraft stock options and directors’ shares of \$7.2 million, direct transaction fees and expenses of \$3.6 million, and a separation agreement with Starcraft’s chairman of the board valued at \$1.1 million. The long-term indebtedness of Starcraft and its subsidiaries remained outstanding following the merger, including Starcraft’s 8.5% convertible subordinated promissory notes due July 1, 2009 (the “Starcraft Convertible Notes”) in the aggregate principal amount of \$15.0 million and approximately \$4.7 million in other long-term indebtedness as of April 30, 2005. We also assumed the obligation to issue our common stock upon conversion of the Starcraft

Convertible Notes. Because the value of the shares of our common stock issuable in the merger in exchange for a share of Starcraft common stock was less than the conversion price of the Starcraft Convertible Notes in effect immediately prior to the completion of the merger, the conversion price of the Starcraft Convertible Notes was adjusted to pursuant to their terms to \$5.77, which was the closing price of our common stock immediately prior to the closing date of the merger.

## **Business Operations**

### *Fuel Cell, Hybrid and Alternative Fuels Operations*

We provide powertrain engineering, system integration, manufacturing and assembly of packaged fuel systems for a variety of automotive applications including fuel cell, hybrid, and alternative fuel vehicles in the transportation, industrial, and military industries. We also design, engineer and manufacture hybrid and fuel cell concept vehicles, and hydrogen refueling systems focused on early infrastructure development. Our packaged fuel systems comprise the storage, monitoring, control, and injection of gaseous fuels to improve efficiency, enhance power output, and reduce pollutant emissions from internal combustion engines and fuel cell systems.

We supply our advanced gaseous fuel systems for alternative fuel vehicles to OEM customers for use by consumers and for commercial and government fleets. Since 1997, we have sold approximately 18,100 fuel systems for alternative fuel vehicles, primarily to General Motors Corporation and its affiliates (“General Motors”), which in turn have sold substantially all of these vehicles to its customers. We also provide our gaseous fuel systems and hydrogen refueling products for fuel cell applications to major OEMs through funded research and development contracts and on a prototype basis. These fuel cell and hydrogen refueling products are not currently manufactured in high volumes and will require additional product development; however, we believe that a commercial market will begin to develop for these products over the next five years. We believe that these systems will reach production volumes only if OEMs produce fuel cell and hydrogen-based vehicles and hydrogen refueling products using our systems on a commercial basis.

A number of automotive and industrial manufacturers are developing alternative clean power systems using fuel cells or clean burning gaseous fuels in order to decrease fuel costs, lessen dependence on crude oil and reduce harmful emissions. Our products for these markets consist primarily of fuel storage, fuel delivery and electronic and drive system control systems, as well as system integration of our products into fuel cell, hybrid, and alternative fuel vehicles, and hydrogen refueling products, which includes the complete design of fuel cell and hybrid vehicles. We offer the following products and services to enable the development and commercialization of these systems:

- *fuel storage*—advanced composite, ultra-lightweight tanks that provide cost-effective storage of hydrogen or natural gas;
- *fuel delivery*—pressure regulators, fuel injectors, flow control valves, and other components designed to control the pressure, flow and metering of gaseous fuels;
- *electronic and drive system controls*—solid-state components and proprietary software that monitor and optimize fuel flow and drive systems to meet manufacturers’ fuel cell or engine requirements; and
- *systems integration*—services to integrate advanced fuel storage, fuel delivery, electronic control components, electric drive systems, power electronics, and other ancillary components to meet OEM requirements, including the complete design of fuel cell and hybrid concept vehicles.

The current market for our packaged fuel systems for fuel cell and hydrogen applications is the emerging world market for passenger, fleet, industrial and military vehicles powered by fuel cells and hybrid engines using hydrogen, and hydrogen refueling products focused on the early refueling infrastructure needs. We plan to continue the development of our hydrogen vehicle and refueling technologies to meet market opportunities. We are focusing our fuel cell enabling technology marketing efforts on North America, Europe and Asia-Pacific.

### *Specialty Automotive Equipment and Second-Stage Manufacturing Operations*

Our Tecstar Automotive Group is a Tier One second-stage manufacturer that designs, engineers and integrates specialty equipment products into motor vehicle applications, primarily General Motors' pick-up trucks and sport utility vehicles. Our accessory packages are typically for new OEM body styles, mid-cycle enhancements, specialty products, and high-performance engines and drivetrains. We also have engineering and design capabilities focused on powertrain projects and complete vehicle concepts, such as high-performance and racing engines for cars, boats and motorcycles, and complete race cars.

We engineer and validate certain appearance items to OEM standards, primarily for General Motors' pick-up trucks and sport utility vehicles. We receive vehicle chassis from the OEM and add these parts through a process called "second-stage manufacturing." The chassis are provided by the OEM on a drop-ship basis. After completing the final appearance assembly work, the vehicles are placed back into the normal OEM distribution stream. The vehicles carry the full OEM warranty and are marketed directly by the OEM through its dealerships. We engineer and design concept vehicles and distribute automotive parts and OEM-quality automotive accessories through OEM dealer networks and other strategic and distribution partners. Tecstar Automotive Group is considered a Tier One automotive supplier to the OEMs.

Our second-stage assembly programs typically range from two to five years over the life of the OEM chassis and are backed by short-term purchase orders standard in the industry. We provide a limited warranty of our products to the OEM, which is substantially the same as the OEM warranty provided to the OEM's retail customers.

The current market for our specialty vehicle equipment products and services is the growing world market for vehicle personalization products. We plan to continue the development of our appearance and performance products to provide OEMs with faster time to market, less costly, high quality exterior and interior appearance packages and to meet market opportunities for the sale and distribution of aftermarket parts and products. We plan to expand our capabilities and products to new customers. We also intend to promote our vehicle manufacturing capabilities, which are currently being utilized for the installation of our specialty equipment products, for the early production of fuel cell and other advanced technology vehicles, such as hydrogen-powered hybrids.

## **Industry Overview**

### *Fuel Cell and Hydrogen Vehicle Industry*

The emerging fuel cell and hydrogen vehicle industry offers a technological option to address increasing worldwide energy costs, the long-term availability of petroleum reserves and environmental concerns. Fuel cell vehicles have emerged as a potential alternative to existing conventional internal combustion engine vehicles because of their higher efficiency, reduced noise and zero tailpipe emissions. Fuel cell industry participants are currently targeting the transportation and hydrogen refueling infrastructure markets. We believe that our fuel cell enabling products of gaseous fuel storage, fuel delivery and electronic and drive system control systems along with our fuel system integration and vehicle assembly experience can be effectively applied in these markets.

A fuel cell is an electrochemical device that produces electricity by combining hydrogen with oxygen from the air. This electrochemical reaction occurs silently and without combustion, with useable heat and water as the only by-products. The system can use as its base fuel either pure hydrogen or hydrogen derived from hydrocarbon fuels, such as methanol, natural gas or petroleum, using a device called a reformer. A reformer breaks down hydrocarbon fuels using heat and a catalytic process. Regardless of the fuel used to provide hydrogen, the fuel cell system will require on-board hydrogen storage, fuel delivery and electronic controls. Furthermore, keys to optimizing the performance of a fuel cell are proper metering and delivery of hydrogen fuel and air to its fuel cell stacks and efficient storage of the fuel to maximize its total operation time.

The use of hydrogen as a fuel of the future has been gaining support worldwide. Domestically, President Bush continues to promote his goal of achieving energy independence for the United States, while dramatically improving the environment, which was first expressed in his 2003 State of the Union Address. Furthermore, both

the House and Senate versions of the proposed Energy Policy Act of 2005 established a comprehensive national policy that includes provisions intended to accelerate the implementation of hydrogen as an energy carrier. Although the detailed provisions related to hydrogen and fuel cell technologies differ between the proposed House and Senate versions of this Act, both include the authorization of over \$3.2 billion of investment through 2010 by the federal government towards the development, demonstration, and ultimate commercialization of these technologies. The proposed funding is intended to support the research, development, and demonstration of hydrogen production, storage, distribution and dispensing, and transport. Both versions of the Energy Bill also support the research, development, and demonstration of fuel cell systems for stationary and portable power generation as well as for transportation applications, including light- and heavy-duty vehicles. Furthermore, the proposed Senate version has also set goals for the production and deployment of not less than 100,000 hydrogen-fueled vehicles in the United States by 2010 and 2,500,000 hydrogen-fueled vehicles by 2020.

The U.S. Department of Energy has published the National Hydrogen Energy Roadmap that provides a plan for the coordinated, long-term, public and private efforts required for hydrogen energy development. Quantum's President and CEO, Alan Niedzwiecki, led the group responsible for the hydrogen storage section of the Roadmap.

Approximately 30 hydrogen-refueling stations have been opened worldwide in the past twelve months. Some of these are open for retail service, such as the station opened by Shell Hydrogen in Washington D.C. There are now 100 hydrogen-refueling stations worldwide. The trend is toward compressed hydrogen. In California alone, where Governor Schwarzenegger is actively promoting a "Hydrogen Highway Network," there are 16 operational hydrogen stations with plans for 23 more by 2007, and a total of 50-100 by 2010. In addition to signing an executive order that calls for a hydrogen refueling infrastructure throughout California, the Governor continues to support hydrogen technologies and claims that hydrogen is one of the "environmental technologies that will allow us to conserve energy cut pollution and protect our natural resources." Other states that have recently established statewide initiatives to encourage the implementation of hydrogen and fuel cells include Colorado, Florida, Illinois, Michigan, New Mexico, New York and Ohio.

The number of fuel cell and hydrogen demonstration programs is increasing worldwide, examples of which include the California Fuel Cell Partnership, California Stationary Fuel Cell Collaborative, Compressed Hydrogen Infrastructure Program, Clean Energy Partnership in Berlin, Controlled Hydrogen Fleet & Infrastructure Demonstration and Validation Project, Fuel Cell Bus Club, Japan Hydrogen & Fuel Cell Demonstration Project, Hydrogen Highway Network in California, BC Hydrogen Highway in British Columbia, AQMD Test Fleet, Hi Way Initiative, Ruhr-Alps-Milan Hydrogen Supply Chain Integrated Project, Hydrogen Corridor in Canada, Norwegian HyNor Project, Illinois Hydrogen Highway, The Northern H in the Upper Midwest, and Singapore's Initiative in Energy Technology.

We believe that these government and commercial activities are positive indications of the momentum behind the development of a hydrogen economy.

Fuel cell and hydrogen-powered hybrid vehicles are being designed to provide clean, quiet power for a variety of applications in transportation, fleet, industrial and military vehicles. The commercialization of fuel cells in all of these markets will require cost reductions for the entire system, including the fuel cell stack, fuel system, balance-of-plant, and assembly.

In the automotive market, each of DaimlerChrysler, Ford, General Motors, Honda, Hyundai, Nissan, and Toyota Motor Corporation has unveiled fuel cell vehicles, with mass production of fuel cell vehicles anticipated by General Motors to begin close to the end of the decade, by DaimlerChrysler to begin by 2012 to 2015, and by Toyota to begin by 2015. Allied Business Intelligence ("ABI"), a technology research and consultancy firm that publishes intelligence on the automotive industry and energy markets, projects that mass production of fuel cell vehicles will begin in 2010 and that the industry will produce approximately 500,000 fuel cell vehicles per year by 2015.

We believe that a market for hybrid vehicles and internal combustion engines powered by hydrogen may also be an enabling strategy to prepare for the emerging fuel cell vehicle market. Hydrogen-powered hybrids and

other hydrogen vehicles can begin to drive the demand for the refueling infrastructure of this clean fuel, which is a critical component to fuel cell vehicle commercialization. This counters the “chicken-or-the-egg” dilemma. South Coast Air Quality Management District in Southern California is positioning the region to be ready for fuel cell vehicles by initiating a hydrogen-powered hybrid program. We believe that this can be the model for other markets where fuel cell vehicles will emerge, e.g., North America, Europe and Asia-Pacific, and thus we intend to initially focus our marketing efforts of hydrogen hybrid systems in these areas.

We believe that additional markets will develop in other areas, including boats, forklifts, golf carts, recreational vehicles, auxiliary power units, and military applications. The commercialization of fuel cells in all of these markets will require across-the-board cost reductions for the entire system, including the fuel cell stack, fuel system, balance-of-plant, and assembly. As cost reduction targets are achieved in volume production, we believe that the fuel subsystem will represent approximately 20% of the cost of a fuel cell or hydrogen system.

Commercialization of fuel cell vehicles is dependent upon establishing cost-effective on-board fuel storage solutions, hydrogen storage and handling codes and standards, and a hydrogen-refueling infrastructure. Safety is also a primary concern when dealing with highly compressed gases. The fuel storage systems must be able to withstand rigorous testing as individual components and as part of the fuel system on the vehicle. Safety concerns apply to the fuel system as a whole, including the tank, regulator and fuel lines, all of which need to comply with applicable safety standards. Additionally, to ensure widespread commercialization, the fuel storage and delivery systems need to provide adequate range, be of acceptable size and shape, and perform similarly to conventionally fueled vehicles without unacceptably high cost. We believe interim steps will be taken by governments to provide initial refueling infrastructure for demonstration fleets, government programs, commercial fleet operators, and initial consumer commercialization. This initial infrastructure could include mobile refueling units, compact stationary refueling units and bulk transport trailers.

#### *Specialty Automotive Equipment and Second-Stage Manufacturing Industry*

The specialty equipment and second-stage manufacturing industry is driven by the growing vehicle personalization market, which is currently a \$31 billion market in annual sales, according to the Specialty Equipment Manufacturers Association (SEMA). OEMs use appearance and performance enhancing packages to increase the appeal of their vehicles to their consumers. Automotive dealers and dealer networks have used styling and performance packages to gain competitive advantages in the market place. Traditionally, these packages have been offered by smaller, niche businesses focusing on components and parts utilizing low-volume assembly shops for installation and distributing parts via aftermarket channels. Over the last several years, the industry has matured from a cottage industry to the emergence of OEM-level second-stage manufactures, and assembly operations providing OEM-level certified systems and installation processes. Vehicle OEMs are also internally producing more automobiles with advanced styling packages and performance enhancements. The certified components and systems are designed and engineered for a specific vehicle platform and are installed via the second-stage manufacturing process. We target not only the vehicle personalization market offered by the OEMs, but also through dealer networks, the aftermarket, and direct to consumer automotive parts industry.

Vehicle personalization items we add to OEM chassis include tires and wheels, exterior body cladding, interior trim, roof racks, grills and graphics. We develop and distribute aftermarket parts such as body cladding, wheels, interior trim panels, engine dress kits, light bars, floor mats and hood scoops. These parts are OEM certified parts using advanced engineering and design methods to ensure durability and high quality.

SEMA targets continued growth in this industry. Based on SEMA announcements, industry trends and other anticipated activity from automotive OEMs, we expect the industry to grow approximately 7% to 10% annually over the next several years.

The sales of specialty equipment and second-stage manufacturing services are directly impacted by the size of the automotive industry and the relative market share of the major OEMs. Further, OEMs periodically reduce production or close plants for several months for model changeovers that adversely affect operating results of

industry participants. Accordingly, a decline in sales in the automotive market or in a particular OEM's automotive sales, or production cutbacks and plant shut downs for model changeovers by an OEM could have an adverse impact on sales and profits. Sales may be adversely affected if OEM's perform such second-stage manufacturing programs themselves and do not outsource the business. Sales tend to be subject to long-term contracts with the OEMs, which, at their option, may extend or reduce the terms of such contracts depending upon market conditions and macro-level manufacturing plans. There are no assurances that programs will be renewed on OEM chassis changeovers. Primarily all of Tecstar Automotive Group's sales are with one customer, General Motors.

## **Products**

### *Fuel System Products*

Our core fuel system products include gaseous fuel storage, fuel delivery, and electronic and drive system controls for use in OEM fuel cell, alternative fuel and hybrid vehicles. Our advanced enabling products for fuel cell applications are used in transportation and industrial vehicles and hydrogen refueling products for the infrastructure to support fuel cell vehicles. We continue to improve our products and develop new systems to meet increasingly stringent vehicle operational and durability requirements in automotive OEM fuel cell powered vehicles. We are also developing improved system technologies using fuel injectors, high- and low-pressure regulators, on-board diagnostics, high-performance fuel system control modules, fuel lock-offs and related components for application in hybrid vehicles and hydrogen internal combustion engines. We design and manufacture computerized controls, regulators and automatic shut-off equipment, and lightweight, high-pressure hydrogen and natural gas storage tanks using our TriShield™ technology.

There can be no assurance that any of our fuel system products under development will be completed or that they will receive market acceptance.

*Fuel Storage Products.* Our fuel storage products include primarily cylindrical tanks and other advanced design storage products that store fuel at high pressures. We provide lightweight, all-composite storage tank technologies for compressed hydrogen and natural gas. The lightweight nature of the tank, coupled with high hydrogen mass by volume, improves the range of hydrogen-powered fuel cell vehicles. Our high-pressure tank maximizes hydrogen storage in a given space, optimizing the volume of hydrogen stored on board. These fuel storage products are production ready and are currently on OEM produced vehicles. As we continue to advance these technologies, our efforts will be OEM customer driven with a focus on cost reductions, storage efficiencies and weight. We expect a certain portion of any future development costs to be funded by customer-sponsored programs.

*Fuel Delivery Products.* Our fuel delivery products consist of in-tank and external regulators, injectors and valves. We have designed our in-tank and external regulators for use with hydrogen for fuel cell applications. Our in-tank design provides greater safety by eliminating the need for high-pressure fuel lines outside of the fuel storage tank. The unit is also cost-effective because it incorporates the features of many independent components, thereby eliminating the need to install several separate components. We have designed our patented fuel injector for use with dry gases such as hydrogen, propane or natural gas. Our fuel injector is capable of handling the high flow rates needed in automotive OEM applications, while offering superior durability, longer life, less noise and lower cost as compared to other gaseous fuel injectors. This component also allows for very precise metering of fuel, which is critical to optimizing a fuel cell system. These fuel delivery products are production ready and are currently on OEM produced vehicles. Advancement of these technologies is focused on application engineering for specific vehicle customization in order to satisfy OEM-specific mechanization and application design. We expect any application development expenses for our fuel delivery products to be funded by customer-sponsored programs.

*Electronic and Drive System Control Products.* Our electronic and drive system control products range from eight- to 32-bit architecture. Certain control products precisely control the flow and pressure of gaseous fuels such as natural gas, hydrogen and other gases such as air. We use our electronic and drive system controls,

coupled with our proprietary software, to optimize fuel flow and drive systems in hybrid and internal combustion engine applications. We believe, however, that there are numerous other potential applications for these controls. The development of electronic controls and software is generally driven by a specific application or program and is usually funded by customer-sponsored programs.

#### *Specialty Equipment Products*

Our Tecstar Automotive Group's vehicle personalization products include styling and performance products. We provide a wide range of styling products including exterior and interior products designed to provide unique vehicle styling and functionality, such as body panels, rack systems and running boards. Our performance products provide enhanced engine performance with the goal of enhancing the performance of a given vehicle.

*Styling Products.* Our styling products include such items as rack systems, electronics, ground effects, aerodynamic enhancements, instrument panels, audio/video equipment, body panels, running boards, rack systems, wheel and tire assemblies, and other items that enhance vehicle appearance, passenger comfort and safety and provide additional vehicle functionality. These products are generally designed and customized for a specific vehicle and are OEM-certified and OEM-level products.

*Performance Products.* Our performance products include engines, engine parts, cooling system parts and chassis products. These products are generally designed and customized for a specific vehicle and are OEM-certified and OEM-level products.

#### **Services**

We provide services, through both our Quantum Fuel Systems and Tecstar Automotive Group operations, in the areas of design, development, validation, certification, manufacturing, and after-sales service support. We provide our customers with the following services to support their programs for fuel cell vehicles, hydrogen and internal combustion engine vehicles, hybrid vehicles, alternative fuel vehicles, hydrogen refueling applications, specialty equipment, and second-stage manufacturing:

- *Vehicle Design.* We design complete concept and low-volume production vehicles to demonstrate fuel cell and hybrid vehicle architecture and our styling and performance products.
- *Systems Integration.* We integrate our advanced fuel storage, fuel delivery, and electronic control components into hydrogen fueled vehicles, fuel cell applications, as well as hydrogen refueling products. We integrate our vehicle personalization products into specialty and limited edition vehicles. We also employ rapid prototyping techniques, which accelerate the iterative design process and result in a more accurate design.
- *Testing and Validation.* To increase the likelihood of high success rates at the system level, we perform component, subsystem and system testing and validation. These procedures must satisfy our own internal requirements, customer-specific requirements and industry standards. If no suitable procedures exist, we generate requirements for the customer.
- *Certification and Compliance.* Our regulatory and certification engineers endeavor to implement the latest emissions and safety regulations in efforts to ensure the proper certification and ongoing compliance of our products and our business.
- *System and Vehicle Level Assembly.* We develop and manage the assembly process for integration of our systems into end products at our facilities or at our customers' facilities. We also build complete concept vehicles.
- *Training.* We develop comprehensive technical training for customers that sell and service our products as well as for those that use our products.
- *Service and Warranty.* We have extensive capabilities in developing service procedures and programs for OEMs. We also provide technical support over the telephone or at customer sites to resolve technical issues.



## **Business Strategy**

Our business strategy is to become a uniquely positioned tier-one automotive supplier and industry leader in providing vehicle-level design, powertrain engineering, power electronics, electric drive systems, system integration, manufacturing and assembly of packaged fuel systems and specialty equipment for automotive applications, including fuel cells, hybrids, alternative fuels, hydrogen refueling, new body styles, mid-cycle vehicle product enhancements and high performance engines and drive trains for OEMs, OEM dealer networks and other strategic alliance and distribution partners.

We also intend to utilize our vehicle manufacturing and second-stage assembly capability to capture the early limited production business as fuel cell and hydrogen-powered hybrid vehicles move toward mass commercialization. We expect to leverage our relationships with several automotive OEMs to increase the revenue of our second-stage assembly and styling and performance type products and services. Our strategy for achieving these objectives includes the following:

### ***Design, Integrate and Assemble Hydrogen and Other Packaged Fuel Systems and Drive Packages for Fuel Cell Vehicle, Hybrids, Alternative Fuel and Other Emerging Applications***

We plan to continue to develop our hydrogen and other fuel and drive system technologies to assist OEMs in expediting the commercialization of fuel cell, hybrid, alternative fuel and specialized vehicle applications. We also plan to develop systems to assist the military in developing fuel cell and hybrid technologies. We intend to apply our expanded vehicle-level design, powertrain engineering, vehicle electronics and system integration expertise to early development and emerging OEM and military vehicle programs to capture early limited production and assembly of new vehicles. Most of the major automotive OEMs have unveiled fuel cell vehicles with mass production of fuel cell vehicles anticipated by General Motors to begin close to the end of the decade, by DaimlerChrysler to begin between 2012 and 2015, and by Toyota to begin by 2015. We plan to focus our hydrogen and fuel cell enabling technology business development priorities in North America, Europe and Asia-Pacific.

### ***Expand Our Customer Base for Specialty Equipment and Second Stage Manufacturing***

We plan to continue to focus our efforts on designing interior and exterior specialty equipment and appearance packages that appeal to the consumer market and present these concepts to General Motors and new potential customers in an effort to provide desirable options that promote the sale of the OEMs' vehicles. We believe that these products will appeal to the broader OEM base beyond our primary customer in this market, General Motors, because we believe our products are less costly, provide OEM-quality, and enable OEMs to introduce the packages faster than they could accomplish internally. We intend to expand our specialty equipment and concept vehicle product portfolio to dealer networks and capitalize on a growing market for OEM-quality products and specialty vehicles. We also plan to leverage our existing vehicle manufacturing capabilities to position us to produce the early volumes of fuel cell and hydrogen-powered hybrid vehicles.

### ***Provide Hydrogen-Refueling Units for Initial Infrastructure for Military Applications, Development Fleets and Consumer Commercialization***

We plan to leverage our hydrogen storage, metering and control technologies, and integration capabilities to capitalize on the need for mobile and stationary hydrogen refueling units. We believe there are significant opportunities to work with OEMs and energy and petroleum companies in providing the initial refueling products such as mobile refueling units, compact stationary refueling units, and hydrogen storage for bulk transport trailers. Over the past year, we also started production of a transportable hydrogen refueler for the U.S. Army. We plan to continue assisting the military in developing their fuel cell and hybrid technologies.

### ***Increase Our Participation in the Hybrid and Alternative Fuel OEM Vehicle Markets***

We plan to leverage our technology and systems integration capabilities in the hybrid and alternative fuel OEM vehicle markets to expand our customer base and enter new OEM and international markets. Over the past

year, we delivered a hydrogen fuel cell hybrid powered light-duty all-terrain vehicle and two hybrid vehicles to the U.S. Army for evaluation. We believe that significant opportunities for growth exist in international markets and the market for hydrogen-powered hybrids. Based on the anticipated market size and projected growth rate for hybrid and alternative fuel vehicles across the globe, we have prioritized our business development efforts in Asia-Pacific, Europe and North America.

***Focus Research and Development on Fuel Cell Enabling Technologies and Securing Outside Funding to Support These Programs***

We intend to focus our research and development efforts on advancing our hydrogen enabling technologies and systems to succeeding generations to further improve performance and reduce cost. We plan to actively seek to establish joint development programs and strategic alliances with the major fuel cell developers and industry leaders in these markets and secure outside funding to support these programs. For example, under our alliance with General Motors, we are co-developing technologies that are designed to accelerate the commercialization of fuel cell applications. We are also working with aerospace companies and government agencies in advancing technologies and developing new applications and solutions to leverage into the broader hydrogen economy.

***Expand Our Participation in the Development of Hydrogen Storage and Handling Codes and Standards***

We plan to expand our participation in national and international organizations that can influence international standard setting for fuel cell and hydrogen vehicles, alternative fuel vehicles, and related supporting infrastructure. We plan to focus our involvement in these organizations to promote standards that are performance-based and consistent with and inclusive of our technologies. Members of our management team have served on the boards of key fuel cell and alternative fuel vehicle industry organizations, including the California Hydrogen Business Council, CalStart/Weststart, the National Hydrogen Association, the Natural Gas Vehicle Coalition, the Society of Automotive Engineers and the U.S. Fuel Cell Council.

**Sales and Distribution**

We derive revenue from the sale of our advanced fuel products and hydrogen fuel systems for use in fuel cell and alternative fuel vehicles manufactured by General Motors, Toyota and other OEMs, development contracts with OEMs, and government contracts focused on hydrogen fuel research. We sell our jointly developed fuel systems and components to General Motors. Through our fuel cell strategic alliance with General Motors, we are a recommended provider to General Motors of hydrogen storage, hydrogen handling and associated electronic controls for fuel cell system applications.

We derive revenue from the sale of our styling and performance products for use in vehicles primarily manufactured by General Motors, and also through parts distribution operations supplying parts for the H2 and H3 HUMMER to OEM dealers, wheels for trucks and SUVs to OEM dealers, and vehicle personalization parts through a dealer network.

We rely on our sales force and strategic partners to sell our products and services, develop new customers and consummate joint application development programs with leading OEMs in our target markets.

**Manufacturing**

Our OEM second-stage manufacturing facilities have been established in Indiana, Louisiana and Texas in the United States and in Whitby, Ontario, Canada. All of our second-stage manufacturing facilities are located near General Motors' assembly plants and are QS-9000 registered. Our parts distribution operations are located near Detroit, Michigan and in Irvine, California. In addition, we operate a tooling and plastics manufacturer in Rochester Hills, Michigan and a paint and injection plastics molder in Vaughn, Ontario, Canada.

Substantially all components for the vehicle specialty equipment products business are purchased from outside suppliers. We supply various painted parts and plastic parts internally from our Canadian paint facility and our plastics manufacturer in Rochester Hills, Michigan. The primary raw material used in these components is plastic, which we believe is readily available from several sources. Our products are generally produced upon receipt of firm orders and are designed and engineered by us. However, from time to time we may experience delays in delivery of certain components or materials from suppliers.

Our fuel system manufacturing activities currently include assembly, system installation and tank manufacturing. We assemble the majority of our components at our facility in Irvine, California, but outsource the assembly of complex electronic components to select key suppliers for certain components of developed fuel systems. Our vendor and service provider supply base is highly diversified, with none of our suppliers representing more than 15% of our raw material purchases. Complete systems are installed on vehicles at the OEM manufacturing facility or at second-stage assembly facilities. The criteria for the establishment of a site are proximity to vehicle manufacturing and delivery points. Our operations are QS-9000 certified.

### **Strategic Relationships**

We survey and evaluate on an ongoing basis the benefits of joint ventures, acquisitions and strategic alliances with our customers and other participants in the fuel cell and hydrogen vehicle industry and the specialty vehicle manufacturing industry to strengthen our global business position. We have focused our strategic alliances on expanding our market opportunities and advancing the development of our technologies. We currently have strategic marketing alliances with General Motors, AM General, IMPCO and Sumitomo. We have a technology development alliance with General Motors focused on the development of enabling technologies for hydrogen fuel cell vehicles.

#### ***AM General***

In October 2004, Starcraft formed a business venture with AM General LLC to provide second-stage manufacturing capabilities and design and engineering expertise for special edition vehicles and other low volume OEM programs. The venture, named Amstar and operated as a Limited Liability Company, will also offer a full line of aftermarket accessories to complement the General Motors special equipment packages available for HUMMER vehicles. AM General LLC and our subsidiary Tecstar, L.P., each own 50% of Amstar.

#### ***IMPCO***

In July 2002, we entered into a Strategic Alliance Agreement with IMPCO pursuant to which we will work with IMPCO in identifying and conducting research and development programs of mutual interest. As part of such research and development activities, we may develop, solely or jointly with IMPCO, technology that is owned solely by us or jointly with IMPCO. The other purpose of this relationship is to provide IMPCO access to our advanced technologies and products, including the natural gas storage tanks, fuel injectors, in-tank regulators and other products, for use in automotive, bus and truck and industrial aftermarket applications and in the bus and truck and industrial OEM markets.

We also have a relationship with IMPCO through Starcraft's 51% ownership of PowerTrain Integration which is 49% owned by IMPCO. PowerTrain Integration has certain distribution rights to General Motors engines through an agreement with General Motors.

#### ***General Motors***

Our strategic alliance with General Motors became effective upon our spin-off from IMPCO. We believe that the strategic alliance with General Motors will advance and help commercialize, on a global basis, the integration of our gaseous storage and handling systems into fuel cell systems used in the transportation markets. Under the alliance, we, together with General Motors, are co-developing technologies that are designed to accelerate the commercialization of fuel cell applications. Additionally, General Motors endorses us as a

recommended provider of hydrogen storage, hydrogen handling and associated electronic controls. This strategic alliance expands upon the relationship that has been in place between General Motors and Quantum (as IMPCO's Automotive OEM Division) since 1993, through which we provide packaged natural gas and propane fuel systems for General Motors' alternative fuel vehicle products.

In connection with our strategic alliance, we issued stock to General Motors, representing 19.9% (since diluted to 8.6% as of April 30, 2005) of our total outstanding equity following our January 2003 public offering, for consideration of a nominal cash contribution and access to certain of General Motors' proprietary information. Under the alliance, we have committed to spend \$4.0 million annually for specific research and development projects directed by General Motors to speed the commercialization of our fuel cell related products. Since this commitment was waived or partially waived by General Motors for calendar years 2002, 2003 and 2004, the Company anticipates that this commitment will be waived or partially waived in the future. The Company and General Motors agreed upon a Directed Research and Development Statement of Work that covered the period from May 15, 2004 through May 14, 2005. The statement of work outlined specific tasks for the advancement of compressed fuel storage technologies enabling improved performance. Total spending under the statement of work approximated \$1.8 million and was funded under the Quantum Fuel Systems segment. Each party will retain the ownership of its existing technology and will jointly own technology that is created under the alliance. We are able to use jointly created technologies in certain aspects of our business, but are required to share with General Motors revenue from fuel cell system-related products that are sold to General Motors or third parties.

#### ***Sumitomo Corporation***

In April 2003, June 2004 and December 2004, we signed agreements with Sumitomo Corporation, whereby Sumitomo will market our products for use in the global alternative fuel and fuel cell markets and will have exclusive sales and distribution rights to market our products in Japan. In addition, the agreements also form the basis, subject to definitive terms, for Sumitomo to make a future strategic investment in Quantum, including a joint business venture.

#### **Customers and Development Programs**

A substantial portion of our revenue relates to product sales to and development fees from GM and Toyota. During fiscal year 2005, revenues from GM and Toyota comprised 77% and 11% of our total revenue, respectively.

We have had prototype development projects or programs with the following entities:

Adam Opel AG	ISE Research
AeroVironment	Lotus Engineering, Inc.
Autoport, Inc.	Missile Defense Agency SBIR
Ballard Power Systems	Pinnacle West Capital Corporation
Catalytic Solutions, Inc.	Proton Energy Systems, Inc.
California Motors LLC	Regency Conversions
Daimler Chrysler	Roush Performance Products
Energy Conversion Devices	Saleen, Inc.
Ford Motor Company	South Coast Air Quality Management District
Garrett-Engine Boosting Systems, Inc.	Sumitomo Corporation
General Motors (Fuel Cell Activities)	Suzuki Motor Corporation
General Motors Corporation	Toyota Motor Corporation
General Motors of Canada, Limited	Unique Performance, Inc.
Hydrogenics Corporation	U.S. Army—National Automotive Center
Hyundai America Technical Center	U.S. Department of Energy
Hyundai Motor Company	Yamaha Motor Company
Integrated Concepts & Research Corporation	

We intend to establish similar relationships with other leading industry OEMs by using our systems integration capabilities and our leading technology position in fuel storage, fuel delivery and electronic controls.

## **Research and Product Development**

We conduct research and product development in the following areas, with corresponding technical capabilities:

- *Fuel Storage.* Composite pressure vessel design and analysis, carbon and epoxy filament winding, and hydraulic, pneumatic, burst and fatigue testing. Evaluation and development test capabilities for advanced hydrogen storage, including hydride, conformable and other emerging pressure and solid state storage.
- *Electronic Control Systems.* Specialization in hardware design and selection, engine modeling, calibration and software design for engine and emission controls.
- *Mechanical Design and Development.* Specialization in pneumatics, kinematics, hydraulic components and systems, and advanced materials, structural, flow and thermal analysis.
- *Advanced Emissions Testing.* Testing facility that utilizes California Air Resources Board (“CARB”) and U.S. Environmental Protection Agency (“EPA”) approved advanced technology to test Super Ultra Low Emission Vehicles. EPA/CARB certification testing, vehicle development testing including catalyst efficiency, diagnostics calibration, engine durability testing, and engine mapping.
- *Advanced Products.* Injectors, fuel management, fuel storage, and fuel supplies for fuel cell power systems, mass flow sensors for natural gas measurement and “smart” sensors using 8-bit microcontrollers.
- *Component and Subsystem Test Facilities.* Extended vibrations, shock loads and accelerations, extreme temperature exposure from -85° F to 392° F, and thermal shock, cyclic corrosion, extended salt, fog, humidity and dryness cycling, severe acid and alkali corrosion, flow simulations, and pneumatic leak checks.
- *Concept Vehicle Development.* Specialization in concept vehicle design and development for specialty equipment and styling packages using powertrain engineering, turbo charging, CAD engineering, clay modeling and other vehicle development and tooling processes.
- *Vehicle Engineering and Build.* Specialization in designing, engineering and building concept or early adoption type vehicles using vehicle and powertrain and electric drive system engineering, vehicle and system integration, and vehicle packaging.

We believe we are uniquely positioned, based on our research and product development capabilities, as a tier-one automotive supplier in providing vehicle-level design, powertrain engineering, power electronics and wheel motor interfacing, system integration, manufacturing and assembly of packaged fuel systems and specialty equipment for automotive applications including fuel cells, hybrids, alternative fuels, hydrogen refueling, new body styles, mid-cycle vehicle product enhancements and high performance engines and drive trains.

## **Competition**

In the fuel cell and hydrogen industry, our expertise is in hydrogen fuel storage, fuel delivery, electronic and drive system controls, and system integration. We do not manufacture fuel cells or fuel reformers. We may face competition from companies providing components such as tanks, regulators or injectors. We may also face competition from traditional automotive component suppliers, such as Bosch, Delphi, Siemens, and Visteon, and from motor vehicle OEMs that develop fuel systems internally.

We believe that our competitive advantage over current and potential future competitors is our technology leadership and integration expertise derived from many years of experience with vehicle development and

assembly programs. Our current competitors typically focus on individual components. We offer complete packaged fuel systems based on our own advanced technologies, including gaseous fuel storage, fuel metering and electronic controls.

A critical element for hydrogen-based vehicles and OEM alternative fuel vehicles is fuel storage. Our major competitors for high-pressure gaseous storage cylinders include Dynetek Industries Ltd., Lincoln Composites and Structural Composites Inc. Liquid hydrogen, metal hydrides and on-board liquid fuel reformation may also provide alternatives to high-pressure storage. Companies pursuing these competing technologies include Linde AG and Energy Conversion Devices.

The major domestic market for our vehicle styling and performance products is highly competitive. Competition is based primarily on price, product engineering and performance, technology, quality and overall customer service, with the relative importance of such factors varying among products. Our global competitors in this market include a large number of other well-established independent manufacturers such as Decoma International, a division of Magna International, and special vehicle assembly companies such as MSX International and ASC Incorporated.

Many of these potential competitors have been in business longer than us and have substantially greater financial, marketing and development resources than we have. We expect that we will face increased competition in the future as new competitors enter the market and advanced technologies become available. In addition, consolidation in our industry may also affect our ability to compete. Consolidation may strengthen our competitors' financial, technical and marketing resources and may provide greater access to customers. Consequently, these competitors may be able to develop greater resources for the development, promotion and sale of their products. We cannot assure you that we will be able to compete successfully with our existing or new competitors or that the competitive pressures will not materially and adversely affect our business, financial condition or results of operations.

### **Safety, Regulation, and Product Certification**

The manufacture, distribution and sale of our products are subject to governmental regulations in the United States at the federal, state and local levels. The most extensive regulations are promulgated under the National Traffic and Motor Vehicle Safety Act, which, among other things, empowers the National Highway Traffic Safety Administration ("NHTSA") to require a manufacturer to remedy certain "defects related to motor vehicle safety" or vehicles that fail to conform to all applicable federal motor vehicle safety standards.

Federal Motor Vehicle Safety Standards are promulgated by the NHTSA. Many of our products are affected by these standards. We engage various testing companies, which also perform testing for NHTSA, to test certain of our products. NHTSA can require automotive manufacturers to recall products. We have not experienced any material recalls.

Like other automotive manufacturers, we may be subject to claims that our products caused or contributed to damage or injury sustained in vehicle accidents or may be required to recall products deemed to contain defects related to motor vehicle safety. We believe that we are adequately insured for any claims. However, any such claims in excess of our insurance coverage or material product recall expenses could adversely affect our financial condition and results of operations. Promulgation of additional safety standards in the future could require us to incur additional testing and engineering expenses that could adversely affect our results of operations.

We must obtain emission compliance certification from the EPA to introduce vehicles or engines into commerce in the United States, and from the California Air Resources Board to introduce vehicles or engines into commerce in California. Certification requires that each vehicle or engine meet specific component, subsystem and vehicle-level durability, emission, evaporative, and idle tests. Both federal and state authorities have various environmental control standards relating to air, water and noise pollution that affect our business and operations.

Furthermore, we strive to meet stringent industry standards set by various regulatory bodies and industry practices, including the U.S. Department of Transportation and Federal Motor Vehicle Safety Standards, the National Fire Protection Association, TÜV, European Integrated Hydrogen Project, Kouatsugasu Hoan Kyokai, Underwriters Laboratories, and American Gas Association. Approvals enhance the acceptability of our products in the domestic marketplace. Many foreign countries also accept these agency approvals as satisfying the “approval for sale” requirements in their markets.

Our international sales are subject to foreign tariffs and taxes, changes in which are difficult to predict and which can adversely affect sales. Our products must also comply with government safety standards imposed in our foreign markets.

### **Backlog**

As of April 30, 2005, backlog for our products was approximately \$37.8 million. We measure backlog for our products from the time orders become irrevocable, which generally occurs 60 days prior to the date of delivery.

### **Employees**

As of June 20, 2005, we had 697 full-time employees. In addition to our employee personnel, we utilized 110 contract laborers in our plants as of June 20, 2005. During peak production periods, we may increase our work force. Historically, the available labor force has been adequate to meet such periodic requirements. As of June 20, 2005, 73 of our employees located in Canada are represented by a collective bargaining agreement. We consider our relations with our employees to be good.

### **Intellectual Property**

The continued development and protection of our intellectual property is crucial to our future success. We rely primarily on patent and trade secret laws to protect our intellectual property rights. Although we recognize the importance of patent and trade secret laws and, when appropriate, seek the advantages and benefits these laws offer, we believe that our growth and future success will be more dependent on factors such as the knowledge, experience and expertise of our personnel, new product introductions, continued emphasis on research and development and creation of “know-how”.

Of the seven domestic patents we received in connection with our separation from IMPCO, we have allowed three to expire, and the remaining patents will expire between June 2006 and September 2019. We do not believe that the expiration of any of our patents will have a material adverse effect on our business. Of the three domestic patent applications we received from IMPCO, we have been awarded patents on two applications, and are diligently prosecuting the remaining application.

We do not know whether any patents will be issued from our patent applications or whether the scopes of our issued patents are sufficiently broad to protect our technologies or processes. Our patents may not provide us a competitive advantage. Competitors may successfully challenge the validity and/or scope of our patents and trademarks. We also rely on a combination of trademark, trade secret and other intellectual property laws and various contract rights to protect our proprietary rights. However, we do not believe our intellectual property rights provide significant protection from competition. We believe that establishing and maintaining strong strategic relationships with valued customers and OEMs are the most significant factors protecting us from new competitors.

In connection with our strategic alliance with General Motors, each party retains the ownership of its existing technology and jointly owns technology that is jointly created under the alliance. No jointly owned patents have been received or applied for under the alliance. Under the alliance, each party granted the other

certain exclusive and/or nonexclusive licenses with respect to certain intellectual property developed by such party prior to and during the term of the alliance and also with respect to the jointly owned intellectual property. During the term of the alliance, we are subject to certain transfer restrictions with respect to the pledge, hypothecation, encumbrance, sale or licensing of certain intellectual property. Further, we are obligated to share with GM a portion of our revenues generated from the sale of our gaseous storage, handling and control products for fuel cell systems for both automotive and non-automotive applications. The revenue sharing payments continue for a period of 45 years. We do not expect the revenue sharing payments to begin until the 2009 fiscal year. Given the uncertainty of the amount of revenues we will generate from the sale of our gaseous storage, handling and control products in future years, we are unable to quantify the amount of revenue sharing payments we will be required to make to GM, if any.

In October 2002, we entered into a patent cross license agreement with GFI Control Systems, Inc. in connection with the parties' mutual agreement to dismiss claims against each other for patent infringement. Pursuant to the agreement, we granted GFI a royalty-free, nonexclusive license to sell products utilizing in-tank regulators covered by our in-tank regulator patent, and GFI granted us a royalty-free, nonexclusive license to sell products utilizing in-tank solenoid valves covered by its in-tank solenoid valve patent, in each case so long as the in-tank regulators and solenoid valves are used together. In the event that the patent covering our in-tank regulator is invalidated, we will be required to pay a five percent royalty to GFI for our use of technology covered by GFI's patent, so long as its patent is not invalidated. The competitive advantage that we believe can be achieved through the intellectual property related to our in-tank regulators may not be fully realized to the extent that GFI uses our in-tank regulator patent to compete with us.

**Available Information**

We make our annual reports on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K, and all amendments to these reports available free of charge on our corporate website as soon as reasonably practicable after such reports are filed with, or furnished to, the SEC. Our corporate website is located at [www.qttww.com](http://www.qttww.com). None of the information contained on our website is intended to be part of this report or incorporated by reference herein.

**Executive Officers**

Our executive officers as of April 30, 2005 and their respective ages and positions were as follows:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Alan P. Niedzwiecki . . . . .	48	President; Chief Executive Officer; Director
Jeffrey P. Beitzel . . . . .	50	Chief Operating Officer; Director
W. Brian Olson . . . . .	41	Chief Financial Officer; Treasurer
Glenn D. Moffett . . . . .	57	Vice President, General Manger of Operations
Bradley J. Timon . . . . .	42	Corporate Controller
Cathryn T. Johnston . . . . .	39	Director of Communications; Corporate Secretary
Michael H. Schoeffler . . . . .	44	President of Starcraft Corporation
Richard C. Anderson . . . . .	51	President of Wheel to Wheel, LLC
Douglass C. Goad . . . . .	47	Executive Vice President of Operations of Tecstar, L.P.
Joseph E. Katona . . . . .	41	Chief Financial Officer of Starcraft Corporation

The following is a biographical summary of the experience of the executive officers:

*Alan P. Niedzwiecki* has served as President and as one of our directors since February 2002 and was appointed as Chief Executive Officer in August 2002. Mr. Niedzwiecki served as Chief Operating Officer from November 2001 until he was appointed as Chief Executive Officer in August 2002. From October 1999 to November 2001, Mr. Niedzwiecki served as Executive Director of Sales and Marketing. From February 1990 to October 1999, Mr. Niedzwiecki was President of NGV Corporation, an engineering and marketing/commercialization consulting company. Mr. Niedzwiecki has more than 25 years of experience in the alternative



fuels industry in product and technology development and commercialization relating to mobile, stationary power generation and refueling infrastructure solutions. Mr. Niedzwiecki is a graduate of Southern Alberta Institute of Technology.

*Jeffrey P. Beitzel* has served as Quantum's Chief Operating Officer and as a member of our Board of Directors since March 2005. He previously served as a director and Co-Chief Executive Officer of Starcraft, and as President of Starcraft's Wheel to Wheel and Tecstar subsidiaries since 1998. Mr. Beitzel founded and owned several automotive companies since leaving an engineering position with Ford Motor Company in 1983. These businesses have generally focused on converting automotive design concepts into limited volume production for OEMs. Mr. Beitzel has a B.S. degree in Mechanical Engineering from Lehigh University.

*W. Brian Olson* has served as Chief Financial Officer and Treasurer since August 2002. From July 1999 to August 2002, Mr. Olson served as Treasurer, Vice President and Chief Financial Officer of IMPCO. He originally joined IMPCO in October 1994 and held various financial positions with IMPCO, including serving as Corporate Controller. Between November 1996 and April 1997, Mr. Olson served as manager of financial planning at Autobytel. Prior to joining IMPCO, Mr. Olson was with the public accounting firm of Ernst & Young LLP and its Kenneth Leventhal Group. Mr. Olson holds a B.S. degree in business and operations management from Western Illinois University and an M.B.A. degree in finance and economic policy from the University of Southern California. Mr. Olson is a Certified Financial Manager and a Certified Management Accountant.

*Glenn D. Moffett* has served as our Vice President and General Manager of Operations since May 2005. Prior to that, Mr. Moffett served as our General Manager of Operations since September 2003. Mr. Moffett served as our Corporate Counsel and as an Administrative Manager from January 2001 until he was appointed as General Manager of Operations in September 2003. From May 2000 to January 2001, Mr. Moffett was a consultant for Results-Based Leadership, a firm that builds strategic leadership capabilities within organizations. One of his clients was Quantum. From October 1992 to May 2000, Mr. Moffett was the owner/founder of a technology firm that produced interactive media. From November 1967 to October 1992, Mr. Moffett held the following positions with Rand McNally & Company, a \$245 million manufacturing company with 2,500 employees: Personnel Manager, Industrial Relations Manager, Corporate Manager of Personnel and Industrial Relations, Vice President and General Manager, and Vice President of Human Resources and Administration. He has over 35 years of manufacturing, operational and administrative experience. Mr. Moffett holds a B.G.S. in Psychology and Business from the University of Kentucky, Lexington, and a J.D. from Indiana University, Indianapolis.

*Bradley J. Timon* has served as Corporate Controller since April 2004. Prior to joining us, Mr. Timon worked as a financial consultant. From June 1998 to October 2001, Mr. Timon was with CORE, INC. serving as the Corporate Controller through the period of January 2001 and then as Acting Chief Financial Officer until the corporate operations were closed pursuant to a merger. Between September 1995 and May 1998, Mr. Timon served as a Controller for James Hardie Industries. Before entering private industry, Mr. Timon was with the public accounting firm KPMG from 1989 to 1995. Mr. Timon has a B.A. in accounting from California State University, Fullerton and is a Certified Public Accountant.

*Cathryn T. Johnston* has served as Director of Communications and Corporate Support since September 2002 and became Corporate Secretary in November 2000. From June 2000 to September 2002, Ms. Johnston served as Director of Business Operations. From 1994 to June 2000, Ms. Johnston held various positions with IMPCO, including Manager of Business Administration, Manager of Program and Contracts Administration, and Program Administrator for OEM programs. Prior to joining IMPCO in 1994, Ms. Johnston held several business administration positions in a variety of industries, including the residential building industry and the non-profit sector. Ms. Johnston received a B.A. in Developmental Psychology from the University of California, Santa Barbara and an M.B.A. from the University of California, Irvine.

*Michael H. Schoeffler* has served as Starcraft Corporation's President since March 2005. Prior to this, he was elected as a director of Starcraft in November 1999 and was appointed Co-Chief Executive Officer in

January 2004 upon consummation of the acquisition of Wheel to Wheel. Mr. Schoeffler originally joined Starcraft in 1995 as Chief Financial Officer and was appointed Secretary in 1995. In 1996 Mr. Schoeffler was appointed President and Chief Operating Officer of Starcraft. Mr. Schoeffler had previously resigned as an officer of Starcraft in August 2001, to become General Manager of Starcraft Bus and Mobility, a division of Forest River, Inc., a recreational vehicle manufacturer, in connection with Starcraft's sale of its bus and mobility business. Mr. Schoeffler rejoined Starcraft in January 2003 as President and Chief Operating Officer. Prior to joining Starcraft in 1995 he was Executive Vice President/Chief Financial Officer of General Products Corporation, an automotive parts supplier, from 1989 to 1995; Assistant Controller for Sudbury, Inc., a diversified automotive manufacturer, from 1986 to 1989; and a Certified Public Accountant with Ernst & Whinney from 1982 to 1986. Mr. Schoeffler holds a B.S. degree in Accounting and Computer Science from University of Dayton, Ohio, and an M.B.A. degree in Operations from Case Western Reserve University, Cleveland, Ohio.

*Richard C. Anderson* has served as Wheel to Wheel, LLC's (a subsidiary of Tecstar Automotive Group) President since March 2005. Prior to this he had served as a director and Executive Vice President of Starcraft since January 2004. He has worked in the automotive industry since 1976. He worked eight years with the Ford Motor Company, primarily in the Advanced Engine Engineering group. Since leaving Ford in 1984 he worked for various companies involved in a wide range of programs for automotive OEM's including powertrain development, complete concept vehicles and specialized production vehicle programs. Mr. Anderson served as Vice President of Engineering of Tecstar since 1998. He served as the Vice President of Engineering of Wheel to Wheel from 1998 until January 2004, when he became President. Mr. Anderson holds a B.S. degree in Mechanical Engineering from University of Wisconsin, Madison.

*Douglass C. Goad* has served as Tecstar, L.P.'s Executive Vice President of Operations since January 2004 upon the consummation of the acquisition of Wheel to Wheel. He had also served as a director of Starcraft from January 2004 until it was acquired by Quantum in March 2005. He has served since 1998 as Vice President of Operations & Quality of Wheel to Wheel. Mr. Goad also serves as President of the Company's Tarxien operation. Prior to joining Wheel to Wheel, Mr. Goad served for five years as Vice President of Operations of TDM World Conversions. Mr. Goad holds a B.S. degree in Automotive Engineering from Western Michigan University and a M.S. degree in Operations Management from Central Michigan University.

*Joseph E. Katona III* has served as Starcraft Corporation's Chief Financial Officer since September 2003. He had also served as Secretary of Starcraft from September 2003 until it was acquired by Quantum in March 2005. Prior to joining Starcraft, Mr. Katona had served since 1998 as Chief Financial Officer of Creation Group, Inc., a manufacturer of windows, doors and specialty products for a wide range of vehicular and housing applications based in Elkhart, Indiana, and affiliated with Heywood Williams, PLC. Mr. Katona served Creation Group in various financial management capacities between 1993 and 1998. He worked as a certified public accountant with McGladrey & Pullen between 1986 and 1993. Mr. Katona holds a B.S. degree in Accounting from Indiana University.

## **Item 2. Properties.**

Our corporate headquarters are located in Irvine, California. Our facility in Irvine is primarily dedicated to the research and development and production of systems and technologies that enable the use of gaseous fuels in internal combustion engines and fuel cells. We conduct research and development of advanced fuel storage, systems for light- and medium-duty OEM alternative fuel vehicles and for fuel cell, hybrid and hydrogen refueling infrastructure applications at the Irvine facility. This facility also serves as a parts distribution center to OEM dealers.

We conduct fuel cell, hydrogen, hybrid and alternative fuel vehicle development and integration at our Advanced Vehicle Concept Center facility located in Lake Forest, California. This facility is focused on hydrogen systems integration, validation and certification for concept, prototype and production vehicles. The

center additionally conducts research and development of advanced fuel delivery and electronic control systems for light- and medium-duty OEM alternative fuel vehicles and for fuel cell applications, including transportation. In one of our two Troy, Michigan facilities, we assist our OEM customers in the Detroit area (including U.S. Army—National Automotive Center), acting as a liaison between us and our customers, performing the following primary functions: vehicle commercialization and specialty vehicle assembly management.

We conduct our OEM second stage manufacturing at our facilities located in Shreveport, Louisiana; Haslet, Texas; and Fort Wayne, Indiana in the United States; and in Whitby, Ontario, Canada. All facilities are located near General Motors assembly plants. We have an engineering center and parts distribution operations near Detroit, Michigan. Tooling and plastics manufacturing are conducted at our facility in Rochester Hills, Michigan, and paint and injection molding are performed in Vaughn, Ontario, Canada. We also operate an administrative, engineering, and concept vehicle development in our second of two facilities in Troy, Michigan and have a powertrain facility in Madison Heights, Michigan. Tecstar Automotive Group’s administrative offices are located in Madison Heights, Michigan and Goshen, Indiana.

We currently utilize manufacturing, research and development and general office facilities in the locations set forth below:

<u>Location</u>	<u>Approximate Square Footage</u>	<u>Owned or Leased</u>	<u>Lease Expiration Date</u>	<u>Principal Uses</u>
Irvine, California . . . . .	88,000	Leased	8/17/09	Corporate offices, manufacturing, research and development, and testing
Haslet, Texas (1) . . . . .	192,000	Leased	7/31/12	Manufacturing and assembly
Whitby, Ontario, Canada . . . . .	79,000	Leased	11/30/12	Manufacturing and assembly
Vaughn, Ontario, Canada . . . . .	67,000	Leased	8/31/07	Paint and injection molding manufacturing
Lake Forest, California . . . . .	65,000	Leased	5/31/08	Design, development, and testing
Fort Wayne, Indiana . . . . .	56,000	Leased	1/31/10	Manufacturing and assembly
Madison Heights, Michigan . . . . .	47,000	Leased	6/30/10	Engine assembly and modification
Troy, Michigan . . . . .	45,000	Owned	N/A	Engineering, administration, and concept vehicles
Livonia, Michigan . . . . .	44,000	Leased	6/30/07	Parts warehouse and offices
Madison Heights, Michigan . . . . .	40,000	Leased	5/31/06	Offices, engineering, and production development
Shreveport, Louisiana . . . . .	38,000	Leased	12/31/08	Manufacturing and assembly
Rochester Hills, Michigan . . . . .	24,000	Leased	5/10/09	Tooling and RIM plastics manufacturing
Walled Lake, Michigan . . . . .	20,000	Leased	8/31/06	Engineering and speciality car manufacturing
Troy, Michigan . . . . .	13,000	Leased	9/30/05	Engineering services
Goshen, Indiana . . . . .	5,000	Leased	2/14/11	Administrative offices
Troy, Michigan . . . . .	300	Leased	9/30/07	Customer relations, sales and speciality vehicle assembly management

(1) The Haslet, Texas lease has a term expiring in July 2012, but with an option to cancel by the Company in July 2007.

We believe our facilities are presently adequate for our current core product manufacturing operations and OEM development programs and production. We anticipate that we will require additional space as we expand our operations in the fuel cell and alternative fuel industries. We believe that we will be able to obtain suitable space as needed on commercially reasonable terms.

**Item 3. Legal Proceedings.**

We are not currently a party to any material legal proceeding. From time to time, we receive claims of and become subject to product liability, employment, intellectual property and other commercial litigation related to the conduct of our business. Such litigation, regardless of its merit or outcome, could be costly and time consuming and could divert our management and other key personnel from our business operations. The uncertainty of litigation increases the risks associated with it. In connection with such litigation, we may be subject to significant damages or equitable remedies relating to the operation of our business. Any such litigation may materially harm our business, results of operations and financial condition.

**Item 4. Submission of Matters to a Vote of Security Holders.**

We held a special meeting of stockholders on March 3, 2005 (which had been adjourned from an original meeting held on February 28, 2005). Our board of directors solicited proxies in connection with the special meeting, at which our stockholders approved each of the following matters:

- A proposal to approve the issuance of shares of Quantum common stock in connection with our acquisition of Starcraft pursuant to the terms of the Agreement and Plan of Merger, dated as of November 23, 2004, among Quantum, Quake Sub, Inc. and Starcraft. Our stockholders approved this proposal by a vote (expressed in number of shares) of 14,793,736 for, 2,629,124 against and 83,080 abstentions.
- A proposal pursuant to which our Amended and Restated Certificate of Incorporation would be amended and restated to increase from 60,000,000 to 100,000,000 the number of shares of authorized common stock and to eliminate the then-authorized shares of Series A common stock. Our stockholders approved this proposal by a vote of 16,799,741 for, 604,170 against and 102,029 abstentions.

Starcraft held a special meeting of shareholders on February 28, 2005. Starcraft's board of directors solicited proxies in connection with the special meeting, at which Starcraft's shareholders voted on and approved a proposal to approve the Agreement and Plan of Merger pursuant to which we acquired Starcraft. The proposal was approved by Starcraft's shareholders by a vote of 6,577,897 for, 122,057 against and 1,873 abstentions.

## PART II

### Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Our common stock has been traded on the Nasdaq National Market under the symbol "QTWW" since July 23, 2002. Our Series B common stock is not publicly traded. The table below sets forth, for the periods indicated, the high and low daily sales prices for our common stock as reported on the Nasdaq National Market:

	<u>High</u>	<u>Low</u>
<b>Fiscal Year Ended April 30, 2004</b>		
Quarter ended July 31, 2003 .....	\$ 3.26	\$1.93
Quarter ended October 31, 2003 .....	9.95	2.90
Quarter ended January 31, 2004 .....	10.58	5.95
Quarter ended April 30, 2004 .....	10.48	5.86
<b>Fiscal Year Ended April 30, 2005</b>		
Quarter ended July 31, 2004 .....	6.72	4.52
Quarter ended October 31, 2004 .....	8.04	4.61
Quarter ended January 31, 2005 .....	7.80	5.00
Quarter ended April 30, 2005 .....	6.15	3.44

On June 20, 2005, the last reported sale price for our common stock as reported by the Nasdaq National Market was \$5.42 per share. On June 20, 2005, there were approximately 560 holders of record of our common stock and one holder of record of our Series B common stock.

#### Dividend Policy

We have not paid any dividends in the past, and we do not anticipate paying any dividends on our common stock in the foreseeable future because we expect to retain our future earnings for use in the operation and expansion of our business. Our payment and amount of dividends, however, will be subject to the discretion of our board of directors and will depend, among other things, upon our results of operations, financial condition, cash requirements, future prospects, and other factors that may be considered relevant by our board of directors.

We did not repurchase any securities during the fourth quarter of fiscal 2005. Item 12 of Part III of this Annual Report on Form 10-K contains information concerning securities authorized for issuance under equity compensation plans.

## Item 6. Selected Financial Data.

The following table summarizes certain historical financial information at the dates and for the periods indicated prepared in accordance with U.S. generally accepted accounting principles. The consolidated statement of operations data for the years ended April 30, 2003, 2004 and 2005 and the consolidated balance sheet data as of April 30, 2004 and 2005 have been derived from our audited consolidated financial statements included elsewhere in this annual report. The consolidated statement of operations data for the year ended April 30, 2001 and 2002 and the balance sheet data as of April 30, 2001, 2002 and 2003 have been derived from audited financial statements not included in this annual report. Certain reclassifications have been made to amounts for fiscal years 2001 through 2004 to conform to the fiscal 2005 presentation. The selected consolidated financial data should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the consolidated financial statements and notes thereto, which are included elsewhere in this annual report.

	Year Ended April 30,				
	2001	2002	2003	2004	2005(2)
	(in thousands, except per share amounts)				
<b>Statement of Operations Data:</b>					
Revenue:					
Net product sales	\$ 15,447	\$ 15,517	\$ 15,833	\$ 18,624	\$ 40,748
Contract revenue	7,911	7,886	7,806	9,495	13,552
Total revenue	<u>23,358</u>	<u>23,403</u>	<u>23,639</u>	<u>28,119</u>	<u>54,300</u>
Cost and expenses:					
Cost of product sales	19,452	25,581	18,471	12,865	36,189
Research and development	26,687	33,474	13,902	13,997	17,176
Selling, general and administrative	7,459	7,246	8,442	8,930	12,617
Amortization of intangibles	—	—	1,160	1,660	2,128
Operating loss	<u>(30,240)</u>	<u>(42,898)</u>	<u>(18,336)</u>	<u>(9,333)</u>	<u>(13,810)</u>
Interest income	(4)	9	120	456	951
Interest expense	—	(488)	(114)	(45)	(310)
Other income	—	—	134	27	80
Provision for income taxes	—	(1)	(1)	(39)	(10)
Net loss	<u>\$(30,244)</u>	<u>\$(43,378)</u>	<u>\$(18,197)</u>	<u>\$ (8,934)</u>	<u>\$(13,099)</u>
Basic and diluted loss per share	\$ —	\$ (3.07)	\$ (1.00)	\$ (0.33)	\$ (0.37)
Weighted average number of shares outstanding—					
basic and diluted (1)	—	14,142	18,153	27,257	35,048
<b>April 30</b>					
	2001	2002	2003	2004	2005
	(in thousands)				
<b>Balance Sheet Data:</b>					
Cash and cash equivalents	\$ 4	\$ 177	\$ 11,539	\$ 15,729	\$ 11,737
Marketable securities held-to-maturity	—	—	—	52,828	36,103
Working capital	11,338	(3,375)	15,500	57,689	58,955
Total assets	32,815	28,159	51,274	103,447	277,662
Long-term obligations, less current portion	183	127	—	—	19,656
Total equity	<u>23,992</u>	<u>10,271</u>	<u>42,950</u>	<u>97,451</u>	<u>219,208</u>

- (1) See Note 14 of the notes to the consolidated financial statements included elsewhere in this annual report for an explanation of the method used to determine the number of shares used to compute the net loss per share.
- (2) Includes the operations of Tecstar Automotive Group (formerly Starcraft) since the acquisition date, March 3, 2005.

## **Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.**

*You should read the following Management's Discussion and Analysis of Financial Condition and Results of Operations together with the consolidated financial statements and related notes included elsewhere in this annual report. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those described under "Risk Factors" and elsewhere in this annual report.*

### **Overview**

We provide powertrain engineering, system integration, manufacturing and assembly of packaged fuel systems and specialty equipment for automotive applications including fuel cells, hybrids, alternative fuels, hydrogen refueling, new body styles, mid-cycle vehicle product enhancements and high performance engines and drive trains for OEMs and OEM dealer networks. We are uniquely positioned to integrate advanced fuel system and electric drive system technologies for fuel cell and hybrid vehicles based on our years of experience in vehicle-level design, vehicle electronics and system integration. We also design, engineer and manufacture hybrid and fuel cell vehicles.

With the completion of our acquisition of Starcraft Corporation on March 3, 2005, our combined business now includes Starcraft's automotive supply operations, now known as the Tecstar Automotive Group, primarily consisting of second stage manufacturing of specialty equipment for General Motors' pick-up trucks and sport utility vehicles (SUVs), engineering and design capabilities for concept vehicles, and distribution of automotive accessories through OEM dealer networks. As Tecstar's continuing operations primarily consist of second-stage manufacturing and engineering activities under its Tecstar operations, we now refer to the entire operations acquired from the merger (including Starcraft and its subsidiaries) as the Tecstar Automotive Group or Tecstar.

We classify our business operations into three reporting segments: Quantum Fuel Systems, Tecstar Automotive Group, and Corporate. The reportable segments other than Corporate represent strategic businesses that are managed separately and offer products and services that can be differentiated. Corporate consists of general and administrative expense incurred at the corporate level that is not directly attributable to any of the other operating segments.

The Quantum Fuel Systems business operations primarily consist of design, manufacture and supply of packaged fuel systems for use in fuel cell, hydrogen and alternative fuel vehicles. This segment generates product revenues through the sale of fuel cell-related fuel storage, fuel delivery, and electronic control systems to OEMs, and the installation of its fuel cell products into OEM vehicles. Product revenues are also generated through the sale of compressed natural gas (CNG), propane (LPG), and hydrogen fuel storage, fuel delivery, and electronic control systems for internal combustion engine applications. In addition to product sales, the Quantum Fuel Systems segment generates contract revenue by providing engineering design and support to the OEMs so that its fuel storage, fuel delivery, and electronic control systems integrate and operate with their fuel cell and alternative fuel applications. Prior to the acquisition of the Tecstar Automotive Group (formerly Starcraft), the Quantum Fuel Systems business was reported in three separate segments which were aligned consistent with how previous operating performance was tracked. The prior year amounts reported have been restated to reflect the new presentation.

The Tecstar Automotive Group is comprised of virtually all of the business activities acquired via the merger with Starcraft.

The chief operating decision maker allocates resources and tracks performance by the three reporting segments. The Company evaluates performance based on profit or loss from operations before interest and income taxes.

### ***Quantum Fuel Systems Segment***

Our Quantum Fuel Systems segment supplies our advanced gaseous fuel systems for alternative fuel vehicles to OEM customers for use by consumers and for commercial and government fleets. Since 1997, we have sold approximately 18,100 fuel systems for alternative fuel vehicles, primarily to General Motors Corporation and its affiliates (“General Motors”), which in turn have sold substantially all of these vehicles to its customers. We also provide our gaseous fuel systems and hydrogen refueling products for fuel cell applications to major OEMs through funded research and development contracts and on a prototype and production intent basis. These fuel cell and hydrogen refueling products are not currently manufactured in high volumes and will require additional product development; however, we believe that a commercial market will begin to develop for these products over the next five years. We believe that these systems will reach production volumes only if OEMs produce fuel cell applications and hydrogen refueling products using our systems on a commercial basis.

A number of automotive and industrial manufacturers are developing alternative clean power systems using fuel cells or clean burning gaseous fuels in order to decrease fuel costs, lessen dependence on crude oil and reduce harmful emissions. Our products for these markets consist primarily of fuel storage, fuel delivery and electronic and drive system controls, as well as system integration of our products into fuel cell, hybrid, and alternative fuel vehicles, and hydrogen refueling products, which includes the complete design of fuel cell and hybrid vehicles.

Our Quantum Fuel Systems segment revenues and cash flows are dependent on the advancement of OEM fuel cell technologies and our OEM customers’ internal plans, spending levels and timing for pre-production development programs and commercial production. This segment depends on the industry-wide growth of the fuel cell and alternative fuel markets, which in turn is dependent on regulations, laws, hydrogen availability and refueling, technology advancements, and consumer adoption of alternative fuel and fuel cell technologies on a commercial scale.

A significant portion of our Quantum Fuel Systems business is generally related to alternative fuel and fuel cell vehicle sales, which vary directly with the production schedules of our OEM customers. The market for these vehicles is sensitive to general economic conditions, government agency and commercial fleet spending and consumer preferences. The rate at which our customers sell fuel cell or alternative fuel vehicles depends on their marketing strategy, as well as company specific inventory and incentive programs. Any significant reduction or increase in production of these vehicles by our OEM customers may have a material effect on our business. Our industry is also dependent upon a limited number of third party suppliers of materials and components for our products. Any quality or supply issue with these components could negatively impact our business. During the first half of fiscal 2005, we experienced shortages of high-strength fiber from our primary supplier due to industry-wide demand and short-term capacity issues. This shortage of fiber negatively impacted the timing of certain contract activities during the first nine months of fiscal 2005. Although the short-term capacity issues were resolved, we could experience supply shortages or the discontinuance of certain fiber products in the future. These supply issues could negatively impact our ability to develop and manufacture fuel storage systems for our customers.

### ***Tecstar Automotive Group Segment***

Our Tecstar Automotive Group segment engineers and integrates specialty equipment products into motor vehicle applications, primarily General Motors’ pick-up trucks and sport utility vehicles. Our accessory packages are typically for new OEM body styles, mid-cycle enhancements, specialty products, and high-performance engines and drivetrains. We also have engineering and design capabilities focused on powertrain projects and complete vehicle concepts, such as high-performance and racing engines for cars, boats and motorcycles, and complete race cars.

We engineer and validate certain appearance items to OEM standards, primarily for General Motors’ pick-up trucks and sport utility vehicles. We receive vehicle chassis from the OEM and add these parts through a



process called “second-stage manufacturing.” The chassis are provided by the OEM on a drop-ship basis and are not included as part of our product sales. After completing the final appearance assembly work, the vehicles are placed back into the normal OEM distribution stream. The vehicles carry the full OEM warranty and are marketed directly by the OEM through its dealerships. We engineer and design concept vehicles and distribute automotive parts and OEM-quality automotive accessories through a dealer network.

The sales of specialty equipment and second-stage manufacturing services are directly impacted by the size of the automotive industry and the relative market share of the major OEMs. Second-stage assembly programs typically range from two to five years over the life of the OEM chassis and are fulfilled under short-term purchase orders, as is standard in the industry. We provide a limited warranty of our products to the OEM, which is substantially the same as the OEM warranty provided to the OEM’s retail customers. OEMs periodically reduce production or close plants for several months for model changeovers that adversely affect operating results of industry participants. Sales may be adversely affected if OEM’s perform such second-stage manufacturing programs themselves and do not outsource the business. Substantially all of Tecstar Automotive Group’s sales are with one customer, General Motors.

### **Financial Operations Overview**

In managing our business, our management uses several non-financial factors to analyze our performance. For example, we assess the extent to which current programs are progressing in terms of timing and deliverables and the success to which our systems are interfacing with our customers’ fuel cell applications. We also assess the degree to which we secure additional programs or new programs from our current or new OEM customers and the level of government funding we receive for hydrogen-based systems and storage solutions. We also evaluate the number of new second-stage manufacturing programs we obtain and the units shipped as part of current and new programs.

For the fiscal years ended April 30, 2003, 2004 and 2005, consolidated revenue related to sales of our products to and contracts with General Motors and its affiliates represented 59%, 46% and 77%, respectively, of our total revenue for these periods. For the fiscal years ended April 30, 2002, 2003 and 2004, revenue related to sales of our products to and contracts with Toyota represented 24%, 44% and 11% of our total revenue for these periods, respectively. Substantially all of the revenues of our Tecstar Automotive Group segment are derived from sales to General Motors.

We recognize revenue for product sales when goods are shipped in accordance with our shipping terms and collectability is reasonably assured. Contract revenue is recognized based on the percentage of completion method.

We expense all research and development when incurred. Research and development expense includes both customer-funded research and development and company-sponsored research and development. Customer-funded research and development consists primarily of expenses associated with contract revenue. These expenses include application development costs we funded under customer contracts. We will continue to require significant research and development expenditures over the next several years in order to commercialize our products for fuel cell applications.

### ***Acquisition of Starcraft Corporation***

On November 23, 2004, we entered into an Agreement and Plan of Merger to acquire Starcraft in a tax-free stock-for-stock exchange. The merger was completed on March 3, 2005. In connection with the merger, each share of Starcraft common stock that was outstanding at the effective time of the merger was converted into the right to receive 2.341 shares of Quantum common stock. Total Quantum shares issued in connection with the merger amounted to approximately 21.0 million shares and represented approximately 40% of the total Quantum shares outstanding following the completion of the merger. As a result of the merger, Starcraft became a wholly-owned subsidiary of Quantum.

Under the purchase method of accounting, the total estimated consideration for the transaction was \$146.5 million and consisted of the exchange of Starcraft shares for our common stock valued at \$134.6 million, cash payments for Starcraft stock options and directors' shares of \$7.2 million, direct transaction fees and expenses of \$3.6 million, and a separation agreement with Starcraft's chairman of the board valued at \$1.1 million. The long-term indebtedness of Starcraft and its subsidiaries remained outstanding following the merger, including Starcraft's 8.5% convertible subordinated promissory notes due July 1, 2009 (the "Starcraft Convertible Notes") in the aggregate principal amount of \$15.0 million and approximately \$4.7 million in other long-term indebtedness as of April 30, 2005. We also assumed the obligation to issue our common stock upon conversion of the Starcraft Convertible Notes. Because the value of the shares of our common stock issuable in the merger in exchange for a share of Starcraft common stock was less than the conversion price of the Starcraft Convertible Notes in effect immediately prior to the completion of the merger, the conversion price of the Starcraft Convertible Notes was adjusted to pursuant to their terms to \$5.77, which was the closing price of our common stock immediately prior to the closing date of the merger.

### ***General Motors Relationship***

Our strategic alliance with General Motors became effective upon our spin-off from IMPCO. We believe that our strategic alliance with General Motors will advance and commercialize, on a global basis, the integration of our gaseous storage and handling systems into fuel cell systems used in the transportation markets. Under the alliance, Quantum and General Motors will co-develop technologies that are designed to accelerate the commercialization of fuel cell applications. Additionally, General Motors will endorse Quantum as a recommended provider of hydrogen storage, hydrogen handling and associated electronic controls. This strategic alliance expands the relationship that has been in place between General Motors and Quantum (as IMPCO's Automotive OEM Division) since 1993, through which we provide packaged natural gas and propane fuel systems for General Motors' alternative fuel vehicle products.

In connection with our strategic alliance, immediately following our spin-off from IMPCO, we issued to General Motors an aggregate of 3,513,439 shares of our Series A common stock, representing 19.9% (since diluted to 8.6% as of April 30, 2005) of our total outstanding equity following such issuance, for consideration of a nominal cash contribution and access to certain of General Motors' proprietary information. Under the alliance, we have committed to spend \$4.0 million annually for specific research and development projects directed by General Motors to speed the commercialization of our fuel cell related products. Since this commitment was waived or partially waived by General Motors for calendar years 2002, 2003 and 2004, we anticipate that this commitment will be waived or partially waived in the future. We and General Motors agreed upon a Directed Research and Development Statement of Work that covered the period from May 15, 2004 through May 14, 2005. The statement of work outlined specific tasks for the advancement of compressed fuel storage technologies enabling improved performance. Total spending under the statement of work approximated \$1.8 million and was funded under the Quantum Fuel Systems segment. We plan to use jointly created technologies in certain aspects of our business but will be required to share revenue with General Motors on fuel cell system-related products that are sold to General Motors or third parties.

Pursuant to the terms of our Amended and Restated Certificate of Incorporation, upon the completion of our January 2003 public offering, all of the outstanding 3,513,439 shares of Series A common stock held by General Motors converted on a one-for-one basis into Quantum common stock. We also issued an additional 999,969 shares of our non-voting Series B common stock to General Motors pursuant to General Motors' anti-dilution rights. As a result of the conversion of the Series A common stock, General Motors no longer has anti-dilution rights.

We recorded the value of the shares issued to General Motors as an intangible asset at fair market value on the date of their respective issuance. We are amortizing this intangible asset over the ten-year term of the strategic alliance with General Motors, subject to periodic evaluation for impairment.

## ***Separation from IMPCO***

We were incorporated under the laws of the State of Delaware on October 13, 2000, as a wholly-owned subsidiary of IMPCO. IMPCO conducted our business through various departments, first as a division (the Automotive OEM Division) and most recently as a subsidiary (Quantum Fuel Systems Technologies Worldwide, Inc.). On July 23, 2002, IMPCO completed the distribution and spin-off of our company by distributing to IMPCO stockholders one share of Quantum common stock for every share of IMPCO common stock held on the record date. Prior to the distribution, we entered into several agreements with IMPCO with respect to, among other things, intellectual property and a number of ongoing commercial relationships. The pricing terms for goods and services covered by the commercial agreements reflected negotiated prices.

## **Critical Accounting Policies and Estimates**

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles and are included elsewhere in this report. The preparation of these consolidated financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. We evaluate our estimates, including those related to bad debts, inventories, goodwill and intangible assets, warranty and recall obligations, long-term service contracts, and contingencies and litigation, on an ongoing basis. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Management considers an accounting estimate to be critical if:

- it requires assumptions to be made that were uncertain at the time the estimate was made; and
- changes in the estimate or different estimates that could have been selected could have a material impact on our results of operations or financial condition.

Our management has discussed the development and selection of these critical accounting policies and estimates with the audit committee of our board of directors, and the audit committee has reviewed the disclosure presented below relating to them. We believe the critical accounting policies described below affect the more significant judgments and estimates used in the preparation of our consolidated financial statements:

- We generally manufacture products based on specific orders from customers. Shipments are generally made by common carrier after receiving authorization from the customer, and revenue is recognized upon shipment under FOB factory terms. We recognize revenue and profit as work progresses on long-term, fixed price contracts for product application development using the percentage-of-completion method, which relies on estimates of total expected contract revenue and costs. We follow this method because we can make reasonably dependable estimates of the revenue and costs applicable to various stages of a contract. Recognized revenue and profit are subject to revisions as the contract progresses to completion. Our estimates of contract costs are based on expectations of engineering development time and materials and other support costs. These estimates can change based on unforeseen technology and integration issues, but known risk factors and contract challenges are generally allowed for in the initial scope and cost estimate of the program. Historically, our final contract costs have approximated the initial estimates and any unforeseen changes in the estimates have not resulted in a material impact to financial results. Revisions in profit estimates are charged to income in the period in which the facts that give rise to the revision become known.
- We conduct a major portion of our business with a limited number of customers. For the past year and for the foreseeable future, General Motors Corporation (and subsidiaries of General Motors) have represented, and are expected to continue to represent, a significant portion of our sales and outstanding accounts

receivable. Credit is extended based upon an evaluation of each customer's financial condition, with terms consistent with those present throughout the industry. Typically, we do not require collateral from customers. We have recorded an allowance for uncollectible accounts receivable based on past experience and certain circumstances surrounding the composition of total accounts receivable. To the extent we increase this allowance in a period, we must include an expense in the statement of operations. If commercial conditions differ from management's estimates, an additional write-off may be required.

- We provide for the estimated cost of product warranties at the time revenue is recognized based on past experience. Our Tecstar Automotive Group segment provides products to OEMs under terms similar to those offered by the OEM to its customers, which are generally three years. While we engage in product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers, our warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. Should actual product failure rates, material usage or service delivery costs differ from our estimates, revisions to the estimated warranty liability would be required.
- We write down our inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. As part of our estimate, we rely upon future planned design configurations and projected alternative usage of certain components estimated by engineering. We also consider estimated demand for service and warranty parts based on historical information. If actual usage rates or market conditions are less favorable than those projected by management, inventory write-downs may be required.
- We recorded our acquisition of Starcraft in accordance with SFAS No. 141, "Business Combinations." We have not obtained all information necessary to determine the final consideration paid in connection with the transaction. In determining the fair value of the assets acquired and liabilities assumed, we considered the evaluations of independent appraisers and other estimates. These estimates may change before the final allocation is recorded in fiscal 2006.
- We evaluate our long-lived assets, particularly our goodwill and intangible assets relating to the acquisition of Starcraft and the intangible asset relating to the strategic alliance with General Motors, in accordance with Statement of Financial Accounting Standards ("SFAS") No. 144, "Accounting for Impairment or Disposal of Long-Lived Assets." Our identifiable finite-lived intangible assets are amortized over their estimated useful lives. Goodwill is not amortized, but is evaluated periodically for any impairment in the carrying value. We review our long-lived assets, which includes property, plant and equipment, goodwill and identifiable finite-lived intangible assets, for impairment on an annual basis or whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. Factors we consider important which could trigger an impairment review include, but are not limited to, the following: significant underperformance relative to expected historical or projected future operating results; significant changes in the manner of our use of the acquired assets or the strategy for our overall business; significant negative industry or economic trends; and a significant decline in our stock price for a sustained period. An impairment would be recognized based on the difference between the fair value of the asset and its carrying value. Future events could cause us to conclude that impairment indicators exist and that long-lived assets may be impaired. Any resulting impairment loss could have a material adverse impact on our financial condition and results of operations.
- We are self-insured for a portion of our employee medical benefits. Medical claims are routinely reviewed by our insurance carrier for purposes of establishing ultimate loss estimates. In addition, management determines the estimated liability for claims incurred but not reported. Such estimates and any subsequent changes in estimates may result in adjustments to our operating results in the future.
- As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves the estimation of

our actual current tax exposure together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. Included in this assessment is the determination of the net operating loss carryforward that has resulted from our cumulative net operating loss since spin-off. In addition, we have estimated the temporary differences resulting from our merger with Starcraft as of and subsequent to the March 3, 2005 acquisition date. These differences result in a net deferred tax asset. We must assess the likelihood that our deferred tax assets will be recovered from future taxable income and to the extent that we believe that recovery is not likely, we must establish a valuation allowance. To the extent we establish a valuation allowance or increase this allowance in a period, we must include an expense within the tax provision in the consolidated statement of operations. Significant management judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance recorded against our net deferred tax assets. We have recorded a valuation allowance due to uncertainties related to our ability to utilize the net deferred tax assets, primarily consisting of net operating losses and credits which may be carried forward before they expire, and that are subject to certain limitations. In the event that actual results differ from these estimates or we adjust these estimates in future periods, we may need to adjust the recorded valuation allowance, which could materially impact our financial position and results of operations. At April 30, 2005, our net deferred tax assets have been offset in full by a valuation allowance.

## Results of Operations

### *Years Ended April 30, 2004 and 2005*

Net revenue and operating income (loss) for our business segments for the years ended April 30, 2004 and 2005 were as follows:

	<u>Revenue</u>		<u>Operating Income (Loss)</u>	
	<u>Year Ended April 30</u>		<u>Year Ended April 30</u>	
	<u>2004</u>	<u>2005</u>	<u>2004</u>	<u>2005</u>
	(in thousands)			
Quantum Fuel Systems .....	\$28,119	\$22,982	\$(4,051)	\$ (8,143)
Tecstar Automotive Group .....	—	31,318	—	344
Corporate (1) .....	—	—	(5,282)	(6,011)
Total .....	<u>\$28,119</u>	<u>\$54,300</u>	<u>\$(9,333)</u>	<u>\$(13,810)</u>

(1) Represents corporate expenses not allocated to any of the reporting segments.

Net revenue increased \$26.2 million, or 93.2%, from \$28.1 million in fiscal year 2004 to \$54.3 million in fiscal 2005. The primary reason for the increase in overall revenue is the inclusion of Starcraft's operations for the period March 4, 2005 through April 30, 2005 as a result of the acquisition completed on March 3, 2005. Management refers to the operations acquired from Starcraft and its subsidiaries as the Tecstar Automotive Group and reports these results as a separate business segment.

Overall operating loss increased \$4.5 million or 48.4%, from \$9.3 million in fiscal 2004 to \$13.8 million in fiscal 2005 mainly due to increased operating losses incurred in our Quantum Fuel Systems segment as a result of lower product sales, primarily hydrogen storage systems, and associated lower margins on those systems.

### *Quantum Fuel Systems Segment*

Product sales decreased \$7.9 million, or 42.5%, from \$18.6 million in fiscal 2004 to \$10.7 million in fiscal 2005. Product sales consist of our hydrogen fuel metering and fuel storage systems for Toyota Motor Corporation's fuel cell SUV platform and bus platform and sales associated with General Motors' mid-size automobiles and pick-up trucks equipped with our bi-fuel and compressed natural gas fuel systems. Sales related

to hydrogen fuel metering and fuel storage systems for fuel cell vehicle applications declined \$4.5 million in fiscal 2005, to \$4.7 million. This decrease is primarily a result of lower fuel cell SUV platform orders and the completion of units shipped in December 2004 for the current generation of Toyota's fuel cell SUV platform. Sales related to compressed natural gas fuel systems declined \$3.4 million, to \$6.0 million. The net decrease in compressed natural gas product sales is mainly attributable to lower average unit prices related to fuel storage systems designed for truck applications and General Motors' discontinuance of the mid-size vehicle platform.

Cost of product sales in the Quantum Fuel Systems segment decreased \$3.2 million, or 24.8%, from \$12.9 million in fiscal 2004 to \$9.7 million in fiscal 2005. The decrease in costs was mainly attributable to an overall decline in volume; however, higher unit costs were incurred during fiscal 2005 related to hydrogen storage systems for fuel cell applications as a result of additional product testing and process validation implemented during fiscal 2005.

Gross profits on product sales decreased \$4.8 million, or 82.8%, from \$5.8 million in fiscal 2004 to \$1.0 million in fiscal 2005. Lower volume on product sales accounted for \$3.7 million of the decline in gross profits and lower margin accounted for \$1.1 million of the decline as a result of higher unit costs and manufacturing overhead.

Contract revenue for the Quantum Fuel Systems segment increased \$2.8 million, or 29.5%, from \$9.5 million in fiscal 2004 to \$12.3 million in fiscal 2005. Contract revenue is derived primarily from system development and application engineering of our products under funded General Motors and other OEM contracts, and other funded contract work with the U.S. military and other government agencies. The increase in fiscal 2005 was primarily due to engineering, design, and integration activities related to hydrogen internal combustion engine applications, and new and expanded programs for the development of fuel delivery systems on behalf of automotive OEM customers and military programs. We anticipate contract revenues to be higher in fiscal 2006 as a result of new and expanding hydrogen-based programs expected from our OEM automotive customers, aerospace programs, military contracts and other government-funded programs.

Research and development expense associated with cost of contract revenue included in the Quantum Fuel Systems segment increased \$2.8 million, or 59.6%, from \$4.7 million in fiscal 2004 to \$7.5 million in fiscal 2005. The increased spending was due to higher levels of contract activities.

Internally funded research and development expense for the Quantum Fuel Systems segment decreased by \$1.1 million, or 11.8%, from \$9.3 million in fiscal 2004 to \$8.2 million in fiscal 2005. The decrease in fiscal 2005 is mainly attributable to a greater emphasis on utilizing internal resources for customer specific projects as compared to the previous year.

Selling, general and administrative expenses increased \$0.4 million or 11.1% from \$3.6 million in fiscal 2004 to \$4.0 million in fiscal 2005, primarily due to a higher level of support required to carry out the expanded customer specific project activities. Selling, general and administrative expenses increased from 12.8% of total Quantum Fuel Systems segment revenues in fiscal 2004 to 17.4% in fiscal 2005.

Amortization of intangibles for the Quantum Fuel Systems segment relates to the Corporate Alliance Agreement with General Motors. The expense in fiscal year 2005 was the same as in fiscal 2004 and amounted to \$1.7 million.

Operating loss for the Quantum Fuel Systems segment increased by \$4.0 million in fiscal 2005 to \$8.1 million primarily as a result of the lower overall product revenues and lower gross profits due to the lower volume. We expect the Quantum Fuel System segment to incur continued operating losses in fiscal 2006, although we expect the losses to be lower than fiscal 2005.

### ***Tecstar Automotive Group Segment***

All activity in the Tecstar Automotive Group segment relates to operations acquired in connection with the merger with Starcraft on March 3, 2005 and consists of activities for the period beginning March 4, 2005 and

ending April 30, 2005. Tecstar Automotive Group product sales include OEM-level specialty equipment and vehicle accessories, known as styling parts and performance products, that are added to OEM pick-up truck and sport utility vehicles through a second-stage assembly process or distributed through an OEM dealer network.

Product sales for the Tecstar Automotive Group totaled \$30.1 million during fiscal 2005. Second-stage assembly revenues were \$18.3 million during fiscal 2005 and are mainly associated with second stage automotive manufacturing facilities located in Louisiana, Texas and Indiana in the United States and in Ontario, Canada. All of these facilities are located near GM assembly plants. Substantially all product sales for this business segment are to General Motors. Product sales in fiscal 2005 for automotive OEM accessory parts distributed through dealer networks were \$10.4 million, revenues from a painting and injection molding facility were \$0.6 million, and other revenues totaled \$0.8 million.

Cost of product sales for the Tecstar Automotive Group were \$26.4 million in fiscal 2005 and primarily represent the cost of raw material, labor and assembly facility overhead required in the second-stage manufacturing process and material costs related to parts distribution. Gross profit on product sales was \$3.7 million or 12.3% of sales.

Contract revenue for the Tecstar Automotive Group was \$1.2 million for fiscal 2005 and is primarily associated with design and engineering services for concept vehicles. Research and development expense associated with cost of contract revenue was \$1.4 million.

Selling, general and administrative expenses for the Tecstar Automotive Group were \$2.6 million or 8.3% of total segment revenue. These expenses represent those costs that directly support the business segment and consist mainly of selling and administrative salaries, business development costs, insurance and travel related costs.

Amortization of intangibles was \$0.5 million and represents the amortization of specifically identified customer contracts and existing technology acquired by Quantum in the merger with Starcraft. Amortization expense is expected to be approximately \$2.8 million for fiscal 2006.

Operating income was \$0.3 million for the period from March 4, 2005 to April 30, 2005. We expect that revenues and expenses for the Tecstar Automotive Group will increase for fiscal 2006 as future reporting will include operations for full reporting periods versus the approximately two month period reflected in the fiscal 2005 results. We further expect that Tecstar Automotive Group revenues in fiscal 2006 will be higher than its fiscal 2005 pro forma revenues of approximately \$184 million and anticipate that the Tecstar Automotive Group segment will generate operating income in fiscal 2006 as a result of the introductions of new special edition platforms, the distribution of OEM-level parts for a new vehicle platform and the continuation of second stage revenues under existing programs extending through July 2006.

### ***Corporate***

Corporate expenses increased by \$0.7 million, or 13.2%, from \$5.3 million in fiscal 2004 to \$6.0 million in fiscal 2005. Corporate expenses as a percentage of total revenues decreased to 11.0% in fiscal 2005 as compared to 18.8% in fiscal 2004. We expect this ratio to continue to decline during fiscal 2006 due to a higher anticipated revenue base.

### ***Non-Reporting Segment Results***

*Interest Income and Expense.* Interest income increased by \$0.5 million, or 100.0%, from \$0.5 million in fiscal 2004 to \$1.0 million in fiscal 2005. In October 2003, we completed a public offering that yielded net proceeds of \$60.1 million. The investment of those proceeds for a full twelve-month period in fiscal 2005 compared to approximately a six-month period during fiscal 2004 was the primary reason for the increase.

Interest expense increased in fiscal 2005 to \$310,000 as compared to \$45,000 in fiscal 2004 as a result of \$23.8 million in debt obligations assumed in connection with the Starcraft merger on March 3, 2005. We expect interest expense to increase in fiscal 2006 as a result of these outstanding obligations.

*Provision for Income Taxes.* Income tax expense remained minor due to our net losses during both fiscal years. A full valuation allowance has been established for our net deferred tax assets due to our lack of earnings history. We expect that income tax expense for fiscal 2006 will be the same as fiscal 2005 as we expect to continue to incur operating losses during fiscal 2006. The tax credits and net operating losses incurred through the date of the distribution remained with IMPCO.

#### **Years Ended April 30, 2003 and 2004**

Net revenue and operating loss for our business segments for the years ended April 30, 2003 and 2004 were as follows:

	Revenue		Operating Loss	
	Year Ended April 30		Year Ended April 30	
	2003	2004	2003	2004
	(in thousands)			
Quantum Fuel Systems . . . . .	\$23,639	\$28,119	\$(12,878)	\$(4,051)
Tecstar Automotive Group . . . . .	—	—	—	—
Corporate (1) . . . . .	—	—	(5,458)	(5,282)
Total . . . . .	\$23,639	\$28,119	\$(18,336)	\$(9,333)

(1) Represents corporate expenses not allocated to any of the reporting segments.

#### **Quantum Fuel Systems**

Net revenue in the Quantum Fuel Systems segment increased \$4.5 million, or 19.1%, from \$23.6 million in fiscal 2003 to \$28.1 million in fiscal 2004.

Product sales increased \$2.7 million, or 17%, from \$15.9 million in fiscal 2003 to \$18.6 million in fiscal 2004. Product sales consisted of our hydrogen fuel metering and fuel storage systems for Toyota Motor Corporation's fuel cell SUV platform and bus platform, sales associated with General Motors' mid-size automobiles, pick-up trucks, and vans equipped with our bi-fuel and compressed natural gas fuel systems, and General Motors' medium duty trucks equipped with dedicated liquid propane gas kits. Hydrogen storage system product sales to Toyota Motor Corporation for their fuel cell vehicle program increased \$4.5 million in fiscal 2004, to \$9.2 million. Alternative fuel product sales to General Motors decreased \$1.8 million from \$11.2 million in fiscal 2003 to \$9.4 million in fiscal 2004. The decrease in product sales for fiscal year 2004 was due to lower sales of General Motors' mid-size automobiles, medium duty trucks and vans, partially offset by higher sales of pick-up trucks.

Cost of product sales decreased \$5.7 million, or 30.8%, from \$18.5 million in fiscal 2003 to \$12.8 million in fiscal 2004. Although costs increased as a result of higher overall volume, this increase was offset by efficiencies achieved in per unit costs due to fewer production changeovers and reduced material scrap related to fuel storage systems. In addition, there was a decrease in direct labor and other indirect production costs related to sales associated with General Motors, including warranty reserve, inventory obsolescence, and freight charges. A provision for inventory obsolescence is made for each General Motors' model year based on inventory levels necessary to provide for future warranty and service parts, as well as for parts that cannot be transferred to the next model year program. During fiscal 2003, we determined that excess inventory remained on the close out of certain model year platforms and, therefore, we recorded an additional provision of \$1.0 million. During fiscal 2004, we recorded only \$0.2 million in additional inventory reserves.



Gross profits on product sales increased \$8.4 million, from a negative \$2.6 million in fiscal 2003 to a positive \$5.8 million in fiscal 2004, due to the increase in sales volume.

Contract revenue increased \$1.7 million, or 21.8%, from \$7.8 million in fiscal 2003 to \$9.5 million in fiscal 2004. Contract revenue is derived primarily from system development and application engineering of our products under funded General Motors and other OEM contracts, and other funded contract work with the military and other government agencies. The increase in fiscal 2004 was primarily due to an increase in the development of fuel delivery systems on behalf of our automotive OEM customers, military contracts, and other governmental agencies.

Research and development expense associated with cost of contract revenue increased \$0.5 million, or 11.9%, from \$4.2 million in fiscal 2003 to \$4.7 million in fiscal 2004. The increase was primarily due to development efforts to support customer-funded contracts and offset by our realization of engineering efficiencies.

Internally funded research and development expense decreased by \$0.4 million, or 4.1%, from \$9.7 million in fiscal 2003 to \$9.3 million in fiscal 2004. Internally funded research and development expense decreased as a result of a continued shift of research and development programs being funded under customer specific programs.

Selling, general and administrative expenses increased \$0.6 million or 20.0% from \$3.0 million in fiscal 2003 to \$3.6 million in fiscal 2004. Selling, general and administrative expenses remained consistent as a percentage of Quantum Fuel Systems total revenue at 12.8% for fiscal 2004 versus 12.7% for fiscal 2003.

Amortization of the intangible asset related to the Corporate Alliance Agreement recorded in July 2002 increased during fiscal 2004 to \$1.7 million as compared to only \$1.2 million in fiscal 2003.

Operating loss for the Quantum Fuel Systems segment decreased by \$8.8 million, from \$12.9 million in fiscal 2003 to \$4.1 million in fiscal 2004 primarily as a result of increased gross profits on higher levels of production volumes.

### ***Corporate***

Corporate expenses decreased by \$0.2 million, or 3.6%, from \$5.5 million in fiscal 2003 to \$5.3 million in fiscal 2004. Corporate expenses as a percentage of total revenues decreased to 18.8% in fiscal 2004 as compared to 23.1% in fiscal 2003.

### ***Non-Reporting Segment Results***

*Interest Income and Expense.* In fiscal year 2004, we recorded \$456,000 in interest income as compared to \$120,000 in fiscal 2003. The higher level of interest income earned is due to the investment of the proceeds of our public equity offering completed in October 2003. Interest expense decreased in fiscal 2004 to \$45,000 as compared to \$114,000 in fiscal 2003 as a result of reductions in capital lease obligations.

*Provision for Income Taxes.* Income tax expense remained minor due to our net losses during the period. Fiscal year 2004 expense was a result of foreign income taxes on Korean activities and minimum state income taxes incurred. A full valuation allowance was established for our net deferred tax assets due to our lack of earnings history. The tax credits and net operating losses incurred through the date of the distribution remained with IMPCO.

### **Liquidity and Capital Resources**

Our principal sources of liquidity at April 30, 2005 included cash and cash equivalents of \$11.7 million, short-term marketable securities of \$32.1 million, long-term marketable securities of \$4.0 million, and revolving lines of credit with domestic and Canadian lenders totaling \$35.0 million that were assumed in connection with our acquisition of Starcraft.

We assumed a total of \$23.8 million of long-term debt at the close of the merger on March 3, 2005. Maturities of long-term debt payable during fiscal 2006 are \$0.5 million. The revolving lines of credit had no outstanding balances as of April 30, 2005. Available borrowings under the lines were \$22.2 million at April 30, 2005 based on eligible receivables and inventories of the Tecstar Automotive Group segment. The advances on the \$35 million revolvers bear interest subject to a pricing matrix with ranges of 3/4% below the prime rate to 1/4% above the prime rate dependant on the ratio of funded debt to EBITDA. The facilities mature on November 1, 2006. Substantially all of Tecstar's assets collateralize the borrowings. Other than cash equivalents on deposit in Tecstar Automotive Group's operating accounts (amounting to \$2.6 million as of April 30, 2005), our cash and marketable securities do not collateralize any of the debt obligations.

We believe that our available working capital will be adequate to meet the liquidity needs of the combined operations of our business for at least the next twelve months. As of April 30, 2005, we had no material commitments for capital expenditures.

Our long-term cash requirements depend on numerous factors. Our Quantum Fuel Systems segment is dependent on factors such as the advancement of OEM fuel cell technologies, development and commercialization timing of our products, customer funding of application development programs, and other industry-wide growth factors. The Tecstar Automotive Group segment is dependent on factors such as economic conditions, including levels of disposable consumer income, the availability and price of gasoline, the level of interest rates, and the availability of consumer financing. Our cash and levels of borrowing are also impacted by the timing of Tecstar Automotive Group's once a month cash collections on product sales to General Motors. Competition and a reliance on a few customers, particularly General Motors, are additional factors that may impact our future operations.

In July 2002, we received \$15.0 million in connection with our spin-off from IMPCO. In January 2003, we completed a public equity offering of an aggregate of 4,025,000 shares of our common stock at a price of \$2.25 per share, which yielded net proceeds of \$8.0 million, all of which has been used for working capital purposes and is now fully exhausted. In October 2003, we completed a public equity offering of an aggregate of 8,050,000 shares of our common stock at a price of \$8.00 per share, which yielded net proceeds of \$60.1 million. In July 2004, Starcraft completed the private placement of \$15 million of unsecured senior subordinated convertible notes. The notes bear interest at 8.5% and mature in July 2009 with semi-annual interest payments payable on January 1 and July 1 of each year. Per terms of the notes, as modified by the merger agreement with Starcraft, the interest payments can be made in either cash or shares of our common stock, at our discretion. In connection with the merger, we assumed the obligation to issue shares of Quantum common stock upon conversion of the notes at a conversion price of \$5.77.

We may require additional sources of financing to complete product and application development, develop facilities for commercialization and mass production of our products and systems, and to take advantage of strategic opportunities. These additional sources of financing may include bank borrowings or public or private offerings of equity or debt securities. We cannot assure you that such additional sources of financing will be available on acceptable terms, if at all. We also agreed that, subject to limited exceptions, we would not issue any stock in a private placement transaction without the prior written consent of General Motors.

Net cash used in operating activities was \$6.8 million during fiscal 2005 as compared to a net use of \$4.8 million in fiscal 2004. The increase in cash used in operating activities primarily resulted from higher net losses in the current period. The net loss was \$13.1 million in fiscal 2005 versus a net loss of \$8.9 million in fiscal 2004.

Net cash provided by investing activities during fiscal 2005 was \$5.8 million as compared to a net use of \$54.3 million during fiscal 2004. The net use reflected in the prior year was primarily a result of \$52.8 million net invested in marketable securities. The net cash provided in fiscal 2005 is mainly a result of maturities on our marketable securities exceeding the levels of reinvestment in longer-term securities by \$16.7 million; thus

providing us with sufficient liquidity to complete the merger transaction with Starcraft in March 2005. The net use of cash in connection with the merger was \$9.1 million through April 2005. Purchases of equipment and leasehold improvements were \$1.9 million for fiscal 2005 as compared to \$1.5 million for the prior fiscal year.

Net cash used by financing activities during fiscal 2005 was \$3.1 million as compared to net cash provided of \$63.3 million during fiscal 2004. Cash provided during fiscal 2004 was principally from proceeds from the public equity offering in October 2003. The net use of cash by financing activities in fiscal 2005 primarily relates to payments of outstanding balances on the revolving credit facilities assumed in connection with the Starcraft acquisition in March 2005.

The ratio of current assets to current liabilities was 10.6:1 at April 30, 2004 and 2.5:1 at April 30, 2005. The primary reason for the change in the ratio from fiscal 2004 to fiscal 2005 is the assets acquired and liabilities assumed related to our merger with Starcraft. During fiscal 2005, our total working capital increased by \$1.3 million, from \$57.7 million at the end of fiscal 2004 to \$59.0 million at April 30, 2005.

### Contractual Obligations

The following table contains supplemental information regarding total contractual obligations as of April 30, 2005 (see Notes 11 and 13 of the Notes to Consolidated Financial Statements).

Contractual Obligations	Payments due by Period				
	Total	Less Than One Year	1-3 Years	3-5 Years	More Than 5 Years
Operating Lease Obligations . . . . .	\$21,124,975	\$4,786,608	\$ 7,839,174	\$ 5,051,474	\$3,447,719
Long-Term Debt Obligations . . . . .	20,181,377	525,215	2,004,407	15,956,900	1,694,855
Employment Agreements (1) . . . . .	8,518,831	4,326,499	4,192,332	—	—
Total . . . . .	<u>\$49,825,183</u>	<u>\$9,638,322</u>	<u>\$14,035,913</u>	<u>\$21,008,374</u>	<u>\$5,142,574</u>

(1) Includes agreements in place as of May 1, 2005 and consists of the estimated minimum contractual obligations under the arrangements assuming a termination of employment without cause initiated by the Company and benefit continuation assuming a cost to the Company of 15% of base salaries. All agreements remain in place until terminated by either of the parties. For further information about the specific terms of the employment agreements with executives officers, see the text of the employment agreements, which are filed as exhibits to this Report.

*Research and Development Funding Commitment.* Pursuant to the Corporate Alliance Agreement with General Motors, the Company has committed to spend \$4.0 million annually for specific research and development projects directed by General Motors to speed the commercialization of the Company's fuel cell related products. Since this commitment was waived or partially waived by General Motors for calendar years 2002, 2003 and 2004, we anticipate that this commitment will be waived or partially waived in the future. We and General Motors agreed upon a Directed Research and Development Statement of Work that covered the period from May 15, 2004 through May 14, 2005. The statement of work outlined specific tasks for the advancement of compressed fuel storage technologies enabling improved performance. Total spending under the statement of work approximated \$1.8 million and was funded under the Quantum Fuel Systems segment.

*Royalties.* Beginning July 24, 2005 for non-automotive applications and July 24, 2008 for automotive applications, we are obligated to provide revenue sharing payments to General Motors based on a percentage of gross revenue derived from sales of applications developed under the Corporate Alliance Agreement. The revenue sharing payments will equal 5% of applicable gross revenue through July 23, 2015, 4% for the ten-year period ending July 23, 2025, 3% for the ten-year period ending July 23, 2035, and 2% for the ten-year period ending July 23, 2045. On July 23, 2045, we will also be obligated to provide a final revenue sharing payment to General Motors equal to the present value of future revenue sharing payments that would otherwise be payable to General Motors on an annual basis assuming an income stream to General Motors of 2% of our gross revenues in perpetuity.

## **Quantitative and Qualitative Disclosures About Market Risk**

We are exposed to market risk from changes in interest rates due to our financing, investing and cash management activities. Specifically, our cash and cash equivalents and marketable securities are subject to fluctuations in interest rates. Based on our cash and marketable securities balance at April 30, 2005, a 1% decrease in interest rates would result in reduced annual interest income of approximately \$480,000.

We are also at risk due to the variable nature of our \$35 million in revolving credit facilities and our mortgage note. As of April 30, 2005, we had no borrowings outstanding related to the revolving credit facilities. However, a 1% increase in the interest rate could result in an annual increase in interest expense of up to approximately \$350,000, assuming the maximum amount was outstanding on the credit facilities during an entire year. A 1% increase would result in approximately \$12,000 of additional interest expense related to the mortgage note.

To date, we have not used any derivative financial instruments for the purpose of reducing our exposure to adverse fluctuations in interest rates. We are not a party to leveraged derivatives nor do we hold or issue financial investments for speculative purposes.

We are exposed to risk from fluctuating currency exchange rates, primarily the U.S. dollar against the Canadian dollar. We face transactional currency exposures that arise when our foreign subsidiaries enter into transactions denominated in currencies other than their own local currency. We also face currency exposure that arises from translating the results of our Canadian operations to the U.S. dollar. Net foreign currency transaction losses aggregated approximately \$52,000 for the two month period ended April 30, 2005 subsequent to the Starcraft acquisition.

## **Recent Accounting Pronouncements**

In November 2004, the Financial Accounting Standards Board (“FASB”) issued SFAS No. 151, “Inventory Cost.” This Statement amends the guidance in Accounting Research Bulletin No. 43, Chapter 4, “Inventory Pricing”, to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material (scrap). SFAS No. 151 requires that those items be recognized as current-period charges. In addition, SFAS No. 151 requires that the allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. The provisions of SFAS No. 151 are effective for inventory costs incurred in fiscal years beginning after June 15, 2005. As such, we plan to adopt these provisions for the annual reporting period beginning May 1, 2006. We are currently evaluating the impact that SFAS No. 151 will have on our consolidated financial statements.

In January 2003, the FASB issued Interpretation No. 46, “Consolidation of Variable Interest Entities, an Interpretation of Accounting Research Bulletin No. 51,” (“FIN 46”). FIN 46 introduces a new consolidation model, the variable interests model, which determines control (and consolidation) based on potential variability in gains and losses of the entity being evaluated for consolidation.

FIN 46 provides guidance for determining whether an entity qualifies as a variable interest entity (“VIE”) by considering, among other considerations, whether the entity lacks sufficient equity or its equity holders lack adequate decision-making ability. If the entity does not qualify as a VIE, then the consolidation criteria is based on previously established accounting standards. Qualifying VIEs are covered by FIN 46 and are individually evaluated for consolidation based on their variable interests. The Company has evaluated the potential impact of FIN 46, as revised in December 2003 by FIN 46R, and has concluded that Amstar LLC qualifies as a VIE and that the Company, through its wholly-owned subsidiary Tecstar L.P., is the primary beneficiary.

## RISK FACTORS

*This annual report, including the preceding Management's Discussion and Analysis of Financial Condition and Results of Operations, contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934. We face a number of risks and uncertainties that could cause actual results or events to differ materially from those contained in any forward-looking statement. Factors that could cause or contribute to such differences include, but are not limited to, the following:*

### **We depend on our sales to and contracts with General Motors for a substantial portion of our revenue.**

During fiscal 2003, 2004 and 2005, our revenue related to product sales to and contracts with General Motors and its affiliates represented approximately 59%, 46% and 77%, respectively, of our total revenue for these years. A substantial portion of our revenues with General Motors is for second-stage assembly and compressed natural gas programs. All of the OEM automotive supply sales of the Tecstar Automotive Group business for the three years ended April 30, 2005 were to General Motors. Our consolidated financial statements reflect the results of operations acquired from our merger with Starcraft for the period March 4, 2005 through April 30, 2005. Our arrangements with General Motors generally are non-exclusive, have no long-term volume commitments and are often done on a purchase order basis. We cannot be certain that General Motors and its affiliates will continue to purchase our products. Our second stage assembly agreements with General Motors extend through July 2006. If General Motors were to cease doing business with us or significantly reduce or delay its purchases from us, our business, financial condition and results of operations could be materially adversely affected.

To continue to compete effectively for General Motors' business, we must continue to satisfy General Motors' pricing, service, technology and increasingly stringent quality and reliability requirements. For example, General Motors has publicized its interest to put significant pressures on its suppliers to reduce costs, as well as its intention to switch suppliers if they do not comply. While we intend to focus our efforts on retaining and winning business from General Motors, we cannot assure you that we will succeed in doing so. To the extent we do not maintain our existing level of business with General Motors, we will need to attract new customers. Additionally, we cannot assure you that we will be successful in expanding our revenue base, and our failure to do so could adversely affect our business.

### **Our Quantum Fuel Systems business revenue depends to a significant extent on our relationship with General Motors and General Motors' commitment to the commercialization of fuel cell vehicles.**

Our strategic alliance with General Motors became effective upon our spin-off from IMPCO. Our business and results of operations would be materially adversely affected if General Motors were to terminate its relationship with us. Our ability to sell our products to the fuel cell automotive OEM markets depends to a significant extent upon General Motors' and its partners' worldwide sales and distribution network and service capabilities. Any change in strategy by General Motors with respect to fuel cells could harm our business by reducing or eliminating a substantial portion of our sales, whether as a result of market, economic or competitive pressures, including any decision by General Motors:

- to alter its commitment to our fuel storage, fuel delivery and electronic control technology in favor of other competing technologies;
- to exit the automotive OEM alternative fuel or fuel cell markets;
- to develop fuel cells or alternative fuel systems targeted at different application markets from ours; or
- to focus on different energy product solutions.

In addition, pursuant to our agreement with General Motors, we are required to spend \$4.0 million annually on joint research and development projects directed by General Motors over a ten-year term that commenced in

July 2002. Since this commitment was waived or partially waived by General Motors for calendar years 2002, 2003 and 2004, we anticipate that this commitment will be waived or partially waived in the future. We and General Motors agreed upon a Directed Research and Development Statement of Work that covered the period from May 15, 2004 through May 14, 2005. The statement of work outlined specific tasks for the advancement of compressed fuel storage technologies enabling improved performance. Total spending under the statement of work approximated \$1.8 million and was funded under the Quantum Fuel Systems segment. The annual commitment under our agreement with General Motors could be financially burdensome and may impact our ability to achieve profitability in the future. Where intellectual property is developed pursuant to this alliance, we have committed to provide certain exclusive or non-exclusive licenses in favor of General Motors, and in some cases the developed intellectual property will be jointly owned. As a result of such licenses, we may be limited or precluded, as the case may be, in the exploitation of such intellectual property rights.

**Our revenue is highly concentrated among a small number of customers.**

A large percentage of our revenue is typically derived from a small number of customers and we expect this trend to continue. During fiscal 2003, 2004 and 2005, in addition to General Motors, revenue related to sales of our products to Toyota Motor Corporation and its affiliates represented approximately 24%, 44% and 11%, respectively.

Our customer arrangements generally are non-exclusive, have no long-term volume commitments and are often done on a purchase order basis. We cannot be certain that customers that have accounted for significant revenue in past periods will continue to purchase our products and generate revenue. Accordingly, our revenue and results of operations may vary substantially from period to period. We are also subject to credit risk associated with the concentration of our accounts receivable from our customers. If one or more of our significant customers were to cease doing business with us, significantly reduce or delay its purchases from us or fail to pay us on a timely basis, our business, financial condition and results of operations could be materially adversely affected.

**Our business depends on the growth of the specialty vehicle and hydrogen economy markets.**

Our future success depends on the continued expansion of the specialty vehicle and hydrogen markets. The specialty vehicle market has grown significantly over the past several years, especially with automotive manufacturers developing second-stage assembly programs for popular vehicle platforms. We cannot assure you that these markets will continue to develop. Additionally, we cannot assure you that the markets for fuel cells or hydrogen-based vehicles will gain broad acceptance or, if they do, that they will result in increased sales of our advanced fuel system products. Our business depends on auto manufacturers' timing for pre-production development programs and commercial production. If there are delays in the advancement of OEM fuel cell technologies or in our OEM customers' internal plans for commercialization, our financial results could be adversely affected.

**We expect our merger with Starcraft to result in benefits to the combined company, but we may not realize those benefits due to challenges associated with integrating the companies.**

The success of our merger with Starcraft, which was completed on March 3, 2005, will depend in large part on the success of our management in integrating the operations, technologies and personnel of the two companies. Our failure to meet the challenges involved in successfully integrating the operations of Starcraft into our other operations or otherwise to realize any of the anticipated benefits of the merger could seriously harm our results of operations. In addition, the overall integration of the two companies may result in unanticipated operations problems, expenses, liabilities and diversion of management's attention. The challenges involved in this integration include the following:

- successfully integrating each company's operations, technologies, products and services;
- demonstrating to the customers of each of Quantum and Starcraft that the merger will not result in adverse changes in business focus;

- coordinating and integrating system and power train engineering activities to fully leverage each company's capabilities;
- coordinating and rationalizing research and development activities to enhance introduction of new products and technologies with reduced cost;
- preserving distribution, marketing or other important relationships of both Quantum and Starcraft and resolving potential conflicts that may arise;
- assimilating the personnel of both companies and integrating the business cultures of both companies;
- realizing the expected cost savings associated with combining the companies in the merger;
- maintaining employee morale and motivation; and
- reducing the administrative and public company costs associated with Starcraft's operations.

We may not be able to successfully integrate our operations in a timely manner, or at all, and we may not realize the anticipated benefits or synergies of the merger to the extent or in the time frame anticipated. The anticipated benefits and synergies include complementary revenue streams, a strengthened position as a full service Tier 1 OEM supplier, an enhanced ability to leverage each company's power train integration capabilities, a broader organization and an expanded geographic footprint, a stronger operational base, enriched cross-selling opportunities, and an increased profile within the financial community. These anticipated benefits and synergies are based on assumptions, not actual experience, and assume a successful integration. In addition to the potential integration challenges discussed above, our ability to realize these benefits and synergies could be adversely impacted to the extent that Quantum's or Starcraft's relationships with existing or potential customers, suppliers or strategic partners is adversely affected as a consequence of the merger, or, by practical or legal constraints on our ability to combine operations or implement workforce reductions. Furthermore, financial projections based on the same assumptions may not be correct if the underlying assumptions prove to be incorrect.

**Our financial results could suffer if the goodwill and other intangible assets we acquired in our merger with Starcraft become impaired, or as a result of costs associated with our merger with Starcraft.**

As a result of the merger, approximately 56% of our total assets are goodwill and other intangibles, of which approximately \$138.0 million is goodwill. In accordance with the Financial Accounting Standards Board's Statement No. 142, *Goodwill and Other Intangible Assets*, goodwill is not amortized but is reviewed for impairment annually, or more frequently if impairment indicators arise. Other intangibles are also reviewed at least annually or more frequently, if certain conditions exist, and may be amortized. When we perform future impairment tests, the carrying value of goodwill or other intangible assets could exceed their implied fair value and would therefore require adjustment. Such adjustment would result in a charge to our operating income in that period, which would likely harm our financial results. Additionally, further adjustments for impairment could be required in subsequent periods.

In addition, we believe that we may incur charges to operations, which are not currently reasonably estimable, in subsequent quarters after the merger was completed, to reflect costs associated with integrating Quantum and Starcraft. It is possible that we will incur additional material charges in subsequent quarters to reflect additional costs associated with the merger.

**We could become subject to stockholder litigation associated with our merger with Starcraft.**

Stockholders of companies involved in mergers sometimes file lawsuits that allege, among other things, improprieties in the manner in which the merger was approved or executed. We are not aware of any claims or potential claims with respect to our merger with Starcraft, but such claims could arise in the future. Any such claims, whether or not resolved in our favor, could divert our management and other resources from the operation of our business and otherwise result in unexpected and substantial expenses that adversely and materially impact our operating results.

**The cyclical nature of automotive production and sales, particularly those of General Motors, could adversely affect our Tecstar Automotive Group business.**

Starcraft's OEM automotive supply sales are directly impacted by the size of the automotive industry and General Motors' market share, particularly in the market for pick-up trucks and sport utility vehicles. Automobile production and sales are highly cyclical and depend on general economic conditions and other factors, including consumer spending and preferences. In addition, automotive production can be affected by labor relations issues, regulatory requirements, trade agreements, and other factors. Furthermore, General Motors periodically reduces production or closes plants for periods of several months for model changeovers. For example, during the third quarter of calendar year 2000, one of Starcraft's two manufacturing facilities was substantially shut down as a result of General Motors' model changeover. The shut down continued through the first quarter of calendar year 2001. GM recently reported declines in vehicle sales, particularly in sales of and demand for its sport utility vehicles. On June 8, 2005, General Motors announced that it planned to close more plants and to cut about 25,000 North American jobs, or 14% of the region's workforce by 2008. A decline in sales in the automotive market or in General Motors' automotive sales, or production cutbacks and plant shut downs for model changeovers by General Motors, could have an adverse impact on our Tecstar Automotive Group business.

**We have a history of operating losses and negative cash flow that may continue into the foreseeable future if our merger with Starcraft does not provide the anticipated benefits.**

We have a history of operating losses and negative cash flow. If we fail to execute our strategy to achieve and maintain profitability in the future, investors could lose confidence in the value of our common stock, which could cause our stock price to decline. We have spent significant funds to develop and refine our technologies and services. We expect to continue to invest in research and development, and this investment could outpace revenue growth, which would hinder our ability to achieve and maintain profitability. Our merger with Starcraft may not create the benefits and results we expect, adversely affecting our strategy to achieve profitability. To achieve profitability, we will also need to, among other things, effectively integrate Starcraft's business, increase our revenue base and realize economies of scale. If we are unable to achieve and maintain profitability, our stock price could be materially adversely affected.

**We may never be able to introduce commercially viable hydrogen products and systems.**

We do not know whether or when we will successfully introduce commercially viable fuel storage, fuel delivery or electronic control products for the hydrogen market. We have produced and are currently demonstrating a number of test and evaluation systems and are continuing efforts to decrease the costs of these systems and to improve their overall functionality and efficiency. However, we must complete substantial additional research and development on these systems before we can introduce commercially viable hydrogen products and systems. Even if we are able to do so, these efforts will still depend upon the success of other companies in producing related and necessary products for use in conjunction with commercially viable fuel cells, hybrids and other hydrogen applications.

**A mass market for hydrogen fuel cell products and systems may never develop or may take longer to develop than anticipated.**

Fuel cell and hydrogen systems represent emerging technologies, and we do not know whether consumers will adopt these technologies on a large scale or whether OEMs will incorporate these technologies into their products. In particular, if a mass market fails to develop, or develops more slowly than anticipated, for hydrogen powered transportation applications, we may be unable to recover our expenditures to develop our fuel systems for hydrogen applications and may be unable to achieve or maintain profitability, any of which could negatively impact our business. Estimates for the development of a mass market for fuel cell products and systems have lengthened in recent years. Many factors that are beyond our control may have a negative effect on the development of a mass market for fuel cells and our fuel systems for hydrogen applications. These factors include the following:

- cost competitiveness and physical size of fuel cell systems and "balance of plant" components;



- availability, future costs and safety of hydrogen, natural gas and other potential fuel cell fuels;
- consumer acceptance of hydrogen or alternative fuel products;
- government funding and support for the development of hydrogen vehicles and hydrogen fuel infrastructure;
- the willingness of OEMs to replace current technology;
- consumer perceptions of hydrogen systems;
- regulatory requirements; and
- emergence of newer, breakthrough technologies and products within the hydrogen industry.

**Evolving customer design requirements, product specifications and testing procedures could cause order delays or cancellations.**

We have experienced delays in shipping our products as a result of changing customer specifications and testing procedures. Due to the dynamic nature of hydrogen fuel cell technology, changes in specifications are common and may continue to result in delayed shipments, order cancellations or higher production costs. Evolving design requirements or product specifications may adversely affect our business or financial results.

**Higher gasoline prices, higher interest rates and/or decreases in the level of disposable consumer income could adversely affect the demand for the products of our Tecstar Automotive Group business.**

Our Tecstar Automotive Group is heavily dependent on consumer demand for large trucks and SUVs. A significant increase in the price of gasoline could reduce demand for the products of our Tecstar Automotive Group business because it would increase the cost of operating the products our Tecstar Automotive Group business sells. Additionally, since many consumers finance their purchase of vehicles, the availability of financing and level of interest rates can affect a consumer's purchasing decision. A decline in general economic conditions, consumer confidence or the level of disposable consumer income would be expected to adversely affect the sales of our Tecstar Automotive Group business.

**Our ability to design and manufacture fuel systems for fuel cell, hydrogen and hybrid applications that can be integrated into OEM products will be critical to our business.**

We currently offer packaged fuel systems, which include tanks, brackets, electronics, software and other components required to allow these products to operate in fuel cells, hybrids, or other alternative fuel applications. Customers for these systems require that these products meet strict OEM standards that can vary by jurisdiction. Compliance with these requirements has resulted in increased development, manufacturing, warranty and administrative costs. A significant increase in these costs could adversely affect our business, results of operations and financial condition. If we fail to meet OEM specifications on a timely basis, our existing or future relationships with OEMs may be harmed, which would have a material adverse effect on our business, results of operations and financial condition.

To be commercially viable, our fuel cell products and systems must be integrated into products manufactured by OEMs. We can offer no assurance that OEMs will manufacture appropriate products or, if they do manufacture such products, that they will choose to use our fuel cell products and systems. Any integration, design, manufacturing or marketing problems encountered by OEMs could adversely affect the market for our fuel cell products and systems and our business, results of operations and financial condition.

**We depend on third-party suppliers for the supply of materials and components for our products.**

A supplier's failure to supply materials or components in a timely manner, or to supply materials and components that meet our quality, quantity or cost requirements, or our inability to obtain substitute sources for

these materials and components in a timely manner or on terms acceptable to us, could harm our ability to manufacture fuel systems for our fuel cell applications and other products. In particular, components that we integrate in our hydrogen fuel regulation systems need to be compatible with hydrogen. To the extent materials need to be tested and replaced to ensure compatibility, we may experience delays in shipping our hydrogen fuel regulation systems or complete packaged fuel systems. For example, in our first quarter of fiscal 2005, a supplier notified us that one of its components that we use in our hydrogen fuel regulation system has been discontinued due to a concern about its compatibility with hydrogen. Additionally, a delay in the delivery of components or materials used in our products, such as high-strength fiber, from our current suppliers or a change to other suppliers would likely delay the production of our products that use those components or materials, which could negatively impact our business, results of operations and financial condition.

**The terms and enforceability of many of our strategic partner relationships are uncertain.**

We have entered into relationships with strategic partners for design, product development and distribution of our existing products, and products under development, some of which may not have been documented by a definitive agreement. Where definitive agreements govern the relationships between us and our partners, the terms and conditions of many of these agreements allow for termination by the partners. Termination of any of these agreements could adversely affect our ability to design, develop and distribute these products to the marketplace. In many cases, these strategic relationships are governed by a memorandum of understanding or a letter of intent. We cannot assure you that we will be able to successfully negotiate and execute definitive agreements with any of these potential partners, and failure to do so may effectively terminate the relevant relationship.

**We currently face and will continue to face significant competition.**

Our products face and will continue to face significant competition. New developments in technology may negatively affect the development or sale of some or all of our products or make our products uncompetitive or obsolete. Other companies, many of which have substantially greater resources, are currently engaged in the development of products and technologies that are similar to, or may be competitive with, certain of our products and technologies.

Because the fuel cell has the potential to replace existing power sources, competition for fuel cell products will come from current power technologies, from improvements to current power technologies and from new alternative power technologies. Increases in the market for alternative fueled vehicles may cause OEMs to find it advantageous to develop and produce their own fuel management equipment rather than purchase the equipment from us. In addition, greater acceptance of alternative fuel engines or fuel cells may result in new competitors. Furthermore, there are competitors, including OEMs, working on developing other fuel cell technologies in our targeted markets. A large number of corporations, national laboratories and universities in the United States, Canada, Europe and Japan possess fuel cell technology and/or are actively engaged in the development and manufacture of fuel cells. Each of these competitors has the potential to capture market share in various markets, which would have a material adverse effect on our position in the industry and our business, results of operations and financial condition. Many of our competitors have financial resources, customer bases, businesses or other resources which give them significant competitive advantages.

**We depend on our intellectual property, and our failure to protect that intellectual property could adversely affect our future growth and success.**

Our failure to protect our existing intellectual property rights may result in the loss of exclusivity or the right to use our technologies. If we do not adequately ensure our freedom to use certain technology, we may have to pay others for rights to use their intellectual property, pay damages for infringement or misappropriation, and/or be enjoined from using such intellectual property.

We have not conducted formal evaluations to confirm that our technology and products do not or will not infringe upon the intellectual property rights of third parties. As a result, we cannot be certain that our technology and products do not or will not infringe upon the intellectual property rights of third parties. If infringement were to occur, our development, manufacturing, sales and distribution of such technology or products may be disrupted.

We rely on patent, trade secret, trademark and copyright law to protect our intellectual property. Our patent position is subject to complex factual and legal issues that may give rise to uncertainty as to the validity, scope and enforceability of a particular patent. Accordingly, we cannot assure you that any of the patents we have filed or other patents that third parties license to us will not be invalidated (especially in light of the potentially adverse implications of our abandoned reissue application and agreement with Dynetek Industries Ltd. in which we agreed not to assert claims with respect to our in-tank regulator patent), circumvented, challenged, rendered unenforceable, or licensed to others or that any of our pending or future patent applications will be issued with the breadth of claim coverage we seek, if issued at all.

Effective patent, trademark, copyright and trade secret protection may be unavailable, limited or not applied for in certain foreign countries. For instance, it may be difficult for us to enforce certain of our intellectual property rights against third parties who may have inappropriately acquired interests in our intellectual property rights by filing unauthorized trademark applications in foreign countries to register our marks because of their familiarity with our business in the United States.

Some of our proprietary intellectual property is not protected by any patent or patent application, and, despite our precautions, it may be possible for third parties to obtain and use such intellectual property without authorization. We have generally sought to protect such proprietary intellectual property in part by confidentiality agreements and, if applicable, inventors' rights agreements with strategic partners and employees, although such agreements have not been put in place in every instance. We cannot guarantee that these agreements adequately protect our trade secrets and other intellectual property or proprietary rights. In addition, we cannot assure you that these agreements will not be breached, that we will have adequate remedies for any breach or that such persons or institutions will not assert rights to intellectual property arising out of these relationships. Furthermore, the steps we have taken and may take in the future may not prevent misappropriation of our solutions or technologies, particularly in respect of officers and employees who are no longer employed by us or in foreign countries where laws or law enforcement practices may not protect our proprietary rights as fully as in the United States.

**Our failure to obtain or maintain the right to use certain intellectual property may negatively affect our business.**

Our future success and competitive position depends in part upon our ability to obtain or maintain certain proprietary intellectual property used in our principal products. This may be achieved, in part, by prosecuting claims against others who we believe are infringing our rights and by defending claims of intellectual property infringement brought by others. While we are not currently engaged in any material intellectual property litigation, in the future we may commence lawsuits against others if we believe they have infringed our rights, or we may become subject to lawsuits alleging that we have infringed the intellectual property rights of others. For example, to the extent that we have previously incorporated third-party technology and/or know-how into certain products for which we do not have sufficient license rights, we could incur substantial litigation costs, be forced to pay substantial damages or royalties, or even be forced to cease sales in the event any owner of such technology or know-how were to challenge our subsequent sale of such products (and any progeny thereof). In addition, to the extent that we discover or have discovered third-party patents that may be applicable to products or processes in development, we may need to take steps to avoid claims of possible infringement, including obtaining non-infringement or invalidity opinions and, when necessary, re-designing or re-engineering products. However, we cannot assure you that these precautions will allow us to successfully avoid infringement claims. Our involvement in intellectual property litigation could result in significant expense to us, adversely affect the

development of sales of the challenged product or intellectual property and divert the efforts of our technical and management personnel, whether or not such litigation is resolved in our favor. In the event of an adverse outcome in any such litigation, we may, among other things, be required to:

- pay substantial damages;
- cease the development, manufacture, use, sale or importation of products that infringe upon other patented intellectual property;
- expend significant resources to develop or acquire non-infringing intellectual property;
- discontinue processes incorporating infringing technology; or
- obtain licenses to the infringing intellectual property.

We cannot assure you that we would be successful in any such development or acquisition or that any such licenses would be available upon reasonable terms, if at all. Any such development, acquisition or license could require the expenditure of substantial time and other resources and could have a material adverse effect on our business, results of operations and financial condition.

**We have limited experience manufacturing fuel systems for fuel cell and hydrogen applications on a commercial basis.**

To date, we have limited experience manufacturing fuel systems for fuel cell and hydrogen applications on a commercial basis. In order to produce fuel systems at affordable prices, we will have to produce fuel systems through high volume automated processes. We do not know whether we will be able to develop efficient, automated, low-cost manufacturing capability and processes that will enable us to meet the quality, price, engineering, design and production standards, or production volumes required to successfully mass market our fuel systems for fuel cell and hydrogen applications. Even if we are successful in developing our high volume manufacturing capability and processes, we do not know whether we will do so in time to meet our product commercialization schedules or to satisfy the requirements of customers. Our failure to develop such manufacturing processes and capabilities could have a material adverse effect on our business, results of operations and financial condition.

**We may need to raise additional capital in the future to achieve commercialization of our products and technologies and to develop facilities for mass production of these products.**

Our future cash requirements will depend on numerous factors, including completion of our product development activities, our ability to commercialize our fuel systems for fuel cell applications and market acceptance of our products. We expect to devote substantial capital resources to continue development programs and develop a manufacturing infrastructure for our products. We anticipate that we may need to raise additional funds to achieve commercialization of our products and to develop facilities for mass production of those products. We do not know whether we will be able to secure additional funding on terms acceptable to us, if at all. If additional funds are raised through the issuance of equity securities or additional acquisitions of entities with cash reserves, the percentage ownership of our then-current stockholders will be reduced. In addition, pursuant to restrictions in our agreement with General Motors, we will generally need General Motors' consent prior to issuing our capital stock in a private placement, and we can provide no assurances that such consent can be obtained. If adequate funds are not available to satisfy long-term capital requirements, we may be required to limit operations in a manner inconsistent with our development and commercialization plans, which could adversely affect operations in future periods.

**We may not meet our product development and commercialization milestones.**

We have product development programs that are in the pre-commercial stage. The success of each product development program is highly dependent on our correct interpretation of commercial market requirements, and

our translation of those requirements into applicable product specifications and appropriate development milestones. If we have misinterpreted market requirements, or if the requirements of the market change, we may develop a product that does not meet the cost and performance requirements for a successful commercial product. In addition, if we do not meet the required development milestones, our commercialization schedules could be delayed, which could result in potential purchasers of these products declining to purchase additional systems or choosing to purchase alternative technologies. Delayed commercialization schedules may also impact our cash flow, which could require increased funding.

**Our business could suffer if we fail to attract and maintain key personnel.**

Our future depends, in part, on our ability to attract and retain key personnel, including engineers, technicians, machinists and management personnel. For example, our research and development efforts depend on hiring and retaining qualified engineers. Competition for highly skilled engineers is extremely intense, and we may experience difficulty in identifying and hiring qualified engineers in many areas of our business. Our future also depends on the continued contributions of our executive officers and other key management and technical personnel, each of whom would be difficult to replace. In connection with our merger with Starcraft, we may face challenges in integrating the personnel and management of our companies. We do not maintain a key person life insurance policy on our chief executive officer, our chief financial officer or any other officer. The loss of the services of one or more of our senior executive officers or key personnel, or the inability to continue to attract qualified personnel, could delay product development cycles or otherwise materially harm our business, results of operations and financial condition.

**We may be adversely affected by labor disputes.**

Labor disputes may occur at OEM facilities, which may adversely affect our business, particularly our Tecstar Automotive Group business. As our Tecstar Automotive Group business becomes more dependent on vehicle conversion programs with OEMs, we will become increasingly dependent on OEM production and the associated labor forces at OEM sites. Labor unions represent most of the labor forces at OEM facilities. Labor disputes could occur at OEM facilities, which could adversely impact our direct OEM product sales. Additionally, we may be subject to work slowdowns or stoppages from time to time.

**We may be subject to warranty claims, and our provision for warranty costs may not be sufficient.**

We may be subject to increased warranty claims due to longer warranty periods. In response to consumer demand, vehicle manufacturers have been providing, and may continue to provide, increasingly longer warranty periods for their products. As a consequence, these manufacturers require their suppliers, such as us, to provide correspondingly longer product warranties. As a result, we could incur substantially greater warranty claims in the future.

**Our business may be subject to product liability claims or product recalls, which could be expensive and could result in a diversion of management's attention.**

The automotive industry experiences significant product liability claims. As a supplier of products and systems to automotive OEMs, we face an inherent business risk of exposure to product liability claims in the event that our products, or the equipment into which our products are incorporated, malfunction and result in personal injury or death. We may be named in product liability claims even if there is no evidence that our systems or components caused the accidents. Product liability claims could result in significant losses as a result of expenses incurred in defending claims or the award of damages. The sale of systems and components for the transportation industry entails a high risk of these claims. In addition, we may be required to participate in recalls involving these systems if any of our systems prove to be defective, or we may voluntarily initiate a recall or make payments related to such claims as a result of various industry or business practices or the need to maintain good customer relationships. Our other products may also be subject to product liability claims or recalls. We

cannot assure you that our product liability insurance will be sufficient to cover all product liability claims, that such claims will not exceed our insurance coverage limits or that such insurance will continue to be available on commercially reasonable terms, if at all. Any product liability claim brought against us could have a material adverse effect on our reputation and business.

**Our insurance may not be sufficient.**

We carry insurance that we consider adequate in regard to the nature of the covered risks and the costs of coverage. We are not fully insured against all possible risks, nor are all such risks insurable.

**Our business may become subject to future product certification regulations, which may impair our ability to market our products.**

We must obtain product certification from governmental agencies, such as the U.S. Environmental Protection Agency and the California Air Resources Board, to sell certain of our products in the United States and internationally. A significant portion of our future sales will depend upon sales of fuel management products that are certified to meet existing and future air quality and energy standards. We cannot assure you that our products will continue to meet these standards. The failure to comply with these certification requirements could result in the recall of our products or in civil or criminal penalties.

We anticipate that regulatory bodies will establish certification procedures and impose regulations on fuel cell enabling technologies, which may impair our ability to distribute, install and service these systems. Any new government regulation that affects our advanced fuel technologies, whether at the foreign, federal, state or local level, including any regulations relating to installation and servicing of these systems, may increase our costs and the price of our systems. As a result, these regulations may have a negative impact on our business, results of operations and financial condition.

**Failure to comply with applicable environmental and other laws and regulations could adversely affect our business and harm our results of operations.**

We use hazardous materials in our research and development and manufacturing processes, and as a result are subject to federal, state, local and foreign regulations governing the use, storage, handling and disposal of these materials and hazardous waste products that we generate. Although we believe that our procedures for using, handling, storing and disposing of hazardous materials comply with legally prescribed standards, we cannot completely eliminate the risk of contamination or injury resulting from hazardous materials and we may incur liability as a result of any such contamination or injury. In the event of an accident, including a discharge of hazardous materials into the environment, we could be held liable for damages or penalized with fines, and the liability could exceed our insurance and other resources. We have also incurred and may continue to incur expenses related to compliance with environmental laws. Such future expenses or liability could have a significant negative impact on our business, financial condition and results of operations. Further, we cannot assure you that the cost of complying with these laws and regulations will not materially increase in the future.

We are also subject to various other federal, state, local and foreign laws and regulations. Failure to comply with applicable laws and regulations, including new or revised safety or environmental standards, could give rise to significant liability and require us to incur substantial expenses and could materially harm our results of operations.

**New technologies could render our existing products obsolete.**

New developments in technology may negatively affect the development or sale of some or all of our products or make our products obsolete. A range of other technologies could compete with fuel cell, hydrogen, or alternative fuel technologies on which our automotive OEM business is currently focused, including electric

vehicles, and methanol-based fuel cell vehicles that require fuel reformation. Our success depends upon our ability to design, develop and market new or modified fuel cell and hydrogen products and systems, as well as fuel storage, fuel delivery and electronic control products for fuel cells and internal combustion engines. Our inability to enhance existing products in a timely manner or to develop and introduce new products that incorporate new technologies, conform to increasingly stringent emission standards and performance requirements and achieve market acceptance in a timely manner could negatively impact our competitive position. New product development or modification is costly, involves significant research, development, time and expense and may not necessarily result in the successful commercialization of any new products.

**Changes in environmental policies could hurt the market for our products.**

The market for fuel cell and alternative fuel vehicles and equipment and the demand for our products are driven, to a significant degree, by local, state and federal regulations that relate to air quality, greenhouse gases and pollutants, and that require the purchase of motor vehicles and equipment operating on alternative fuels or fuel cells. Similarly, foreign governmental regulations also affect our international business. These laws and regulations may change, which could result in transportation or equipment manufacturers abandoning or delaying their interest in alternative fuel and fuel cell powered vehicles or equipment. In addition, a failure by authorities to enforce current domestic and foreign laws or to adopt additional environmental laws could limit the demand for our products.

Although many governments have identified as a significant priority the development of alternative energy sources, and fuel cells in particular, we cannot assure you that governments will not change their priorities or that any change they make would not materially affect our revenue or the development of our products.

**The development of uniform codes and standards for hydrogen fuel cell vehicles and related hydrogen refueling infrastructure may not develop in a timely fashion.**

Uniform codes and standards do not currently exist for fuel cell systems, fuel cell components or the use of hydrogen as a vehicle fuel. Establishment of appropriate codes and standards is a critical element to allow fuel cell system developers, fuel cell component developers and hydrogen storage and handling companies to develop products that will be accepted in the marketplace.

All fuels, including hydrogen, pose significant safety hazards, and hydrogen vehicles have not yet been widely used under “real-world” driving conditions. Ensuring that hydrogen fuel is safe to use by the car-driving public requires that appropriate codes and standards be established that will address certain characteristics of hydrogen and the safe handling of hydrogen fuels.

The development of fuel cell and hydrogen fuel applicable standards is being undertaken by numerous organizations, including the American National Standards Institute, the American Society of Mechanical Engineers, the European Integrated Hydrogen Project, the International Code Council, the International Standards Organization, the National Fire Protection Association, the National Hydrogen Association, the Society of Automotive Engineers, the Canadian Standards Association, the American National Standards Institute and the International Electrotechnical Commission. Given the number of organizations pursuing hydrogen and fuel cell codes and standards, it is not clear whether universally accepted codes and standards will result and, if so, when.

Although many organizations have identified as a significant priority the development of codes and standards, we cannot assure you that any resulting codes and standards would not materially affect our revenue or the commercialization of our products.

**Future sales of substantial amounts of our common stock could affect its market price.**

Future sales of substantial amounts of our common stock into the public market, including shares issued upon exercise of options and warrants, could adversely affect the prevailing market price of our common stock. In connection with our merger with Starcraft, we:

- issued approximately 21.0 million shares of our common stock to holders of shares of Starcraft's common stock outstanding at the effective time of the merger; and
- agreed to issue approximately 2.6 million shares of our common stock upon conversion of Starcraft's 8.5% Convertible Subordinated Notes due 2009.

Furthermore, in connection with our merger with Starcraft, we agreed to file a registration statement on Form S-3 (or other available registration form) to permit the resale by certain former shareholders of Starcraft of the shares of our common stock that they received in the merger. To the extent that holders of a significant number of shares of our common stock choose to liquidate their investments in us, sales of such shares could have a negative impact upon the price of our common stock, particularly in the short-term.

**Our future operating results may fluctuate, which could result in a lower price for our common stock.**

The market price of our common stock may decline below currently prevailing levels. The market price of our common stock may be adversely affected by numerous factors, including:

- actual or anticipated fluctuations in our operating results;
- changes in financial estimates by securities analysts; and
- general market conditions and other factors.

Our future operating results may fluctuate significantly depending upon a number of factors, including general industry conditions.

**If we fail to maintain adequate internal controls we may not be able to produce reliable financial reports in a timely manner or prevent financial fraud.**

We are required to document and test our internal control procedures in order to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act of 2002, which requires annual management assessments of the effectiveness of our internal controls over financial reporting and a report by our independent auditors addressing these assessments. As a result of our merger with Starcraft, our internal controls include the internal controls of both Starcraft and Quantum. Our internal controls will also include those of any company or business that we acquire in the future. Acquired companies or businesses are likely to have different standards, controls, contracts, procedures and policies, making it more difficult to implement and harmonize company-wide financial, accounting, information and other systems. During the course of our testing we may identify deficiencies which we may not be able to remediate in time to meet the deadlines imposed by the Sarbanes-Oxley Act of 2002. If we fail to maintain the adequacy of our internal controls, as such standards are modified, supplemented or amended from time to time, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal controls over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act of 2002. Moreover, effective internal controls are necessary for us to produce reliable financial reports and are important in helping prevent financial fraud. If we cannot provide reliable financial reports on a timely basis or prevent financial fraud, our business and operating results could be harmed, investors could lose confidence in our reported financial information, and the trading price of our stock could be negatively affected.

**The market price and trading volume of our common stock may be volatile.**

Prior to July 2002, there was no trading market for our common stock. Since our common stock began trading in July 2002, its market price and trading volume have been volatile. The market price of our common



stock could continue to fluctuate significantly for many reasons, including in response to the risk factors described in this annual report or for reasons unrelated to our specific performance. In recent years, the stock market has experienced extreme price and volume fluctuations. This volatility has affected the market prices of securities issued by many companies for reasons unrelated to their operating performance and may adversely affect the market price and trading volume of our common stock. Prices for our common stock may also be influenced by the depth and liquidity of the market for our common stock, investor perceptions about us and our business, our future financial results, the absence of cash dividends on our common stock and general economic and market conditions. In the past, securities class action litigation has often been instituted against companies following periods of volatility in their stock price. This type of litigation could result in substantial costs and could divert our management and other resources.

**Provisions of Delaware law and of our amended and restated certificate of incorporation and amended and restated bylaws may make a takeover or change in control more difficult.**

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws, and of Delaware corporate law, may make it difficult and expensive for a third party to pursue a tender offer, change in control or takeover attempt that our management and board of directors oppose. Public stockholders that might desire to participate in one of these transactions may not have an opportunity to do so. Our amended and restated certificate of incorporation and amended and restated bylaws provide for the following:

- a staggered board of directors, which makes it difficult for stockholders to change the composition of the board of directors in any one year;
- the exclusive right of the board of directors to change the number of directors and fill vacancies on the board of directors, which could make it more difficult for a third party to obtain control of the board of directors;
- authorizing the issuance of preferred stock which can be created and issued by the board of directors without prior stockholder approval, commonly referred to as “blank check” preferred stock, with rights senior to those of our common stock, which could make it more difficult or expensive for a third party to obtain voting control of us;
- advance notice requirements for director nominations or other proposals at stockholder meetings;
- prohibiting stockholder action by written consent, which could delay a third party from pursuing an acquisition; and
- requiring the affirmative vote of holders of at least two-thirds of our outstanding voting stock to amend certain provisions in our amended and restated certificate of incorporation and amended and restated bylaws, and requiring the affirmative vote of 80% of our outstanding voting stock to amend certain other provisions of our amended and restated certificate of incorporation and amended and restated bylaws, which could make it more difficult for a third party to remove the provisions we have included to prevent or delay a change of control.

These anti-takeover provisions could substantially impede the ability of public stockholders to benefit from a change in control or to change our management and the board of directors.

**Item 7A. Quantitative and Qualitative Disclosures About Market Risk.**

Information relating to Quantitative and Qualitative Disclosures About Market Risk appear under the heading “Quantitative and Qualitative Disclosures About Market Risk,” which is included in Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operation.

**Item 8. Financial Statements and Supplementary Data.**

The information required by this item is contained in the consolidated financial statements listed in Item 15(a) of this annual report under the caption “Financial Statements” and appear beginning on page F-1 of this annual report.

**Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.**

None.

**Item 9A. Controls and Procedures**

**(a) Disclosure Controls and Procedures**

As of the end of the period covered by this report, we carried out an evaluation, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective in timely alerting them to material information required to be included in this report.

**(b) Design and Evaluation of Internal Control Over Financial Reporting**

*Management's Report on Internal Control Over Financial Reporting*

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of the design and operation of our internal control over financial reporting based on the framework in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that the our internal control over financial reporting was effective as of April 30, 2005. The scope of management's assessment of the effectiveness of internal control over financial reporting includes all of our business except for the Tecstar Automotive Group (formerly Starcraft Corporation), a material business acquired on March 3, 2005. Our consolidated sales for the fiscal year ended April 30, 2005 were \$54.3 million, of which the Tecstar Automotive Group represented \$31.3 million. Our total assets as of April 30, 2005, were \$277.7 million, of which the Tecstar Automotive Group represented \$194.5 million. Ernst & Young LLP, our independent registered public accounting firm, audited management's assessment of the effectiveness of internal control over financial reporting and, based on that audit, issued the report set forth on the following page.

**REPORT OF ERNST & YOUNG LLP,  
INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM,  
ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

The Board of Directors and Stockholders  
Quantum Fuel Systems Technologies Worldwide, Inc.

We have audited management's assessment, included in Management's Report on Internal Control Over Financial Reporting, that Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries maintained effective internal control over financial reporting as of April 30, 2005 based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As indicated in the accompanying Management's Report on Internal Control Over Financial Reporting included in Item 9(b), management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of the Tecstar Automotive Group (formerly Starcraft Corporation), which was acquired in March 2005 and is included in the fiscal 2005 consolidated financial statements of Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries, and constituted 70% of total assets as of April 30, 2005 and 58% of sales for the year then ended. Our audit of internal control over financial reporting of Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries also did not include an evaluation of the internal control over financial reporting of the Tecstar Automotive Group.

In our opinion, management's assessment that Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries maintained effective internal control over financial reporting as of April 30, 2005, is fairly stated, in

all material respects, based on the COSO criteria. Also, in our opinion, Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries maintained, in all material respects, effective internal control over financial reporting as of April 30, 2005, based on the COSO criteria.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries as of April 30, 2004 and 2005, and the related consolidated statements of operations, changes in stockholders' equity, and cash flows for each of the three years in the period ended April 30, 2005, and our report dated June 22, 2005 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Los Angeles, California  
June 22, 2005

**(c) Changes in Internal Control Over Financial Reporting**

There have been no other changes in our internal control over financial reporting that occurred during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B. Other Information.**

None.

## **PART III**

### **Item 10. Directors and Executive Officers of the Registrant.**

Information regarding our board of directors, audit committee, audit committee financial expert and code of ethics is set forth under the caption “Election of Directors,” in our definitive Proxy Statement to be filed in connection with our fiscal 2005 Annual Meeting of Stockholders and such information is incorporated herein by reference. Information regarding Section 16(a) beneficial ownership compliance is set forth under the caption “Executive Compensation—Compliance with Section 16(a) of the Securities and Exchange Act” our definitive Proxy Statement to be filed in connection with our fiscal 2005 Annual Meeting of Stockholders and such information is incorporated by reference. A list of our executive officers is included in Part I, Item 1 of this Report under the heading “Executive Officers.”

We have adopted a Code of Business Conduct and Ethics that applies to each of our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Our Code of Business Conduct and Ethics, Audit Committee Charter, Compensation Committee Charter, and Nominating and Corporate Governance Committee Charter are posted on our website at [www.qttw.com/about/corporate\\_governance/index.php](http://www.qttw.com/about/corporate_governance/index.php).

### **Item 11. Executive Compensation.**

The information required by this item is set forth under the captions “Executive Compensation and Other Information” and “Election of Directors—Compensation of Directors” in our definitive Proxy Statement to be filed in connection with our fiscal 2005 Annual Meeting of Stockholders and such information is incorporated herein by reference.

### **Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.**

The information required by this item is set forth under the captions “Security Ownership of Certain Beneficial Owners and Management” and “Equity Compensation Plan Information” in our definitive Proxy Statement to be filed in connection with our fiscal 2005 Annual Meeting of Stockholders and such information is incorporated herein by reference.

### **Item 13. Certain Relationships and Related Transactions.**

The information required by this item is set forth under the captions “Certain Relationships and Related Transactions” and “Compensation Committee Interlocks and Insider Participation” in our definitive Proxy Statement to be filed in connection with our fiscal 2005 Annual Meeting of Stockholders and such information is incorporated herein by reference.

### **Item 14. Principal Accountant Fees and Services.**

The information required by this item is set forth under the caption “Ratification and Approval of the Appointment of Independent Accountants” in our definitive Proxy Statement to be filed in connection with our fiscal 2005 Annual Meeting of Stockholders and such information is incorporated herein by reference.

## PART IV

### Item 15. Exhibits and Financial Statement Schedules.

(a) The following documents are filed as part of this report:

(1) Financial Statements. See Consolidated Financial Statements beginning on page F-1.

(2) Financial Statement Schedules. See Schedule II, Valuation and Qualifying Accounts that follow the Consolidated Financial Statements.

All other schedules are omitted because the information is not applicable or is not material, or because the information is included in the consolidated financial statements or the notes thereto.

(3) Exhibits. The following exhibits are filed or incorporated by reference as a part of this report:

<u>Exhibit No.</u>	<u>Description</u>
2.1	Contribution and Distribution Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant (filed as Exhibit 10.1 hereto).
2.2	Agreement and Plan of Merger, dated as of November 23, 2004, by and among the Registrant, Quake Sub, Inc. and Starcraft Corporation (incorporated herein by reference to Exhibit 2.1 of the Registrant's Current Report on Form 8-K that was filed with the SEC on November 23, 2004).
3.1	Amended and Restated Certificate of Incorporation of the Registrant, dated March 3, 2005 (incorporated herein by reference to Exhibit 3.1 of the Registrant's Current Report on Form 8-K that was filed with the SEC on March 9, 2005).
3.2	Amended and Restated Bylaws of the Registrant (incorporated herein by reference to Exhibit 3.2 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2004, which was filed with the SEC on July 29, 2002).
4.1	Specimen Common Stock Certificate (incorporated herein by reference to Exhibit 4.1 of the Registrant's Registration Statement on Form 10 (File No. 000-49629), which was filed with the SEC on February 13, 2002).
10.1	Contribution and Distribution Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant (incorporated herein by reference to Exhibit 10.1 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2002, which was filed with the SEC on July 29, 2002).
10.2	Tax Allocation and Indemnification Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant (incorporated herein by reference to Exhibit 10.2 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2002, which was filed with the SEC on July 29, 2002).
10.3	Transition Services Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant (incorporated herein by reference to Exhibit 10.3 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2002, which was filed with the SEC on July 29, 2002).
10.4	Employee Benefit Matters Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant (incorporated herein by reference to Exhibit 10.4 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2002, which was filed with the SEC on July 29, 2002).
10.5	Strategic Alliance Agreement, dated as of July 23, 2002, between IMPCO Technologies, Inc. and the Registrant (incorporated herein by reference to Exhibit 10.5 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2002, which was filed with the SEC on July 29, 2002).

<u>Exhibit No.</u>	<u>Description</u>
10.6*	Quantum Fuel Systems Technologies Worldwide, Inc. 2002 Stock Incentive Plan and Form of Award Agreement (incorporated herein by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form S-8 (File No. 333-96923), which was filed with the SEC on July 23, 2002).
10.7†	Corporate Alliance Agreement, dated June 12, 2001, between the Registrant and General Motors Corporation (incorporated herein by reference to Exhibit 10.31 of the Registration Statement on Form S-3 (File No. 333-63726) of IMPCO Technologies, Inc., which was filed with the SEC on July 9, 2001).
10.8	Master Technical Development Agreement, dated June 12, 2001, between the Registrant and General Motors Corporation (incorporated herein by reference to Exhibit 10.32 of the Registration Statement on Form S-3 (File No. 333-63726) of IMPCO Technologies, Inc., which was filed with the SEC on July 9, 2001).
10.9	Stock Transfer Agreement, dated June 12, 2001, between the Registrant and General Motors Corporation, (incorporated herein by reference to Exhibit 10.33 of the Registration Statement on Form S-3 (File No. 333-63726) of IMPCO Technologies, Inc., which was filed with the SEC on July 9, 2001).
10.10	Registration Rights Agreement, dated June 12, 2001, between the Registrant and General Motors Corporation (incorporated herein by reference to Exhibit 10.34 of the Registration Statement on Form S-3 (File No. 333-63726) of IMPCO Technologies, Inc., which was filed with the SEC on July 9, 2001).
10.11	Lease, dated August 18, 1997, between Klein Investments, Family Limited Partnership, as Lessor, and IMPCO Technologies, Inc., as Lessee (incorporated herein by reference to Exhibit 10.12 of the Annual Report on Form 10-K of IMPCO Technologies, Inc. for the fiscal year ended April 30, 1998, which was filed with the SEC on July 29, 1998).
10.12	Lease, dated as of March 31, 2000, by and between IMPCO Technologies, Inc. and Braden Court Associates (incorporated herein by reference to Exhibit 10.20 of the Annual Report on Form 10-K of IMPCO Technologies, Inc. for the fiscal year ended April 30, 2000, which was filed with the SEC on June 30, 2000).
10.13	Memorandum of Understanding and Teaming Agreement, dated May 22, 2000, between IMPCO Technologies, Inc. and ATK Thiokol Propulsion (incorporated herein by reference to Exhibit 10.14 of the Registrant's Registration Statement on Form 10 (File No. 000-49629), which was filed with the SEC on February 13, 2002).
10.14	Amendment Nos. 1, 2 and 3 to Memorandum of Understanding and Teaming Agreement, among the Registrant, IMPCO Technologies, Inc. and ATK Thiokol Propulsion (incorporated herein by reference to Exhibit 10.14 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2002, which was filed with the SEC on July 29, 2002).
10.15	First Amendment to Corporate Alliance Agreement, dated as of July 19, 2002, between the Registrant and General Motors Corporation (incorporated herein by reference to Exhibit 10.15 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2002, which was filed with the SEC on July 29, 2002).
10.16	First Amendment to Stock Transfer Agreement, dated as of July 19, 2002, between the Registrant and General Motors Corporation (incorporated herein by reference to Exhibit 10.16 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2002, which was filed with the SEC on July 29, 2002).



<u>Exhibit No.</u>	<u>Description</u>
10.17	Amendment to Lease Agreement, dated October 18, 2000, among the Registrant, IMPCO Technologies, Inc. and Braden Court Associates (incorporated herein by reference to Exhibit 10.17 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2002, which was filed with the SEC on July 29, 2002).
10.18	Amendment to Lease Agreement, dated October 31, 2000, among the Registrant, IMPCO Technologies, Inc. and Klein Investments (incorporated herein by reference to Exhibit 10.18 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2002, which was filed with the SEC on July 29, 2002).
10.19	Lease, dated March 5, 2004, between Klein Investments, Family Limited Partnership, as Lessor, and the Registrant, as Lessee (incorporated by reference to Exhibit 10.30 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2004, which was filed with the SEC on July 1, 2004).
10.20	Memorandum of Understanding, dated June 2, 2004, between the Registrant and Sumitomo Corporation (incorporated herein by reference to Exhibit 10.31 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2004, which was filed with the SEC on July 1, 2004).
10.21	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers (incorporated herein by reference to Exhibit 10.21 of the Registrant's Registration Statement on Form S-1 (File No. 333-101668), which was filed with the SEC on December 5, 2002).
10.22(a)*	Employment Agreement, dated May 1, 2005, by and between the Registrant and Alan P. Niedzwiecki (incorporated herein by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K that was filed with the SEC on May 5, 2005).
10.22(b)*	Employment Agreement, dated August 1, 2002, between the Registrant and Alan P. Niedzwiecki (incorporated herein by reference to Exhibit 10.19 of the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended July 31, 2002, which was filed with the SEC on September 16, 2002).
10.22(c)*	Addendum A to Employment Agreement, dated as of February 10, 2003, between the Registrant and Alan P. Niedzwiecki (incorporated herein by reference to Exhibit 10.23 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2003, which was filed with the SEC on July 2, 2003).
10.22(d)*	Addendum B to Employment Agreement, dated as of November 2, 2003, between the Registrant and Alan P. Niedzwiecki (incorporated herein by reference to Exhibit 10.28 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2004, which was filed with the SEC on July 1, 2004).
10.23(a)*	Employment Agreement, dated May 1, 2005, by and between the Registrant and W. Brian Olson (incorporated herein by reference to Exhibit 10.2 of the Registrant's Current Report on Form 8-K that was filed with the SEC on May 5, 2005).
10.23(b)*	Employment Agreement, dated September 1, 2002, between the Registrant and W. Brian Olson (incorporated herein by reference to Exhibit 10.20 of the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended July 31, 2002, which was filed with the SEC on September 16, 2002).
10.23(c)*	Addendum A to Employment Agreement, dated as of February 10, 2003, between the Registrant and W. Brian Olson (incorporated herein by reference to Exhibit 10.24 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2003, which was filed with the SEC on July 2, 2003).

<b><u>Exhibit No.</u></b>	<b><u>Description</u></b>
10.23(d)*	Addendum B to Employment Agreement, dated as of February 10, 2003, between the Registrant and W. Brian Olson (incorporated herein by reference to Exhibit 10.25 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2003, which was filed with the SEC on July 2, 2003).
10.23(e)*	Addendum C to Employment Agreement, dated as of November 2, 2003, between the Registrant and W. Brian Olson (incorporated herein by reference to Exhibit 10.29 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2004, which was filed with the SEC on July 1, 2004).
10.24*	Employment Agreement, dated May 1, 2005, by and between the Registrant and Glenn D. Moffett (incorporated herein by reference to Exhibit 10.3 of the Registrant's Current Report on Form 8-K that was filed with the SEC on May 5, 2005).
10.25*	Consulting Agreement, dated May 1, 2005, by and between the Registrant and Dale L. Rasmussen (incorporated herein by reference to Exhibit 10.5 of the Registrant's Current Report on Form 8-K that was filed with the SEC on May 5, 2005).
10.26*	Employment Agreement, dated March 3, 2005, by and between the Registrant and Jeffrey P. Beitzel (incorporated herein by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K that was filed with the SEC on March 9, 2005).
10.27*	Employment Agreement, dated March 3, 2005, by and between the Registrant and Michael H. Schoeffler (incorporated herein by reference to Exhibit 10.2 of the Registrant's Current Report on Form 8-K that was filed with the SEC on March 9, 2005).
10.28*	Employment Agreement, dated March 3, 2005, by and between Starcraft Corporation and Richard C. Anderson (incorporated herein by reference to Exhibit 10.3 of the Registrant's Current Report on Form 8-K that was filed with the SEC on March 9, 2005).
10.29*	Employment Agreement, dated March 3, 2005, by and between Starcraft Corporation and Douglass C. Goad (incorporated herein by reference to Exhibit 10.4 of the Registrant's Current Report on Form 8-K that was filed with the SEC on March 9, 2005).
10.30*	Employment Agreement, dated March 3, 2005, by and between Starcraft Corporation and Joseph E. Katona III (incorporated herein by reference to Exhibit 10.5 of the Registrant's Current Report on Form 8-K that was filed with the SEC on March 9, 2005).
10.31*	Form of Restricted Stock Award Agreement under the Quantum Fuel Systems Technologies Worldwide, Inc. 2002 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.4 of the Registrant's Current Report on Form 8-K that was filed with the SEC on May 5, 2005).
10.32*	Summary of Executive Officer Salary and Bonus Arrangements.
10.33*	Summary of Director Compensation Arrangements.
10.34	Registration Rights Agreement, dated March 3, 2005, by and among the Registrant, Kelly L. Rose, Jeffrey P. Beitzel, Richard C. Anderson and Douglass C. Goad (incorporated herein by reference to Exhibit 10.6 of the Registrant's Current Report on Form 8-K that was filed with the SEC on March 9, 2005).
10.35	Loan Agreement, dated February 13, 2002, by and between Tecstar, LP and Comerica Bank (incorporated herein by reference to Exhibit 4.1 of the Quarterly Report on Form 10-Q of Starcraft Corporation for the fiscal quarter ended March 31, 2002, which was filed with the SEC on May 7, 2002).

<u>Exhibit No.</u>	<u>Description</u>
10.36	First Amendment to Loan Agreement and Note, dated as of May 13, 2002, by and between Tecstar, LP and Comerica Bank (incorporated herein by reference to Exhibit 4.4(b) of the Annual Report on Form 10-K of Starcraft Corporation for the fiscal year ended September 28, 2003, which was filed with the SEC on December 5, 2003).
10.37	Amendment No. 2 to Loan Agreement and Consent, dated as of June 7, 2002, by and between Tecstar, LP and Comerica Bank (incorporated herein by reference to Exhibit 4.4(c) of the Annual Report on Form 10-K of Starcraft Corporation for the fiscal year ended September 28, 2003, which was filed with the SEC on December 5, 2003).
10.38	Amendment to Loan Agreement, dated August 1, 2003, between Tecstar, LP and Comerica Bank (incorporated herein by reference to Exhibit 4.2 of the Quarterly Report on Form 10-Q of Starcraft Corporation for the fiscal quarter ended June 29, 2003, which was filed with the SEC on August 6, 2003).
10.39	Loan Agreement, dated June 28, 2002, by and between Starcraft Corporation and Comerica Bank (incorporated herein by reference to Exhibit 4.15 of the Annual Report on Form 10-K of Starcraft Corporation for the fiscal year ended September 29, 2002, which was filed with the SEC on December 24, 2002).
10.40	Amendment No. 1 to Loan Agreement, dated April 6, 2003, by and between Starcraft Corporation and Comerica Bank (incorporated herein by reference to Exhibit 4.1 of the Quarterly Report on Form 10-Q of Starcraft Corporation for the fiscal quarter ended March 30, 2003, which was filed with the SEC on May 8, 2003).
10.41	Amendment to Loan Agreement, dated August 1, 2003, between Starcraft Corporation and Comerica Bank (incorporated herein by reference to Exhibit 4.1 of the Quarterly Report on Form 10-Q of Starcraft Corporation for the fiscal quarter ended June 29, 2003, which was filed with the SEC on August 6, 2003).
10.42	Credit Agreement, dated January 16, 2004, by and between Starcraft Corporation and Comerica Bank (incorporated herein by reference to Exhibit 4.1 of the Quarterly Report on Form 10-Q of Starcraft Corporation for the fiscal quarter ended December 28, 2003, which was filed with the SEC on February 11, 2004).
10.43	Amendment No. 1 to Credit Agreement, dated January 30, 2004, by and between Starcraft Corporation and Comerica Bank (incorporated herein by reference to Exhibit 4.1 of the Quarterly Report on Form 10-Q of Starcraft Corporation for the fiscal quarter ended March 28, 2004, which was filed with the SEC on May 12, 2004).
10.44	Amendment No. 2 to Credit Agreement, dated March 28, 2004, by and between Starcraft Corporation and Comerica Bank (incorporated herein by reference to Exhibit 4.2 of the Quarterly Report on Form 10-Q of Starcraft Corporation for the fiscal quarter ended March 28, 2004, which was filed with the SEC on May 12, 2004).
10.45	Amendment No. 3 to Credit Agreement, dated March 31, 2004, by and between Starcraft Corporation and Comerica Bank (incorporated herein by reference to Exhibit 4.6(d) of the Annual Report on Form 10-K of Starcraft Corporation for the fiscal year ended October 3, 2004, which was filed with the SEC on December 17, 2004).
10.46	Amendment No. 4 to Credit Agreement, dated March 31, 2004, by and between Starcraft Corporation and Comerica Bank (incorporated herein by reference to Exhibit 4.6(e) of the Annual Report on Form 10-K of Starcraft Corporation for the fiscal year ended October 3, 2004, which was filed with the SEC on December 17, 2004).

<u>Exhibit No.</u>	<u>Description</u>
10.47	Amendment No. 5 to Credit Agreement, effective September 30, 2004, by and between Starcraft Corporation and Comerica Bank (incorporated herein by reference to Exhibit 4.6(f) of the Annual Report on Form 10-K of Starcraft Corporation for the fiscal year ended October 3, 2004, which was filed with the SEC on December 17, 2004).
10.48	Form of Revolving Note of Starcraft Corporation to Comerica Bank, dated as of January 16, 2004 (incorporated herein by reference to Exhibit 4.2 of the Quarterly Report on Form 10-Q of Starcraft Corporation for the quarter ended December 28, 2003, which was filed with the SEC on February 11, 2004).
10.49	Form of Swing-line Note of Starcraft Corporation to Comerica Bank, dated as of January 16, 2004 (incorporated herein by reference to Exhibit 4.3 of the Quarterly Report on Form 10-Q of Starcraft Corporation for the quarter ended December 28, 2003, which was filed with the SEC on February 11, 2004).
10.50	Loan Agreement, made as of April 30, 2003, between Tecstar Manufacturing Canada Limited and Comerica Bank (incorporated herein by reference to Exhibit 4.8 of the Annual Report on Form 10-K of Starcraft Corporation for the fiscal year ended September 28, 2003, which was filed with the SEC on December 5, 2003).
10.51	First Amendment to Loan Agreement, dated August 1, 2003, between Tecstar Manufacturing Canada, Ltd. and Comerica Bank (incorporated herein by reference to Exhibit 4.3 of the Quarterly Report on Form 10-Q of Starcraft Corporation for the fiscal quarter ended June 29, 2003, which was filed with the SEC on August 6, 2003).
10.52	Promissory Note, dated as of September 26, 2002, from Starcraft Corporation to G. Ray Stults in the principal amount of \$803,900 (incorporated herein by reference to Exhibit 4.16 of the Annual Report on Form 10-K of Starcraft Corporation for the fiscal year ended September 29, 2002, which was filed with the SEC on December 24, 2002).
10.53	Promissory Note, dated as of September 26, 2002, from Starcraft Corporation to Kelly L. Rose in the principal amount of \$670,220 (incorporated herein by reference to Exhibit 4.17 of the Annual Report on Form 10-K of Starcraft Corporation for the fiscal year ended September 29, 2002, which was filed with the SEC on December 24, 2002).
10.54	Convertible Senior Subordinated Note Purchase Agreement, dated July 12, 2004, among Starcraft Corporation and certain purchasers named therein (incorporated herein by reference to Exhibit 4.1 of the Current Report on Form 8-K of Starcraft Corporation filed with the SEC on July 14, 2004).
10.55	License Agreement, dated September 12, 1991, by and between Starcraft Corporation and Starcraft RV, Inc. (incorporated herein by reference to Exhibit 10.24 of the Registration Statement on Form S-1 of Starcraft Corporation filed with the SEC on June 3, 1993).
10.56	License Agreement, dated January 18, 1991, by and between Starcraft Corporation and Starcraft Recreational Products, Ltd. (incorporated herein by reference to Exhibit 10.25 of the Registration Statement on Form S-1 of Starcraft Corporation filed with the SEC on June 3, 1993).
10.57	Reimbursement Agreement, dated as of December 12, 2000, between Starcraft Corporation, National Mobility Corporation, Imperial Automotive Group, Inc., Starcraft Automotive Group, Inc., Kelly L. Rose and G. Ray Stults (incorporated herein by reference to Exhibit 10.18(a) of the Annual Report on Form 10-K of Starcraft Corporation for the fiscal year ended October 1, 2000, which was filed with the SEC on January 23, 2001).
10.58	Security Agreement, entered into as of December 12, 2000, between Starcraft Corporation, Starcraft Automotive Group, Inc., Kelly L. Rose and G. Ray Stults (incorporated herein by reference to Exhibit 10.18(b) of the Annual Report on Form 10-K of Starcraft Corporation for the fiscal year ended October 1, 2000, which was filed with the SEC on January 23, 2001).

<u>Exhibit No.</u>	<u>Description</u>
10.59	Real Property Mortgage (LaGrange County, Indiana) (Elkhart County, Indiana), dated as of December 12, 2000, by Starcraft Corporation, f/k/a Rokane Investment Group, Inc. in favor of Kelly L. Rose and G. Ray Stults (incorporated herein by reference to Exhibit 10.18(c) of the Annual Report on Form 10-K of Starcraft Corporation for the fiscal year ended October 1, 2000, which was filed with the SEC on January 23, 2001).
10.60	Agreement for Office Lease, dated February 15, 2003, by and between Gateway Property Development, LLC and Starcraft Corporation (incorporated herein by reference to Exhibit 10.2 of the Quarterly Report on Form 10-Q of Starcraft Corporation for the fiscal quarter ended March 30, 2003, which was filed with the SEC on May 8, 2003).
10.61*	Employment Agreement, dated March 3, 2003, between the Registrant and Raymond W. Corbin (incorporated herein by reference to Exhibit 10.22 of the Registrant's Annual Report on Form 10-K for the fiscal year ended April 30, 2003, which was filed with the SEC on July 2, 2003).
21.1	Subsidiaries of the Registrant.
23.1	Consent of Independent Registered Public Accounting Firm.
31.1	Certification of the Chief Executive Officer of the Registrant pursuant to Exchange Act Rule 13a-14(a).
31.2	Certification of the Chief Financial Officer of the Registrant pursuant to Exchange Act Rule 13a-14(a).
32.1	Certification of the Chief Executive Officer of the Registrant furnished pursuant to Exchange Act Rule 13a-14(b) and 18 U.S.C. 1350.
32.2	Certification of the Chief Financial Officer of the Registrant furnished pursuant to Exchange Act Rule 13a-14(b) and 18 U.S.C. 1350.

† Certain information in this exhibit has been omitted and filed separately with the SEC. Confidential treatment has been granted with respect to the omitted portions.

\* The referenced exhibit is a compensatory contract, plan or arrangement.

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**REPORT OF ERNST & YOUNG LLP,  
INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Stockholders  
Quantum Fuel Systems Technologies Worldwide, Inc.

We have audited the accompanying consolidated balance sheets of Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries as of April 30, 2004 and 2005, and the related consolidated statements of operations, changes in stockholders' equity, and cash flows for each of the three years in the period ended April 30, 2005. Our audits also included the financial statement schedule listed in the index at Item 15(a). These consolidated financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries at April 30, 2004 and 2005, and the results of its operations and its cash flows for each of the three years in the period ended April 30, 2005, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries' internal control over financial reporting as of April 30, 2005, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated June 22, 2005 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Los Angeles, California  
June 22, 2005

**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**

	April 30,	
	2004	2005
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 15,728,901	\$ 11,736,688
Marketable securities held-to-maturity	35,595,269	32,101,357
Accounts receivable, net	5,896,504	24,100,272
Inventories, net	5,744,769	24,383,684
Tooling and engineering	—	1,917,184
Refundable income taxes	—	2,721,381
Other current assets	719,229	791,871
Total current assets	63,684,672	97,752,437
Property and equipment, net	8,780,096	20,280,405
Marketable securities held-to-maturity	17,232,298	4,001,182
Intangible assets, net	13,659,705	16,731,930
Goodwill	—	138,004,271
Other assets	90,173	891,555
Total assets	\$103,446,944	\$277,661,780
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 2,836,025	\$ 31,734,310
Accrued payroll obligations	773,937	2,234,049
Accrued interest	—	457,408
Note payable	—	250,000
Deferred revenue	736,518	52,889
Accrued warranties	948,521	1,258,119
Other accrued liabilities	700,466	2,285,595
Current maturities of long-term debt	—	525,215
Total current liabilities	5,995,467	38,797,585
Long-term debt, net of current maturities	—	19,656,162
Commitments and contingencies		
Minority interest	—	—
Stockholders' equity:		
Preferred stock, \$.001 par value, 20,000,000 shares authorized; none issued and outstanding for each period	—	—
Series A common stock, \$.001 par value; 12,000,000 shares authorized in 2004 and none in 2005; none issued and outstanding for each period	—	—
Series B common stock, \$.001 par value; 6,000,000 shares authorized in 2004 and 2,000,000 in 2005; 999,969 issued and outstanding for each period	1,000	1,000
Common stock, \$.001 par value; 42,000,000 shares authorized in 2004 and 98,000,000 in 2005; 30,673,089 issued and outstanding at April 30, 2004 and 51,735,257 issued and outstanding at April 30, 2005	30,673	51,735
Additional paid-in-capital	119,864,432	254,680,716
Accumulated deficit	(22,444,628)	(35,543,418)
Accumulated other comprehensive income	—	18,000
Total stockholders' equity	97,451,477	219,208,033
Total liabilities and stockholders' equity	\$103,446,944	\$277,661,780

See accompanying notes.



**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**

	Year Ended April 30,		
	2003	2004	2005
Revenue:			
Net product sales .....	\$ 15,832,919	\$18,624,021	\$ 40,747,861
Contract revenue .....	7,806,486	9,495,428	13,552,172
Total revenue .....	23,639,405	28,119,449	54,300,033
Costs and expenses:			
Cost of product sales .....	18,471,425	12,864,702	36,188,831
Research and development .....	13,902,009	13,997,545	17,176,021
Selling, general and administrative .....	8,442,137	8,930,874	12,617,444
Amortization of intangibles .....	1,159,878	1,659,775	2,127,775
Total costs and expenses .....	41,975,449	37,452,896	68,110,071
Operating loss .....	(18,336,044)	(9,333,447)	(13,810,038)
Interest income .....	120,390	455,553	950,865
Interest expense .....	(114,178)	(44,593)	(309,688)
Other income (expense), net .....	133,171	27,412	80,241
Provision for income taxes .....	(800)	(39,345)	(10,170)
Net loss .....	\$(18,197,461)	\$(8,934,420)	\$(13,098,790)
Net loss per share—basic and diluted .....	\$ (1.00)	\$ (0.33)	\$ (0.37)
Number of shares used in per share calculation—basic and diluted .....	18,153,059	27,257,230	35,048,437

See accompanying notes.

QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

	Invested Equity	Series A & B Common Stock		Common Stock		Additional Paid-In- Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Equity
		Shares	Amount	Shares	Amount				
Balance at April 30, 2002	\$ 10,270,447	—	\$ —	1,000	\$ 1	\$ 99	—	\$ —	\$ 10,270,547
Cash transfers from IMPCO	26,250,970	—	—	—	—	—	—	—	26,250,970
Net loss prior to distribution	(4,687,253)	—	—	—	—	—	—	—	(4,687,253)
Conversion of Invested Equity to Stockholders' Equity upon distribution	(31,834,164)	—	—	14,141,036	14,141	31,820,023	—	—	—
Issuance of Series A common stock	—	3,513,439	3,513	—	—	14,225,915	—	—	14,229,428
Issuance of warrants	—	—	—	—	—	163,875	—	—	163,875
Issuance of common stock	—	—	—	4,025,000	4,025	7,978,955	—	—	7,982,980
Conversion of Series A common stock	—	(3,513,439)	(3,513)	3,513,439	3,513	—	—	—	—
Issuance of Series B common stock	—	999,969	1,000	—	—	2,248,930	—	—	2,249,930
Net loss subsequent to distribution	—	—	—	—	—	(13,510,208)	—	—	(13,510,208)
Balance at April 30, 2003	\$ —	999,969	\$ 1,000	21,680,475	\$ 21,680	\$ 56,437,797	\$ (13,510,208)	\$ —	\$ 42,950,269
Issuance of common stock in public offering	—	—	—	8,050,000	8,050	60,127,888	—	—	60,135,938
Stock option exercises	—	—	—	874,664	875	3,409,114	—	—	3,409,989
Non-cash stock compensation charge	—	—	—	—	—	16,714	—	—	16,714
Warrant issuances and exercises	—	—	—	67,950	68	(68)	—	—	—
Additional costs related to equity offerings	—	—	—	—	—	(127,013)	—	—	(127,013)
Net loss	—	—	—	—	—	—	(8,934,420)	—	(8,934,420)
Balance at April 30, 2004	\$ —	999,969	\$ 1,000	30,673,089	\$ 30,673	\$ 119,864,432	\$ (22,444,628)	\$ —	\$ 97,451,477
Issuance of common stock in connection with acquisition	—	—	—	20,995,683	20,995	134,561,332	—	—	134,582,327
Stock option exercises	—	—	—	65,794	66	254,953	—	—	255,019
Warrant issuances and exercises	—	—	—	691	1	(1)	—	—	—
Change in accumulated comprehensive income	—	—	—	—	—	—	—	18,000	18,000
Net loss	—	—	—	—	—	—	(13,098,790)	—	(13,098,790)
Comprehensive loss	—	—	—	—	—	—	—	—	(13,080,790)
Balance at April 30, 2005	\$ —	999,969	\$ 1,000	51,735,257	\$ 51,735	\$ 254,680,716	\$ (35,543,418)	\$ 18,000	\$ 219,208,033

**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

	Year Ended April 30,		
	2003	2004	2005
<b>Cash flows from operating activities:</b>			
Net loss	\$(18,197,461)	\$ (8,934,420)	\$ (13,098,790)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	4,766,112	5,213,193	5,554,528
(Gain) loss on disposal of property and equipment	(133,718)	17,497	18,563
Non-cash stock compensation charge	163,875	16,714	—
Costs arising from termination of combination with Global Thermoelectric	—	126,819	—
Changes in operating assets and liabilities, net of effects of acquisition:			
Accounts receivable	(1,400,368)	(1,808)	352,475
Inventories	3,600,714	281,133	(5,176,690)
Tooling and engineering	—	—	111,841
Refundable income taxes	—	—	52,829
Other current assets	(1,169,656)	(354,844)	1,646,286
Accounts payable	(2,724,333)	(1,200,935)	5,071,365
Other current liabilities	1,961,933	41,105	(1,294,420)
Net cash used in operating activities	<u>(13,132,902)</u>	<u>(4,795,546)</u>	<u>(6,762,013)</u>
<b>Cash flows from investing activities:</b>			
Purchases of property and equipment	(1,083,496)	(1,467,429)	(1,900,381)
Proceeds from sale of property and equipment	146,300	450	52,000
Acquisition of Starcraft, net of cash acquired	—	—	(9,067,024)
Purchases of marketable securities	—	(54,611,970)	(36,666,956)
Maturities of marketable securities	—	1,784,403	53,391,984
Other non-current assets	—	—	39,605
Net cash provided by (used in) investing activities	<u>(937,196)</u>	<u>(54,294,546)</u>	<u>5,849,228</u>
<b>Cash flows from financing activities:</b>			
Payments on capital lease obligations	(177,393)	(138,794)	(11,443)
Net advances from IMPCO prior to distribution	2,625,970	—	—
Proceeds from issuance of note payable	—	—	250,000
Payments on note payable	—	—	(58,162)
Payments on revolving credit agreement	—	—	(3,506,942)
Proceeds from issuance of common stock, net	7,982,980	60,135,938	—
Proceeds from exercises of stock options and warrants	—	3,409,989	255,019
Contributions from IMPCO upon distribution	15,000,000	—	—
Additional costs related to equity offering	—	(127,013)	—
Net cash provided by (used in) financing activities	<u>25,431,557</u>	<u>63,280,120</u>	<u>(3,071,528)</u>
Effect of exchange rate changes on cash	—	—	(7,900)
Net increase (decrease) in cash and cash equivalents	11,361,459	4,190,028	(3,992,213)
Cash and cash equivalents at beginning of year	177,414	11,538,873	15,728,901
Cash and cash equivalents at end of year	<u>\$ 11,538,873</u>	<u>\$ 15,728,901</u>	<u>\$ 11,736,688</u>
<b>Supplemental schedule of non-cash activity:</b>			
Acquisition of Starcraft:			
Fair value of tangible assets acquired	\$ —	\$ —	\$ 52,445,578
Goodwill and intangibles	—	—	143,204,271
Fair value of liabilities assumed	—	—	(51,098,614)
Issuance of common stock	—	—	(134,582,328)
Accounts payable and other liabilities for unpaid acquisition costs	—	—	(901,883)
Issuance of Series A and Series B common stock recorded as intangible asset	16,479,358	—	—
Assumption of line of credit by IMPCO	8,625,000	—	—
Conversion of owner's net investment to stockholders' equity	31,834,164	—	—
Issuance of warrants	163,875	16,714	—
<b>Supplemental disclosure information:</b>			
Cash paid during the year for:			
Interest	\$ 114,178	\$ 44,593	\$ 94,973
Income taxes	800	39,345	7,365

See accompanying notes.

**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**April 30, 2005**

**1. Background and Basis of Presentation**

*Background*

Quantum Fuel Systems Technologies Worldwide, Inc. and Subsidiaries (collectively referred to as “Quantum” or the “Company”) provide powertrain engineering, system integration, manufacturing and assembly of packaged fuel systems and specialty equipment for automotive applications including fuel cells, hybrids, alternative fuels, hydrogen refueling, new body styles, mid-cycle vehicle product enhancements and high performance engines and drive trains for Original Equipment Manufacturers (“OEMs”) and consumers of aftermarket parts and accessories. The Company also designs, engineers and manufactures hybrid and fuel cell vehicles.

The Company was incorporated in Delaware on October 13, 2000 as a wholly-owned subsidiary of IMPCO Technologies, Inc. (“IMPCO”). On July 23, 2002, IMPCO completed the distribution and spin-off of the Company to stockholders of IMPCO (the “Distribution”) based on a distribution ratio of one share of the Company’s common stock for every share of IMPCO common stock outstanding on the record date. In addition to cash transfers made by IMPCO to cover the Company’s operating needs prior to the distribution, IMPCO contributed \$15 million in cash to the Company and assumed the Company’s debt facility of \$8.6 million on the date of distribution. Furthermore, as discussed in Note 9 and Note 15, immediately following the spin-off, the Company issued 3,513,439 shares of its Series A common stock to General Motors Corporation (“General Motors” or “GM”) in connection with a strategic alliance between the Company and General Motors. The Company’s accumulated deficit of \$35.5 million represents its operating results from the Distribution date to April 30, 2005.

On March 3, 2005, the Company completed its acquisition of Starcraft Corporation (“Starcraft”) in a tax-free stock-for-stock exchange. Pursuant to the terms set forth in the merger agreement, the Company operates Starcraft as a wholly-owned subsidiary (see Note 4). Management refers to the operations acquired via the merger with Starcraft as the Tecstar Automotive Group.

The Company’s authorized capital stock was amended in connection with the acquisition of Starcraft. The authorized capital stock at April 30, 2005 consists of 20,000,000 shares of preferred stock, par value \$0.001 per share, no shares issued and outstanding and 100,000,000 shares of common stock, par value \$0.001 per share, 52,735,226 shares issued and outstanding (which includes 999,969 shares of Series B common stock). Of the 100,000,000 authorized shares of common stock, 2,000,000 are designated as Series B common stock. Common stock previously designated as Series A was eliminated under the Company’s Amended and Restated Certificate of Incorporation.

*Basis of Presentation*

The consolidated financial statements include the accounts of Quantum Fuel Systems Technologies Worldwide, Inc. and its wholly-owned subsidiary Starcraft (for the period subsequent to the merger completed on March 3, 2005). Through the Company’s merger with Starcraft, the consolidated financial statements also include the wholly-owned subsidiaries of Starcraft, which consist of Tecstar Partners, LLC, Tecstar, L.P., Tecstar Manufacturing Canada Limited, Tarxien Automotive Products Limited, Classic Acquisition Company, LLC, Wheel to Wheel, LLC, and Wheel to Wheel Powertrain, LLC. Also acquired in connection with the merger are the operating activities of two business ventures, Amstar, LLC (“Amstar”) and PowerTrain Integration, LLC, that the Company holds equity ownership positions of 50% and 51%, respectively. The accounts of both of these ventures are included in the Company’s consolidated financial statements for the period subsequent to the merger.

**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Amstar is a variable interest entity as defined by Financial Accounting Standards Board (“FASB”) Interpretation No. 46 (revised December 2003), “Consolidation of Variable Interest Entities, an Interpretation of ARB No. 51” (“FIN 46R”). Tecstar L.P. has a 50% equity position in Amstar with AM General LLC holding the remaining 50% equity position. Amstar’s operations are similar in nature to Tecstar Automotive Group’s primary business of second stage manufacturing for automotive applications. Tecstar L.P. acts as a guarantor for certain facility lease and other agreements of Amstar and has been determined to be Amstar’s primary beneficiary. The accounts of Amstar are consolidated by the Company as required by FIN 46R. The Company accounts for AM General’s equity position as minority interest (see Note 19).

All significant intercompany accounts and transactions have been eliminated in consolidation.

The consolidated financial statements also include certain assets, liabilities, and related operations that were transferred to the Company (the “Contribution”) from IMPCO in July 2002. The consolidated financial statements include the historical operations transferred to the Company by IMPCO (the “Company’s Businesses”). The Contribution was completed prior to the Distribution and resulted in a recapitalization of the Company.

The financial statements prior to the Distribution date have been derived from the financial statements and accounting records of IMPCO using the historical results of operations and historical basis of the assets and liabilities of the Company’s Businesses. Management believes the assumptions underlying the financial statements are reasonable.

The financial statements prior to the Distribution date include allocations of certain IMPCO corporate headquarters’ assets, liabilities, and expenses relating to the Company’s Businesses that were transferred to the Company from IMPCO. General corporate overhead was allocated either based on the ratio of the Company’s headcount to IMPCO’s total headcount, on the Company’s revenue as a percentage of IMPCO’s total revenue, or specifically identified costs for the Company. General corporate overhead primarily includes salary and expenses for the executive management, finance, legal, human resources, information services and investor relations departments. Following the spin-off, the Company has performed these functions using its own resources or purchased services.

In January 2003, the Company completed a public equity offering of an aggregate of 4,025,000 shares of its common stock at a price of \$2.25 per share, which yielded net proceeds of approximately \$8.0 million after underwriting discounts and commissions and offering expenses. In October 2003, the Company completed a public equity offering of an aggregate of 8,050,000 shares of common stock at a price of \$8.00 per share, which yielded net proceeds of approximately \$60.1 million after underwriting discounts and commissions and offering expenses. The Company has available revolving lines of credit with domestic and Canadian lenders totaling \$35.0 million with terms expiring in November 2006 that were assumed in connection with the acquisition of Starcraft. Available borrowings under the lines were \$22.2 million at April 30, 2005. The Company believes that its available working capital will be adequate to meet liquidity needs for at least the next twelve months. The Company may require additional sources of financing to complete product and application development, develop facilities for commercialization and mass production of its products and systems, and to take advantage of strategic opportunities. These additional sources of financing may include bank borrowings or public or private offerings of equity or debt securities. The Company cannot assure you that such additional sources of financing will be available on acceptable terms, if at all. The Company has also agreed, subject to limited exceptions, not to issue any stock in a private placement transaction without the prior written consent of General Motors.

**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**2. Summary of Significant Accounting Policies**

*Use of Estimates in the Preparation of Consolidated Financial Statements*

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. These estimates include assessing the collectability of accounts receivable, the use and recoverability of inventory, impairment of long-lived assets and goodwill, the realization of deferred tax assets, useful lives for depreciation/amortization periods of tangible and intangible assets, provisions for warranty claims and accruals for self-insured risks, among others. The markets for the Company's products are characterized by competition, technological development and new product introduction, all of which could impact the future realizability of the Company's assets. Actual results could differ from those estimates.

*Revenue Recognition*

The Company generally manufactures products based on specific orders from customers. Revenue is recognized on product sales when goods are shipped in accordance with the Company's shipping terms and collectability is reasonably assured. The Company includes the costs of shipping and handling, when incurred, in cost of goods sold.

Contract revenue for customer funded research and development is principally recognized by the percentage of completion method. Amounts expected to be realized on contracts are based on the Company's estimates of total contract value and costs at completion. These estimates are reviewed and revised periodically throughout the lives of the contracts. Percentage of completion is determined based on costs incurred as a percentage of total estimated costs at completion. Billings under these types of contracts frequently differ from the periods that revenue is earned. Certain contracts are billable under a reimbursement basis while others have specific billing schedules or billing parameters that are unrelated to the earnings process. Consequently, the Company had earned revenue that had not been billed and was not billable to certain customers as of April 30, 2004 and 2005, which is included in accounts receivable. Billings made in advance of the earnings process for other customers is reported as deferred revenue.

*Research and Development Costs*

Research and development costs are charged to expense as incurred. Prior to the Distribution, this line item includes an allocation from IMPCO for the costs of research conducted by IMPCO (see Note 1). Equipment used in research and development with alternative future uses is capitalized and only the current period depreciation is charged to research and development.

*Cash and Cash Equivalents*

All highly liquid investments with original maturities of three months or less when purchased are considered to be cash equivalents.

*Accounts Receivable*

The Company sells to customers using credit terms customary in its industry. Credit is extended to customers based on an evaluation of the customer's financial condition, and when credit is extended, collateral is generally not required. Interest is not normally charged on receivables. Management establishes an allowance for

**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

potential losses on its accounts receivable based on historical loss experience and current economic conditions. Accounts receivable are charged off to the allowance when management determines the account is uncollectible.

*Marketable Securities*

The Company accounts for its investments in accordance with Statement of Financial Accounting Standards (“SFAS”) No. 115, “Accounting for Certain Investments in Debt and Equity Securities.” SFAS No. 115 requires that all applicable investments be classified as trading securities, available-for-sale securities or held-to-maturity securities. Marketable securities are classified as held-to-maturity when the Company has the positive intent and ability to hold the securities to maturity. Management has determined that all of its investments are being held-to-maturity. Held-to-maturity securities are stated at amortized cost. The amortized cost of securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization is included in interest income.

*Financial Instruments and Concentration of Credit Risk*

The estimated fair values of cash equivalents, accounts receivable, accounts payable, and accrued expenses approximate their carrying values because of the short-term maturity of these instruments. Long-term debt, as summarized in Note 11, was acquired in connection with the acquisition of Starcraft and is either tied to variable interest rate structures and/or approximates fair values consistent with the nature of the debt instrument involved. The fair values of marketable securities held-to-maturity, as summarized in Note 5, are based primarily on quoted prices for those or similar instruments.

Financial instruments, which potentially subject the Company to concentrations of credit risk, consist principally of marketable securities, trade receivables and long-term debt. The Company conducts a major portion of its business with a limited number of customers. For the past three years and for the foreseeable future, General Motors (including subsidiaries of General Motors) represents a significant portion of the Company’s sales and outstanding accounts receivable. Toyota Motor Corporation (“Toyota”) also represents a significant portion of the Company’s sales. Credit is extended based upon an evaluation of each customer’s financial condition, with terms consistent with those present throughout the industry. Typically, the Company does not require collateral from customers.

The Company may use derivative financial instruments for the purpose of reducing its exposure to adverse fluctuations in interest and foreign exchange rates. While these hedging instruments could be subject to fluctuations in value, such fluctuations are generally offset by the value of the underlying exposures being hedged. The Company has not had any derivative financial instruments for any of the periods reported. The Company is not a party to leveraged derivatives and does not hold or issue financial instruments for speculative purposes.

*Inventories*

Inventories are valued at the lower of cost or market. Cost is determined by the first-in, first-out (“FIFO”) method for all inventories. Market is determined by replacement cost for raw materials and parts and net realizable value for work-in-process and finished goods. The Company’s business is subject to the risk of technological and design changes. The Company provides for obsolete or slow-moving inventory based on management’s analysis of inventory levels and future sales forecasts at the end of each accounting period.

*Tooling and Engineering*

Tooling and engineering represent costs, less amounts billed, incurred by the Company in the development of tooling and engineering services provided by the Company for second-stage vehicle development programs.

**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The Company receives a specific purchase order for these tooling and engineering services and is generally reimbursed by the customer within terms customary in its industry. The Company also defers tooling and engineering project costs in anticipation of a specific vehicle development program in accordance with Statement of Position 81-1 “Accounting for Performance of Construction-Type and Certain Production-Type Contracts.” The costs generally consist of engineering, design and the purchase of materials and supplies for the assembly of vehicles and costs incurred for assets to be used in connection with a specific second stage program. Costs are deferred until reimbursed by the customer and costs are subject to evaluation of their probable recoverability. Forecasted losses on incomplete projects are recognized currently.

*Property and Equipment*

Property and equipment are stated at historical cost less accumulated depreciation. Depreciation is computed principally by the straight-line method over the estimated useful lives of the assets. The Company is depreciating buildings over periods of 15-50 years, building improvements over periods of 5 to 20 years, and equipment over periods of 3 to 12 years. Amortization of leasehold improvements and equipment financed under borrowing facilities is provided using the straight-line method over the shorter of the assets’ estimated useful lives or the lease terms.

Major renewals and improvements are capitalized and minor replacements, maintenance and repairs are charged to current operations as incurred. Upon retirement or disposal of assets, the cost and related accumulated depreciation are removed from the balance sheets and any gain or loss is reflected in the statements of operations.

*Goodwill and Other Intangible Assets*

The issuance of shares related to the Company’s strategic alliance with General Motors has been recorded at the estimated fair market value on the date of the Distribution, in accordance with SFAS No. 123, “Accounting for Stock Based Compensation,” and Emerging Issues Task Force (“EITF”) 96-18, “Accounting for Equity Instruments that are Issued to Other than Employees for Acquiring, or in Conjunction with Selling Goods or Services.” The intangible asset was recorded in accordance with the consensus reached by the EITF during their November 2001 meeting with respect to EITF 00-18, “Accounting Recognition for Certain Transactions involving Equity Instruments Granted to Other than Employees.” The intangible asset is carried at cost less accumulated amortization. The Company is amortizing the intangible asset, subject to periodic evaluations for impairment, over the ten-year term of the Corporate Alliance Agreement with General Motors (see Note 3 and Note 9).

In connection with the acquisition of Starcraft, certain intangible assets, as defined by SFAS No. 142, “Goodwill and Other Intangible Assets,” were identified that are subject to amortization over periods ranging from nineteen months to twenty-nine months. These intangible assets arise from contractual or other legal rights and consist of customer contracts and existing technology.

Goodwill represents the excess of the purchase price over the fair value of Starcraft’s net assets acquired (see Note 4). In accordance with SFAS No. 142, goodwill is not amortized and is assessed annually for impairment.

*Warranty Costs*

The Company follows the policy of accruing an estimated liability for warranties at the time the warranted products are sold. Warranty is provided for terms similar to those offered by the OEM to its customers. Estimates are based, in part, on historical experience.



**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

*Impairment of Long-Lived Assets*

In accordance with SFAS No. 144, "Accounting for the Impairment or Disposal of Long-lived Assets," impairment losses are recorded on long-lived assets used in operations when an indicator of impairment (significant decrease in market value of an asset, significant change in extent or manner in which the asset is used or significant physical change to the asset) is present and the undiscounted cash flows estimated to be generated by those assets are less than the assets' carrying amount. The Company has not experienced any significant changes in the business climate or in the use of assets that would require the Company to write-down the value of the assets recorded in the balance sheet.

*Income Taxes*

The asset and liability approach is used to recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred tax assets and liabilities are determined based on the differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. In accordance with SFAS No. 109, "Accounting for Income Taxes," the Company has established a full valuation allowance for its net deferred tax asset since based on the Company's lack of earnings history and current evidence, it is unlikely that the asset will be realized.

*Stock-Based Compensation*

In April 2003, the Company adopted SFAS No. 148, "Accounting for Stock-Based Compensation-Transition and Disclosure," which amends SFAS No. 123, "Accounting for Stock-Based Compensation." SFAS No. 148 provides alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based compensation. In addition, SFAS No. 148 amends the disclosure requirements of SFAS No. 123 to require more prominent and more frequent disclosures in financial statements of the effects of stock-based compensation. The Company elected to continue to account for stock-based compensation plans using the intrinsic value-based method of accounting prescribed by Accounting Principles Board Opinion ("APB") No. 25, "Accounting for Stock Issued to Employees" and related interpretations. No compensation expense is recorded under APB No. 25 because the exercise price of the Company's employee common stock options equals the market price of the underlying common stock on the grant date. If the Company had elected to recognize compensation cost based on the estimated fair value of the options granted at the grant date as prescribed by SFAS No. 148, net loss and loss per share would have been increased to the pro forma amounts shown below:

	Year Ended April 30		
	2003	2004	2005
Net loss, as reported	\$(18,197,461)	\$ (8,934,420)	\$(13,098,790)
Deduct: Total stock-based employee compensation expense determined under the fair value based method for all awards, net of related tax effects	(1,343,000)	(2,079,000)	(3,089,000)
Pro forma net loss	\$(19,540,461)	\$(11,013,420)	\$(16,187,790)
Net loss per share, as reported—basic and diluted	\$ (1.00)	\$ (0.33)	\$ (0.37)
Net loss per share, as adjusted—basic and diluted	\$ (1.08)	\$ (0.40)	\$ (0.46)
Number of shares used in the calculation of pro forma per share	18,153,059	27,257,230	35,048,437

**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The estimated fair value of the options is amortized to expense over the options' vesting period for pro forma disclosures. The net income per share "pro forma" for the effects of SFAS No. 123, as amended by SFAS No. 148, is not indicative of the effects on reported net income/loss for future years.

The fair value of these options was determined at the date of grant using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	Year Ended April 30		
	2003	2004	2005
Expected dividend yield . . . . .	0%	0%	0%
Calculated volatility . . . . .	1.245	1.005	0.974
Risk-free interest rate . . . . .	3.00%	3.00%	3.34%
Expected life of the option in years . . . . .	7.10	7.16	6.98

The FASB has also issued Interpretation No. 44, "Accounting for Certain Transactions Involving Stock Compensation." The Interpretation addresses implementation practice issues in accounting for compensation costs under existing rules prescribed by APB No. 25. The rules are applied prospectively to all new awards, modifications to outstanding awards and changes in grantee status after July 1, 2000, with certain exceptions. The Company considers the impact of these rules when adopting new stock option plans and when granting any options.

In December 2004, FASB issued SFAS No. 123 (revised 2004), "Share-Based Payment." SFAS No. 123R is a revision of SFAS No. 123, supersedes APB No. 25 and amends SFAS No. 95, "Statement of Cash Flows." In April 2005, FASB delayed the initial adoption of SFAS No. 123R to annual periods that begin after June 15, 2005. As such, the Company plans to adopt the provisions of SFAS No. 123R in fiscal 2007 beginning May 1, 2006. The Company is currently analyzing which method will be the most appropriate to estimate fair value of stock-based compensation upon adoption of SFAS No. 123R. The Company anticipates that fair value estimates will be consistent with pro forma disclosures reported above if the Company determines it will use the Black-Scholes option-pricing model.

*Segment Information*

The Company separately discloses its principal operations in accordance with SFAS No. 131, "Disclosure about Segments of an Enterprise and Related Information." The Company classifies its business operations into three segments: Quantum Fuel Systems, Tecstar Automotive Group and Corporate.

*Comprehensive Income*

Other comprehensive income refers to revenues, expenses, gains and losses that under U.S. generally accepted accounting principles are included in comprehensive income but are excluded from net income as these amounts are recorded directly as an adjustment to stockholders' equity. The Company's other comprehensive income consists of foreign currency translation adjustments.

*Translation of Foreign Currency*

Assets and liabilities of Tecstar Canada are translated at rates of exchange in effect at the close of the fiscal year. Revenues and expenses are translated at the average rates of exchange for the period. Translation gains and losses are accumulated within other comprehensive income as a separate component of stockholders' equity. Foreign currency transaction gains and losses (transactions denominated in a currency other than Tecstar Canada's local currency) are included in selling, general and administrative expenses, and net foreign currency transaction losses aggregated \$51,719 for the approximately two month period ended April 30, 2005 subsequent to the Starcraft acquisition.

**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

*Reclassification*

Certain reclassifications have been made to fiscal year 2003 and 2004 amounts to conform to the fiscal year 2005 presentation.

*Recently Issued Accounting Pronouncements*

In November 2004, the FASB issued SFAS No. 151, "Inventory Cost." SFAS No. 151 amends the guidance in Accounting Research Bulletin No. 43, Chapter 4, "Inventory Pricing," to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material (scrap). SFAS No. 151 requires that those items be recognized as current-period charges. In addition, SFAS No. 151 requires that the allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. The provisions of SFAS No. 151 are effective for inventory costs incurred in fiscal years beginning after June 15, 2005. As such, the Company plans to adopt these provisions for the annual reporting period beginning May 1, 2006. The Company is currently evaluating the impact that SFAS No. 151 will have on its financial statements.

In January 2003, the FASB issued Interpretation No. 46, "Consolidation of Variable Interest Entities, an Interpretation of Accounting Research Bulletin No. 51," ("FIN 46"). FIN 46 introduces a new consolidation model, the variable interests model, which determines control (and consolidation) based on potential variability in gains and losses of the entity being evaluated for consolidation.

FIN 46 provides guidance for determining whether an entity qualifies as a variable interest entity ("VIE") by considering, among other considerations, whether the entity lacks sufficient equity or its equity holders lack adequate decision-making ability. If the entity does not qualify as a VIE, then the consolidation criteria is based on previously established accounting standards. Qualifying VIEs are covered by FIN 46 and are individually evaluated for consolidation based on their variable interests. The Company has evaluated the potential impact of FIN 46, as revised in December 2003 by FIN 46R, and has concluded that Amstar LLC qualifies as a VIE and that the Company, through its wholly-owned subsidiary Tecstar L.P., is the primary beneficiary.

### **3. Related Party Transactions**

*Agreements with IMPCO*

For the years 2003, 2004 and 2005, respectively, the Company had \$93,862, \$63,123 and \$23,984 of revenue for products and services sold to IMPCO. For the years 2003, 2004 and 2005, respectively, the Company had \$482,347, \$374,059 and \$660,900 of products and services purchased from IMPCO. In connection with the Contribution and Distribution, the Company and IMPCO executed the Contribution and Distribution Agreement (the Contribution and Distribution Agreement), and certain related agreements that are summarized below. This summary is qualified in all respects by the terms of the Contribution and Distribution Agreement and such related agreements. On June 24, 2002, IMPCO amended its credit facility with Bank of America NT&SA in which IMPCO released the Company as a borrower under the line of credit.

Prior to the Distribution, certain of the Company's executive officers served as officers or employees of IMPCO and/or its other subsidiaries. In acting on the Company's behalf, these officers considered not only the short-term and long-term impact of operating decisions on its business, but also the impact of such decisions on the business of IMPCO.

*Contribution and Distribution Agreement*

The Company entered into a Contribution and Distribution Agreement with IMPCO that provides for, among other things, certain corporate transactions required to effect the Distribution and other arrangements among the Company and IMPCO subsequent to the Distribution. The agreement provided that IMPCO would

**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

transfer to the Company the assets constituting IMPCO's automotive OEM business. The agreement provides for, among other things, assumptions of liabilities and cross-indemnities designed to place financial responsibility on each of the Company and IMPCO for the liabilities of their respective business.

Under the agreement, if the Company or IMPCO act or fail to act in a manner which causes the Distribution to fail to qualify under Section 355 of the Internal Revenue Code or causes Section 355(e) of the Internal Revenue Code to apply to the Distribution, the Company or IMPCO will indemnify the other for any tax liability arising from such failure or application.

The Company and IMPCO have agreed to a non-competition arrangement under the Contribution and Distribution Agreement whereby each party will be restricted from engaging in competitive activities with the other party through July 23, 2005. Each party will refrain from directly competing with the retained businesses of the other party in such other party's designated market (including such party's OEM market) and/or aftermarket and from engaging in business with specified competitors of the other party. Additionally, IMPCO will refrain from engaging in business with the Company's OEM customers specified in the agreement through July 23, 2005.

Under the Contribution and Distribution Agreement, IMPCO has retained rights to use, on a royalty-free basis, the existing technology for the Company's TriShield tanks, and to manufacture tanks using such technology, in certain markets, which include the automotive aftermarket, bus and truck aftermarket, the industrial aftermarket for vehicles with internal combustion engines, and the bus and truck and industrial OEM markets for vehicles with internal combustion engines. Subject to the non-competition restrictions discussed above, the Company will be free to commercialize its TriShield tanks in other markets, including the worldwide OEM market for Class 1 through 5 vehicles which are powered by fuel cell applications on an exclusive basis, the OEM market in the United States and Canada for Class 1 through 5 vehicles with internal combustion engines (other than diesel vehicles) on an exclusive basis and in all other countries on a non-exclusive basis, the worldwide OEM market in the United States and Canada for Class 6 vehicles on a non-exclusive basis, the worldwide market for components, systems and subsystems for fuel cell applications on an exclusive basis, the worldwide industrial OEM market for vehicles powered by fuel cell applications on an exclusive basis, and the worldwide industrial aftermarket for vehicles powered by fuel cell applications on an exclusive basis. Each party has a right to use the modifications and improvements made by the other party to such TriShield technology, if any, on a royalty-bearing basis at reasonable commercial rates in the designated market for such party. These rights will last for a minimum period of five years from the date of the Distribution, which ends July 23, 2007.

The agreement also provides for a full release and discharge of all liabilities existing or arising from all acts and events occurring or failing to occur or alleged to have occurred or to have failed to occur and all conditions existing or alleged to have existed on or before the date of the agreement, between or among the Company or any of its subsidiaries or affiliates, on the one hand, and IMPCO or any of its subsidiaries or affiliates other than the Company, on the other hand, except as expressly set forth in the agreement. The agreement also provides that, except as otherwise set forth therein or in any related agreement, all costs or expenses incurred in connection with the Distribution and not paid prior to the Distribution will be charged to and paid by the Company. Each party will pay its own expenses after the Distribution.

*Employee Benefit Matters Agreement*

The Company entered into an Employee Benefit Matters Agreement with IMPCO pursuant to which the Company agreed to create independent retirement and other employee benefit plans that are substantially similar to IMPCO's existing retirement and other employee benefit plans. Under the agreement and effective immediately after the Distribution, IMPCO transferred the assets and liabilities of its existing 401(k) retirement and other benefit plans related to the Company's employees to the comparable Company benefit plans. Generally, following the

**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Distribution, IMPCO ceased to have any continuing liability or obligation to the Company's current employees and their beneficiaries under any of IMPCO's benefit plans, programs or practices.

Pursuant to the Employee Benefit Matters Agreement, all IMPCO stock options that were outstanding on the record date and that had not been exercised prior to the Distribution date were converted into two stock options: (i) an option to purchase the number of previously-unexercised IMPCO stock options as of the record date, and (ii) an option to purchase a number of shares of Quantum's common stock equal to the number of previously-unexercised IMPCO stock options times a fraction, the numerator of which is the total number of shares of Quantum's common stock distributed to IMPCO stockholders in the Distribution and the denominator of which is the total number of IMPCO shares outstanding on the record date for the Distribution.

*Tax Allocation and Indemnification Agreement*

The Company and IMPCO entered into a Tax Allocation and Indemnification Agreement, which allocates tax liabilities between the Company and IMPCO and addresses certain other tax matters such as responsibility for filing tax returns and the conduct of audits and other tax proceedings for taxable periods before and after the Distribution date. IMPCO will be responsible for and will indemnify the Company against all tax liabilities relating to the assets and entities that constitute IMPCO and its subsidiaries, and the Company will be responsible for and will indemnify IMPCO against all tax liabilities relating to the assets and entities that constitute the Company's business. In addition, the Company generally will indemnify IMPCO for all tax liabilities arising if the contribution is not tax-free, other than tax liabilities arising in connection with the Company's assumption of certain IMPCO liabilities.

*Transition Services Agreement*

The Company entered into a Transition Services Agreement with IMPCO pursuant to which IMPCO provided the Company with various administrative services. Those services included employee benefits administration, affirmative action and immigration administration, and payroll processing. The Company paid fees to IMPCO for services provided in amounts based on IMPCO's loaded costs incurred in providing such services. This agreement expired on January 23, 2003; however, IMPCO has continued to share certain investor relations services with the Company. Since the Company's spin-off from IMPCO, an officer of IMPCO and a member of the Company's board of directors, provided these investor relations services to the Company, for which the Company has made payments to IMPCO of \$132,658 in fiscal 2004 and \$234,077 in fiscal 2005 for salary, overhead and related expenses. As of April 30, 2005, \$43,757 was payable to IMPCO for investor relations services. The investor relations services ceased as of April 30, 2005.

*Strategic Alliance Agreement*

The Company entered into a Strategic Alliance Agreement with IMPCO pursuant to which it will work with IMPCO in identifying and conducting research and development programs of mutual interest. As part of such research and development activities, the Company may develop, solely or jointly with IMPCO, technology that is owned solely by the Company or jointly with IMPCO. The other purpose of this relationship is to provide IMPCO access to the Company's advanced technologies, including the CNG storage tanks, fuel injectors, in-tank regulators and other products for use in automotive, bus and truck and industrial aftermarket applications and in the bus and truck and industrial OEM markets.

*PowerTrain Integration*

The Company also has a relationship with IMPCO through the venture PowerTrain Integration, LLC. The venture was formed on July 13, 2004 and will provide powertrain integration, engineering and production capabilities for low-volume, on-highway vehicle applications to OEMs when anticipated revenues begin in fiscal

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2006. There were no significant operating activities for this venture through April 30, 2005. The Company owns a 51% equity position with IMPCO holding the remaining 49%.

PowerTrain Integration also has certain distribution rights to General Motors' engines through an agreement with General Motors.

***Agreements with General Motors***

The Company has entered into a strategic alliance with General Motors regarding the development of fuel systems for fuel cell applications. Under the terms of the strategic alliance, General Motors acquired shares of stock originally representing 19.9% of the Company's issued and outstanding capital stock following the Distribution. As a result of subsequent issuances of capital stock via public offerings, stock options exercises and in connection with the acquisition of Starcraft, General Motors ownership has declined to approximately 8.6% of the Company's issued and outstanding common stock as of April 30, 2005.

The Company entered into the agreements described below with General Motors in connection with the alliance. The following description is a summary of the terms of the referenced agreements.

***Corporate Alliance Agreement***

The Corporate Alliance Agreement between the Company and General Motors serves to formalize the two companies' agreement to work together to advance and commercialize, on a global basis, fuel cell systems and the market for fuel cells to be used in transportation, mobile, stationary and portable applications. The Corporate Alliance Agreement became effective upon the Distribution and has a term of ten years, which ends on July 23, 2012. The agreement provides that:

- General Motors is obligated to actively support, endorse and recommend the Company to its customer base;
- General Motors will assist and provide guidance with respect to the Company's directed research and development of fuel cell applications;
- the Company will appoint one individual nominated by General Motors to the board of directors prior to or promptly after the Distribution, and thereafter during the term of the agreement the Company will continue to nominate one individual designated by General Motors to the proposed slate of directors to be presented to the stockholders as necessary for General Motors to retain one seat on the board of directors;
- General Motors will be entitled to appoint an "ex-officio" board member with non-voting capacity during the term of the agreement;
- the Company committed to spend \$4.0 million annually for specific research and development projects directed by General Motors to speed the commercialization of the Company's fuel cell related products; and
- beginning July 24, 2005 for non-automotive applications and July 24, 2008 for automotive applications, the Company is obligated to provide revenue sharing payments to General Motors based on a percentage of gross revenue derived from sales of applications developed under the strategic alliance. The revenue sharing payments will equal 5% of applicable gross revenue through July 23, 2015, 4% for the ten-year period ending July 23, 2025, 3% for the ten-year period ending July 23, 2035, and 2% for the ten-year period ending July 23, 2045. On July 23, 2045, the Company will also be obligated to provide a final revenue sharing payment to General Motors equal to the present value of future revenue sharing payments that would otherwise be payable to General Motors on an annual basis assuming an income stream to General Motors of 2% of the Company's gross revenues in perpetuity.

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As outlined above, the Company has committed to spend \$4.0 million annually for specific research and development projects directed by General Motors to speed the commercialization of fuel cell related products. Since this commitment was waived or partially waived by General Motors for calendar years 2002, 2003 and 2004 the Company anticipates that this commitment will be waived or partially waived in the future. The Company and General Motors agreed upon a Directed Research and Development Statement of Work that covered the period from May 15, 2004 through May 14, 2005. The statement of work outlined specific tasks for the advancement of compressed fuel storage technologies enabling improved performance. Total spending under the statement of work approximated \$1.8 million and was funded under the Quantum Fuel Systems segment. Each party retains the ownership of its existing technology and will jointly own technology that is created under the alliance. The Company has the opportunity to use jointly created technologies in certain aspects of its business but will be required to share revenue with General Motors on fuel cell system-related products that are sold to General Motors or third parties.

Under the agreement, General Motors has a right of first refusal in the event that the Company proposes to sell, or otherwise transfer its fuel cell-related intellectual property contemplated under the Corporate Alliance Agreement. In the event that the Company decides to discontinue operations or is deemed insolvent, General Motors has the right to purchase the intellectual property contemplated under the Corporate Alliance Agreement at a price to be determined by an independent appraisal firm approved by both the Company and General Motors.

*Stock Transfer Agreement*

The Company entered into a Stock Transfer Agreement pursuant to which it agreed to issue to General Motors shares of Series A common stock representing 19.9% (since diluted to 8.6% as of April 30, 2005) of the Company's total issued and outstanding capital stock after the Distribution. The Company issued the Series A common stock immediately following the Distribution. The Series A common stock automatically converted into common stock upon the closing of the Company's public offering of common stock in January 2003. The Company also issued to General Motors an aggregate of 999,969 shares of its non-voting Series B common stock upon the completion of the Company's January 2003 public equity offering.

The Company also agreed that, subject to limited exceptions, it would not issue any stock in a private placement transaction without the prior written consent of General Motors.

*Registration Rights Agreement*

The Company entered into a Registration Rights Agreement with General Motors pursuant to which General Motors may demand that the Company file a registration statement under the Securities Act, covering some or all of the common stock General Motors would receive upon conversion of its Series A common stock. General Motors may make this demand any time after the earlier of three years following the Distribution or six months after the effective date of the Company's first registration statement for a public offering of its securities to the general public, which was January 16, 2003. The Company is not required to effect more than two demand registrations nor is the Company required to effect a registration if the requested registration would have an aggregate offering price to the public of less than \$20 million. In an underwritten offering, the managing underwriter of any such offering has the right to limit the number of registrable securities to be included in the registration statement.

General Motors also has "piggyback" registration rights. If the Company proposes to register any of its equity securities under the Securities Act, other than pursuant to the demand registration rights described above or certain excluded registrations, General Motors may require the Company to include all or a portion of its registrable securities in the registration and in any related underwriting. Further, if the Company is eligible to effect a registration on Form S-3, General Motors may demand that the Company file a registration statement on

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Form S-3 covering all or a portion of General Motors' registrable securities, provided that the registration has an aggregate offering price of at least \$10 million. The Company will not be required to effect more than two such registrations in any twelve month period. In general, the Company will bear all fees, costs and expenses of such registrations, other than underwriting discounts and commissions. The Company also agreed to take such reasonable actions as are necessary to make Rule 144 available to General Motors for the resale of its registrable securities without registration under the Securities Act.

*Master Technical Development Agreement*

Under the terms of the Master Technical Development Agreement with General Motors, the Company has agreed to work with General Motors to facilitate the integration, interface, and optimization of General Motors' fuel cell systems with Quantum's gaseous fuel storage and handling modules. To that end, the agreement provides for the establishment of joint Quantum/General Motors technical teams to implement statements of work with respect to the development of fuel cell applications. In addition, the agreement provides that both the Company and General Motors will license their fuel cell-related technologies to each other for the purpose of developing, manufacturing and selling the fuel cell applications developed under the strategic alliance.

**4. Acquisition of Starcraft Corporation**

On November 23, 2004, the Company entered into an Agreement and Plan of Merger with Starcraft Corporation (the "Merger Agreement"). The merger was completed effective after the close of business on March 3, 2005. Pursuant to the terms set forth in the Merger Agreement, the Company operates Starcraft as a wholly-owned subsidiary. The Company has recorded the transaction as a purchase in accordance with SFAS No. 141, "Business Combinations."

In connection with the merger, each share of Starcraft common stock that was outstanding at the effective time of the merger was converted into the right to receive 2.341 shares of Quantum common stock. Total Quantum shares issued in connection with the merger amounted to approximately 21.0 million shares and represented approximately 40% of the total Quantum shares outstanding immediately following the completion of the merger.

Under the purchase method of accounting, the total estimated consideration for the transaction was \$146.5 million and consists of the exchange of Starcraft shares for the Company's common stock valued at \$134.6 million, cash payments for Starcraft stock options and directors' shares of \$7.2 million, direct transaction fees and expenses of \$3.6 million, and a separation agreement with Starcraft's chairman of the board valued at \$1.1 million. As a result, the Company recorded \$138.0 million in goodwill and assigned \$5.2 million to intangible assets, primarily existing customer contracts and intellectual property. The goodwill is not expected to be deductible for income tax purposes.

The value assigned for the exchange of Starcraft shares for the Company's common stock was based on the weighted average price of \$6.41 of Quantum's common stock as reported on The Nasdaq National Market for the two day period before and after the date the merger was announced (November 23, 2004). The long-term indebtedness of Starcraft remained outstanding following the merger, including Starcraft's 8.5% unsecured senior subordinated convertible promissory notes due July 1, 2009 in the aggregate principal amount of \$15.0 million (the "Starcraft Convertible Notes") and approximately \$8.8 million in other indebtedness. In connection with the merger, the Company assumed the obligation to issue its common stock upon conversion of the Starcraft Convertible Notes at a conversion price of \$5.77.

Starcraft designs, engineers and integrates specialty equipment products into motor vehicle applications, primarily General Motors' pick-up trucks and sport utility vehicles. In addition, Starcraft manufactures and



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distributes aftermarket automotive parts and products to wholesale and retail customers, and provides engineering development services to customers in the automotive industry. The acquisition of Starcraft was initiated to create a stronger, more diversified company with complementary revenue streams to address the mainstream automotive and alternative fuel markets and the hydrogen economy. Management refers to the operations acquired via the merger with Starcraft as the Tecstar Automotive Group.

The Company has not yet obtained all information related to the acquisition, primarily related to the final completion of the income tax returns as of the acquisition date and estimated transaction costs. The final allocation will be completed in fiscal 2006. The components of the consideration paid for Starcraft and the purchase price allocation of the acquired business based upon independent appraisals and management's estimates at the date of the acquisition is as follows:

*Components of Consideration:*

Purchase of Starcraft common shares .....	\$134,582,327
Cash payments for Starcraft stock options .....	7,243,845
Direct transaction fees and expenses .....	3,600,761
Separation agreement with Starcraft's Chairman of the Board .....	1,129,361
Total consideration .....	<u>\$146,556,294</u>

*Allocation of Consideration:*

Tangible assets acquired at fair value:	
Cash & cash equivalents .....	\$ 1,225,698
Accounts receivable .....	18,562,513
Inventories .....	13,434,998
Tooling and engineering projects .....	2,029,025
Recoverable income taxes .....	2,774,210
Other current assets .....	1,705,341
Property and equipment .....	13,120,504
Other non-current assets .....	818,987
	<u>53,671,276</u>
Liabilities assumed at fair value:	
Accounts payable .....	(23,266,771)
Accrued payroll obligations .....	(1,254,954)
Accrued interest .....	(232,500)
Accrued warranties .....	(590,555)
Other accrued liabilities .....	(1,995,910)
Long-term debt .....	(23,757,924)
	<u>(51,098,614)</u>
Net tangible assets acquired at fair value .....	2,572,662
Net assets of Starcraft Parts Business disposed of in connection with merger .....	779,361
Specifically identifiable intangible assets acquired at fair value:	
Customer contracts .....	3,100,000
Existing technology .....	2,100,000
Goodwill .....	138,004,271
Total allocation of consideration .....	<u>\$146,556,294</u>

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The operating results of Starcraft have been included in the Company's consolidated financial statements from the date of the acquisition.

The pro forma financial data set forth below gives effect to the Company's merger with Starcraft as if the acquisition had been completed on May 1, 2003. The pro forma financial data includes adjustments to eliminate the operating revenues and expenses associated with Starcraft's kit and parts business that was transferred to the outgoing chairman of Starcraft, incremental changes in amortization expense resulting from fair value adjustments to amortizable intangible assets, reversal of impairment to goodwill in connection with Starcraft's January 2004 merger with Wheel to Wheel, Inc., utilization of allowable net operating loss carry forwards of the Company to reduce income tax expense, and an increase in the number of shares used in per share calculations as a result of shares issued in connection with the transaction. The pro forma financial data excludes those adjustments made to allocate the purchase consideration to Starcraft's assets acquired and liabilities assumed based on their estimated fair value at the date of acquisition.

	<u>Year Ended April 30, 2004</u>		<u>Year Ended April 30, 2005</u>	
	<u>As Reported</u>	<u>Pro Forma (unaudited)</u>	<u>As Reported</u>	<u>Pro Forma (unaudited)</u>
	(in thousands, except per share amounts)			
Net revenue . . . . .	\$28,119	\$210,678	\$ 54,300	\$206,345
Operating income (loss) . . . . .	\$ (9,333)	\$ 3,045	\$(13,810)	\$(19,503)
Net income (loss) applicable to common stock . . . . .	\$ (8,934)	\$ 2,946	\$(13,099)	\$(19,916)
Net Income (loss) per share:				
Basic . . . . .	\$ (0.33)	\$ 0.06	\$ (0.37)	\$ (0.38)
Diluted . . . . .	\$ (0.33)	\$ 0.06	\$ (0.37)	\$ (0.38)
Number of shares:				
Basic . . . . .	27,257	48,253	35,048	52,545
Diluted . . . . .	27,257	51,206	35,048	52,545

The pro forma financial information is presented for informational purposes only and is not indicative of what the actual consolidated results of operations might have been had the transaction occurred on May 1, 2003. Included in the pro forma results for fiscal 2005 were non-recurring expenses related to the merger of \$1.5 million.

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**5. Marketable Securities**

At April 30, 2005, the Company's marketable securities held-to-maturity were classified as follows:

	<u>Amortized Cost</u>	<u>Gross Unrealized</u>		<u>Fair Value</u>
		<u>Gains</u>	<u>Losses</u>	
<b>Short-Term</b>				
Certificate of deposit .....	\$ 2,425,137	\$ —	\$ —	\$ 2,425,137
Commercial paper .....	—	—	—	—
Asset backed securities .....	1,242,375	—	28,693	1,213,682
Corporate bonds .....	20,036,301	—	69,584	19,966,717
U.S. government securities .....	8,397,544	—	53,544	8,344,000
	<u>32,101,357</u>	<u>—</u>	<u>151,821</u>	<u>31,949,536</u>
<b>Long-Term</b>				
Asset backed securities .....	—	—	—	—
Corporate bonds .....	971,962	—	9,320	962,642
U.S. government securities .....	3,029,220	—	28,590	3,000,630
	<u>4,001,182</u>	<u>—</u>	<u>37,910</u>	<u>3,963,272</u>
Total marketable securities .....	<u>\$36,102,539</u>	<u>\$ —</u>	<u>\$189,731</u>	<u>\$35,912,808</u>

At April 30, 2005, marketable securities held-to-maturity classified as long-term have maturity dates ranging from May 2006 to October 2007.

**6. Accounts Receivable**

Accounts receivable consist of the following:

	<u>April 30</u>	
	<u>2004</u>	<u>2005</u>
Customer accounts billed .....	\$3,120,131	\$22,840,496
Customer accounts unbilled .....	2,923,373	2,503,671
Allowance for doubtful accounts .....	(147,000)	(1,243,895)
Net accounts receivable .....	<u>\$5,896,504</u>	<u>\$24,100,272</u>

**7. Inventories**

Inventories consist of the following:

	<u>April 30</u>	
	<u>2004</u>	<u>2005</u>
Inventories:		
Materials and parts .....	\$5,198,673	\$23,858,343
Work-in-process .....	58,945	806,772
Finished goods .....	1,424,719	1,864,401
	<u>6,682,337</u>	<u>26,529,516</u>
Less provision for obsolescence .....	(937,568)	(2,145,832)
Net inventories .....	<u>\$5,744,769</u>	<u>\$24,383,684</u>

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**8. Property and Equipment**

Property and equipment consist of the following:

	April 30	
	2004	2005
Land .....	\$ —	\$ 211,000
Buildings .....	—	1,233,192
Dies, molds and patterns .....	2,975,192	3,018,290
Machinery and equipment .....	8,970,785	14,620,712
Office furnishings and equipment .....	7,867,990	13,066,431
Automobiles and trucks .....	136,386	787,953
Leasehold improvements .....	2,547,012	4,603,834
Capitalized machinery and equipment .....	623,358	623,358
Construction in progress .....	841,282	581,347
	23,962,005	38,746,117
Less accumulated depreciation and amortization .....	(15,181,909)	(18,465,712)
Net property and equipment .....	\$ 8,780,096	\$ 20,280,405

**9. Goodwill and Other Intangible Assets**

*Starcraft Acquisition*

As discussed in Note 4, the Company completed its acquisition of Starcraft on March 3, 2005. In accordance with SFAS No. 141, the total estimated consideration for the transaction was allocated to the tangible assets acquired and liabilities assumed based on their fair values at the date of acquisition. In addition, certain identifiable intangible assets were recorded in connection with contractual or other legal rights acquired. The excess of the cost of acquiring Starcraft over the net of the amounts assigned to their assets acquired and liabilities assumed, amounting to \$138,004,271, was recognized as goodwill.

*General Motors Strategic Alliance*

In connection with the Company's strategic alliance with General Motors, the Company issued 3,513,439 shares of its Series A common stock to General Motors on July 24, 2002. This issuance has been recorded at the estimated fair market value on the date of the Distribution of approximately \$14.2 million, in accordance with SFAS No. 123, "Accounting for Stock Based Compensation," and EITF 96-18, "Accounting for Equity Instruments that are Issued to Other than Employees for Acquiring, or in Conjunction with Selling Goods or Services." The intangible asset was recorded in accordance with the consensus reached by the EITF during their November 2001 meeting with respect to EITF 00-18, "Accounting Recognition for Certain Transactions Involving Equity Instruments Granted to Other than Employees."

Pursuant to the terms of the Company's Amended and Restated Certificate of Incorporation, upon the completion of the Company's January 2003 public equity offering, all of the 3,513,439 shares of the Company's outstanding Series A common stock held by General Motors converted automatically into shares of the Company's common stock on a one-for-one basis, and the Company issued to General Motors an aggregate of 999,969 shares of its non-voting Series B common stock. The issuance of the Series B common stock has been recorded as additional consideration related to the strategic alliance between the companies at the estimated fair market value on the date of the public offering of approximately \$2.2 million. As a result, the intangible asset recorded in connection with the Company's issuance of Series B common stock to General Motors was increased by \$2.2 million.

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*Amortization of Intangibles*

SFAS No. 142 requires that recognized intangible assets be amortized over their useful lives and that goodwill is not subject to amortization. The intangible assets consisting of customer contracts and existing technology acquired in the acquisition of Starcraft are amortized using the straight-line method over their estimated weighted-average useful lives of nineteen months and twenty-nine months, respectively. The intangible asset recorded in connection with the Corporate Alliance Agreement with General Motors is being amortized over the ten-year term of the agreement.

Intangible assets consist of the following:

	April 30	
	2004	2005
GM Strategic Alliance Agreement:		
Gross carrying value .....	\$16,479,358	\$16,479,358
Accumulated amortization .....	(2,819,653)	(4,479,428)
Net carrying value .....	13,659,705	11,999,930
Customer contracts:		
Gross carrying value .....	\$ —	\$ 3,100,000
Accumulated amortization .....	—	(322,000)
Net carrying value .....	—	2,778,000
Existing technology:		
Gross carrying value .....	\$ —	\$ 2,100,000
Accumulated amortization .....	—	(146,000)
Net carrying value .....	—	1,954,000
	\$13,659,705	\$16,731,930

The expected amortization expense for the next five fiscal years and thereafter is as follows:

	Amortization Expense
2006 .....	\$ 4,467,775
2007 .....	3,381,775
2008 .....	1,861,775
2009 .....	1,659,775
2010 .....	1,659,775
Thereafter .....	3,701,055
	\$16,731,930

On May 1, 2002, the Company adopted SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets and for Long-lived Assets to be Disposed Of." Accordingly, the goodwill and intangible assets are reviewed on an annual basis for impairment or on a more frequent basis if events or circumstances change that might indicate that impairment exists. In accordance with the requirements of SFAS No. 144, the Company believes that no event or circumstance currently exists that would indicate impairment of these long-lived assets.

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**10. Other Assets**

Other assets consist of the following:

	April 30	
	2004	2005
Security deposits .....	\$90,173	\$755,609
Other .....	—	135,946
Total other assets .....	\$90,173	\$891,555

**11. Long-term Debt**

There was no long-term indebtedness as of April 30, 2004. Long-term debt, all of which was assumed in connection with the Starcraft merger, consisted of the following at April 30, 2005:

Senior subordinated convertible notes .....	\$15,000,000
Domestic bank revolving lines of credit .....	—
Canadian revolving line of credit .....	—
Mortgage note payable to bank, due in monthly installments of \$15,000 including interest at the bank's prime rate (effective rate of 5.75% at April 30, 2005), due September 2006, collateralized by related building .....	1,255,712
Promisory note payable to a former shareholder of Wheel to Wheel, Inc., payable in monthly installments of \$22,113 including interest at 5.38%, due May 1, 2013, unsecured .....	1,736,462
Obligation payable to a former shareholder of Wheel to Wheel, Inc., payable in monthly installments of \$27,750 including imputed interest at 5.5%, due May 1, 2013, unsecured .....	2,169,084
Various capital lease obligations due in total monthly installments of \$5,210 including interest ranging from 12% to 19%, with maturities through June 2006 .....	20,119
	20,181,377
Less current maturities .....	(525,215)
Long-term debt .....	\$19,656,162

Effective July 13, 2004, Starcraft issued \$15,000,000 in principal amount of unsecured senior subordinated convertible notes in a private placement to accredited investors. The notes bear interest at 8.5% and mature in July 2009, with semi-annual interest payments payable on January 1 and July 1 of each year. Per terms of the notes, as modified by the merger agreement with Starcraft, the interest payments can be made in either cash or shares of the Company's common stock, at the Company's discretion. As modified, the notes are convertible, subject to certain conditions, into 2,599,653 shares of the Company's common stock at a conversion price of \$5.77.

The Company has a \$30,000,000 revolving credit agreement. Advances under the agreement are limited to a specific percentage of eligible receivables and inventories of the Tecstar Automotive Group. The advances bear interest subject to a pricing matrix with ranges of 3/4% below the prime rate to 1/4% above the prime rate dependent upon a ratio of the Company's funded debt to earnings before interest, taxes, depreciation and amortization ("EBITDA"). The revolver also contains a London Interbank Offered Rate ("LIBOR") based borrowing option with rates ranging from 150 to 250 basis points above Euro dollar rates, dependent upon the

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same ratio of funded debt to EBITDA. The credit facility expires on November 1, 2006. Availability under the revolving credit agreement was \$21.5 million under the eligible borrowing base as of April 30, 2005.

The Company has a \$5,000,000 revolving credit agreement with a Canadian institution. Advances under the agreement are limited to eligible receivables and a percentage of inventories. Borrowings bear interest subject to a pricing matrix with ranges of 3/4% below bank prime to 1/4% above bank prime rate dependent upon a ratio of funded debt to EBITDA. The credit facility expires on November 1, 2006. Availability under the revolving credit agreement was \$0.7 million under the eligible borrowing base as of April 30, 2005.

The Company is responsible for commitment fees on the unused portion of the revolving credit facilities of 1/4%. There were no outstanding letters of credit issued under the revolving credit facilities as of April 30, 2005.

The revolving credit facilities are secured by substantially all of Tecstar Automotive Groups's assets and require Tecstar Automotive Group to meet certain covenants, including minimum ratios for current, leverage, fixed charge, funded debt to EBITDA and senior debt to EBITDA, along with minimum net worth levels. The lenders for the revolving credit facilities waived the requirement to calculate covenants for the period from the close of the merger through April 30, 2005. The Company was in compliance with reporting requirements of the revolving credit facilities and the unsecured senior subordinated convertible notes as of April 30, 2005.

The promissory note and the obligation to a former shareholder of Wheel to Wheel, Inc. are guaranteed by certain senior managers and a current director of the Company.

Maturities of long-term debt for each of the next five fiscal years ending April 30 are as follows:

2006 .....	\$ 525,215
2007 .....	1,563,566
2008 .....	440,841
2009 .....	465,455
2010 .....	15,491,445
Thereafter .....	<u>1,694,855</u>
	<u>\$20,181,377</u>

## 12. Income Taxes

The following table presents the principal reasons for the difference between the effective tax rate and the federal statutory income tax rate:

	<u>Year Ended April 30</u>		
	<u>2003</u>	<u>2004</u>	<u>2005</u>
Income tax benefit at U.S. statutory rates .....	(34.0)%	(34.0)%	(34.0)%
State and local income taxes, net of federal benefit .....	(6.0)%	(6.0)%	(5.2)%
Net operating losses and research and development credits retained by IMPCO .....	10.3%	0.0%	—
Amortization of intangible asset .....	2.5%	7.5%	5.0 %
Other .....	2.0%	3.3%	(1.9)%
Valuation allowance .....	<u>25.2%</u>	<u>29.6%</u>	<u>36.2 %</u>
Effective tax rate .....	<u>0.0%</u>	<u>0.4%</u>	<u>0.1 %</u>

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The following table presents the provision for income taxes by jurisdiction:

	Year Ended April 30		
	2003	2004	2005
Current:			
Federal . . . . .	\$ —	\$ —	\$ —
State and local . . . . .	—	7,000	10,000
Foreign . . . . .	—	32,000	—
	<u>—</u>	<u>39,000</u>	<u>10,000</u>
Deferred:			
Federal . . . . .	4,100,000	2,683,000	7,525,000
State and local . . . . .	724,000	(48,000)	1,060,000
Foreign . . . . .	—	—	2,034,000
	<u>4,824,000</u>	<u>2,635,000</u>	<u>10,619,000</u>
Less: Change in valuation allowance . . . . .	<u>(4,824,000)</u>	<u>(2,635,000)</u>	<u>(10,619,000)</u>
Subtotal . . . . .	<u>—</u>	<u>—</u>	<u>—</u>
Income tax provision . . . . .	<u>\$ —</u>	<u>\$ 39,000</u>	<u>\$ 10,000</u>

The significant components of deferred tax assets and liabilities are as follows:

	Year Ended April 30	
	2004	2005
Deferred income tax assets:		
Accrued compensation . . . . .	\$ 186,000	\$ 1,400,000
Accrued warranty . . . . .	379,000	509,000
Inventory . . . . .	410,000	889,000
Other . . . . .	59,000	506,000
Tax credits . . . . .	—	612,000
Net operating loss carryforwards . . . . .	8,178,000	18,397,000
	<u>9,212,000</u>	<u>22,313,000</u>
Less: Valuation allowance . . . . .	<u>(8,555,000)</u>	<u>(19,174,000)</u>
Total deferred income tax assets . . . . .	<u>657,000</u>	<u>3,139,000</u>
Deferred income tax liabilities:		
Equipment and leasehold improvements . . . . .	(657,000)	(1,455,000)
Intangible assets . . . . .	—	(1,684,000)
Total deferred tax liabilities . . . . .	<u>(657,000)</u>	<u>(3,139,000)</u>
Net deferred tax (liabilities) assets . . . . .	<u>\$ —</u>	<u>\$ —</u>

At April 30, 2005, the Company has Federal net operating loss carryforwards of approximately \$42.5 million available to offset future federal taxable income. The net operating losses expire between the years 2021 and 2025. The Company has credit carryforwards of \$0.6 million that do not expire. The U.S. tax laws contain provisions that limit the use in any future period of net operating loss and credit carryforwards upon the occurrence of certain events including a significant change in ownership interest. The Company has incurred



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such an event, which limits the future use of its losses. The net operating loss carryforwards include approximately \$0.7 million of deductions related to stock option exercises. If and when the Company reduces any portion of its valuation allowance related to the stock option compensation deduction, the benefit will be added to stockholders equity, rather than being shown as a reduction of future income tax expense.

The Company has established a valuation allowance against its net deferred tax asset since based on the Company's lack of earnings history and current evidence, it is unlikely that the asset will be realized. Tax credits and net operating losses generated prior to the spin-off are retained by IMPCO.

For the fiscal years ended April 30, 2003, 2004 and 2005, the loss from the Company's foreign operations before the provision for foreign income taxes was approximately \$0, \$0, and \$293,000, respectively.

**13. Commitments and Contingencies**

*Leases*

The Company has certain non-cancelable operating leases for facilities and equipment. Future minimum lease commitments under non-cancelable operating leases at April 30, 2005 are as follows:

	<b>Lease Obligation</b>
2006 .....	4,786,608
2007 .....	4,202,429
2008 .....	3,636,745
2009 .....	2,934,180
2010 .....	2,117,294
Thereafter .....	3,447,719
Total minimum lease payments .....	\$21,124,975

Total rental expense under the operating leases for fiscal years ended April 30, 2003, 2004 and 2005 was approximately \$1.4 million, \$1.5 million and \$2.6 million, respectively. These leases are non-cancelable and certain leases have renewal options and escalation clauses.

*Royalties*

The Company has entered into contracts under which it is required to pay royalties for products sold using certain technologies covered by these contracts. No royalty expense was incurred under these contracts for any of the periods reported in the financial statements.

*Contingencies*

The Company is subject to various legal proceedings and claims which arise out of the normal course of its business. Management and the Company's legal counsel periodically review the probable outcome of pending proceedings and the costs reasonably expected to be incurred. The Company accrues for these costs when it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. In the opinion of management, any ultimate cost to the Company in excess of amounts accrued will not materially affect its consolidated financial position, results of operations or cash flows.

*Self-Insured Group Health Plan*

The Company, by virtue of its merger with Starcraft, provides a self-insured group health insurance plan for substantially all of the Tecstar Automotive Group's employees. The Company has stop-loss insurance to reduce

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its exposure under this plan. The Company is responsible for the funding of all claims up to \$50,000 per individual per policy year and up to approximately \$2.3 million per year on the group as a whole. A liability of approximately \$271,000 has been recorded at April 30, 2005, to estimate payment of claims pending on that date. Future operating results could be affected should actual claims differ from management's current estimate.

*Compensation Plans*

The Company sponsors four defined contribution plans that are qualified under Internal Revenue Service Code Section 401(k) that cover its employees. The plans are subject to the provisions of the Employee Retirement Income Security Act of 1974. Three of the plans were assumed in connection with the Starcraft merger.

Under the Quantum Investment and Tax Savings Plan (the "Plan"), all employees who are at least age twenty-one or older are eligible to participate in the Plan on the first day of employment with the Company. Employees of the Company who elect to participate in the Plan may contribute into the Plan not less than 1% nor more than 15% of compensation. The Company's matching contributions under the Plan are discretionary and match elective salary deferrals up to 3% of compensation.

Under the three plans assumed from Starcraft and its subsidiaries, employees with over six months of service are eligible to participate. The plans provide for discretionary matching contributions by the Company of the employee's contribution, up to 6% of compensation. Also, the plans provide for additional discretionary contributions annually as determined by the Board of Directors.

Contributions attributable to the Company approximated \$210,000, \$223,000 and \$245,000 for fiscal years ended 2003, 2004 and 2005, respectively.

*Employment Agreements*

The Company has entered into employment agreements with its Chief Executive Officer, Chief Operating Officer, Chief Financial Officer and other senior managers which provide for annual base salary, other benefits and severance obligations. The Company's obligation under the terms of these agreements for the fiscal year ending April 30, 2006 is approximately \$3.8 million. The Company's obligation beyond fiscal year 2006 totals approximately \$3.3 million.

*General Motors Directed Research & Development Expenses*

Pursuant to the Corporate Alliance Agreement with General Motors (see Note 3), the Company has committed to spend \$4.0 million annually for specific research and development projects directed by General Motors to speed the commercialization of the Company's fuel cell related products. Since this commitment was waived or partially waived by General Motors for calendar years 2002, 2003 and 2004 the Company anticipates that this commitment will be waived or partially waived in the future. The Company and General Motors agreed upon a Directed Research and Development Statement of Work that covered the period from May 15, 2004 through May 14, 2005. The statement of work outlined specific tasks for the advancement of compressed fuel storage technologies enabling improved performance. Total spending under the statement of work approximated \$1.8 million and was funded under the Quantum Fuel Systems segment.

**14. Earnings (Loss) Per Share**

The Company computes net loss per share in accordance with SFAS No. 128, "Earnings Per Share," and SEC Staff Accounting Bulletin ("SAB") No. 98. Under the provisions of SFAS No. 128, basic net loss per share

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is computed by dividing the net loss for the period by the weighted average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing the net loss for the period by the weighted average number of common and common equivalent shares outstanding during the period.

Under the provisions of SAB No. 98, common shares issued for nominal consideration, if any, would be included in the per share calculations as if they were outstanding for all periods presented. The Company initially issued 1,000 shares to IMPCO for nominal consideration. Prior to the spin-off, the Company declared a stock split to increase the number of shares outstanding to 14,142,036 shares of common stock in order to match the number of shares outstanding of IMPCO's common stock. In July 2002, IMPCO's Board of Directors declared a 1-for-1 stock dividend whereby every shareholder of IMPCO Common Stock received a corresponding share of the Company's common stock. On July 24, 2002, the Company issued 3,513,439 shares of Series A common stock to General Motors, which were converted into shares of common stock in January 2003. The Company considers common equivalent shares from the exercise of stock options and warrants in the instance where the shares are dilutive to net income of the Company by application of the treasury stock method. The effects of stock options and warrants were anti-dilutive for all periods presented.

The following table sets forth the computation of basic and diluted earnings per share:

	Year Ended April 30		
	2003	2004	2005
Numerator:			
Net loss . . . . .	\$(18,197,461)	\$(8,934,420)	\$(13,098,790)
Numerator for basic and diluted loss per share—to common stockholders . . . . .	\$(18,197,461)	\$(8,934,420)	\$(13,098,790)
Denominator for basic and diluted loss per share—weighted-average shares . . . . .	18,153,059	27,257,230	35,048,437
Basic and diluted loss per share . . . . .	<u>\$ (1.00)</u>	<u>\$ (0.33)</u>	<u>\$ (0.37)</u>

For fiscal years ended April 30, 2003, 2004 and 2005, options to purchase approximately 2,403,000, 2,704,000 and 4,092,000 and warrants to purchase approximately 400,000, 249,000 and 245,000 shares of common stock, respectively, were excluded in the computation of diluted net income per share, as the effect would be anti-dilutive. In addition, for the period March 4 through April 30, 2005, senior subordinated notes payable convertible into approximately 2,600,000 shares of common stock were excluded in the computation of diluted net income per share, as the effect would be anti-dilutive.

**15. Stockholders' Equity**

*Authorized Capital Stock*

As discussed in Note 1, the Company's authorized stock was amended in March 2005 to consist of 20,000,000 shares of preferred stock and 100,000,000 shares of common stock. Of the 100,000,000 shares of common stock, 2,000,000 are designated as Series B common stock. Common stock previously designated as Series A was eliminated.

*Quantum Common Stock*

Holders of the Company's common stock are entitled to one vote for each share on all matters voted on by stockholders. Holders of common stock do not have cumulative voting rights in the election of directors.

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Holders of the Company's common stock do not have subscription, redemption or conversion privileges. Subject to the preferences or other rights of any preferred stock that may be issued from time to time, holders of the Company's common stock will be entitled to participate ratably in dividends the Company's common stock as declared by the board of directors. Holders of common stock will be entitled to share ratably in all assets available for distribution to stockholders in the event of liquidation or dissolution of the Company, subject to distribution of the preferential amount, if any, to be distributed to holders of preferred stock. No holder of any capital stock of the Company authorized at any such distribution date will have any preemptive right to subscribe for or purchase any securities of any class or kind of the Company.

*Series A Common Stock*

As part of the strategic alliance with General Motors, the Company agreed to issue to General Motors, and General Motors agreed to acquire, that number of shares of the Company's Series A common stock, \$0.001 par value per share, which, when combined with all shares of capital stock of the Company then issued and outstanding, would equal 19.9% of the issued and outstanding shares of the capital stock of the Company. Immediately following the Distribution, the Company issued 3,513,439 shares of its Series A common stock to General Motors. Upon the closing of the Company's initial public offering in January 2003, the outstanding shares of Series A common stock automatically converted into an equal number of shares of common stock. Series A common stock was eliminated in March 2005.

The Series A common stock included certain anti-dilution rights, by which in the event the Company effected any other issuance of additional shares of common stock (including any shares issued in an initial public offering of the Company's securities, but excluding shares or options issued pursuant to a board-approved stock option or equity incentive plan), the holders of Series A common stock would receive shares of non-voting Series B common stock in an amount that will cause the issued and outstanding Series A and Series B common stock, taken together, to equal 19.9% of the issued and outstanding shares of all series of the Company's common stock (excluding shares issued pursuant to a board-approved stock option or equity incentive plan). As a result of the conversion of the Series A common stock in connection with the Company's initial public offering, General Motors no longer has anti-dilution rights. General Motors' ownership interest, including its shares of Series B common stock, has been diluted to approximately 8.6% as of April 30, 2005 as a result of subsequent securities issuances.

*Series B Common Stock*

Shares of the Company's Series B common stock are not entitled to vote on any matters voted on by stockholders except as otherwise specifically required by law. In the event the Company issues additional shares of common stock as a dividend or other distribution on the Company's outstanding common stock, or a subdivision or combination of the Company's common stock into a smaller or greater number of shares, the number of shares of Series B common stock will be adjusted to that number of shares of Series B common stock that is equal to the percentage of all outstanding shares of all series of the Company's common stock (excluding shares issued pursuant to a board-approved stock option or equity incentive plan) that the holders of Series B common stock held prior to such event. Upon the transfer of any of the outstanding shares of Series B common stock to any person or entity that is not controlled by or under common control with General Motors, the transferred shares of Series B common stock will convert into an equal number of shares of the Company's common stock. Subject to the preferences or other rights of any preferred stock that may be issued from time to time, holders of the Company's Series B common stock will be entitled to participate ratably in dividends on the Company's common stock as declared by the Company's board of directors. Holders of the Company's Series B common stock will be entitled to share ratably in all assets available for distribution to stockholders in the event of liquidation or dissolution of the Company, subject to distribution of the preferential amount, if any, to be distributed to holders of preferred stock.

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*Preferred Stock*

The Company's charter authorizes the board of directors, without any vote or action by the holders of the Company's common stock, to issue up to 20,000,000 shares of preferred stock from time to time in one or more series. The Company's board of directors are authorized to determine the number of shares and designation of any series of preferred stock and the dividend rights, dividend rate, conversion rights and terms, voting rights (full or limited, if any), redemption rights and terms, liquidation preferences and sinking fund terms of any series of preferred stock. Issuances of preferred stock would be subject to the applicable rules of the Nasdaq National Market or other organizations on whose systems the Company's stock may then be quoted or listed. Depending upon the terms of preferred stock established by the Company's board of directors, any or all series of preferred stock could have preference over the Company's common stock with respect to dividends and other distributions and upon liquidation of the Company. Issuance of any such shares with voting powers, or issuance of additional shares of the Company's common stock, would dilute the voting power of the Company's outstanding common stock. The Company has no present plans to issue any preferred stock.

*Warrants*

In connection with the spin-off from IMPCO, the Company issued warrants to purchase an aggregate of 300,000 shares of the Company's common stock to holders of outstanding IMPCO warrants as of the distribution date, July 23, 2002. The Company issued these warrants at an exercise price of \$5.83 per share with a term expiring in January 2006. During fiscal year 2004, warrants to purchase an aggregate of 51,000 shares of common stock were exercised on a cashless basis, which resulted in the issuance of 18,536 shares of common stock. During fiscal year 2005, warrants to purchase an aggregate of 3,556 shares of common stock were exercised on a cashless basis, which resulted in the issuance of 691 shares of common stock.

The Company issued a warrant to purchase 100,000 shares of the Company's common stock to a consulting firm on August 27, 2002 for services related to investor relations. This warrant was issued at an exercise price of \$5.10 per share with a four-year term. The Company valued the warrant at fair value (in accordance with SFAS No. 123, "Accounting for Stock Based Compensation") based on a Black-Scholes fair value calculation. The warrant was valued at date of grant and was re-measured at fair value at each subsequent reporting period, and changes in value were recorded over the performance period. The Company recorded an expense of \$16,714 during fiscal year 2004 in connection with the issuance of this warrant. During the third quarter of fiscal year 2004, the warrant was exercised in full on a cashless or "net issue" basis, resulting in the issuance of an aggregate of 49,414 shares of common stock.

Warrants to purchase an aggregate of 245,444 shares of common stock were outstanding at April 30, 2005.

*Stock Options*

The Company has adopted its 2002 Stock Incentive Plan to provide employees, directors, officers and consultants an opportunity to acquire stock ownership in the Company. In connection with the spin-off from IMPCO, each IMPCO option holder received one option to purchase Quantum stock for every IMPCO option held at the record date. The exercise price of both the IMPCO and Quantum stock options was adjusted based on the relative market values of the common stock of both companies on the first trading day following the spin-off. All vesting schedules remained the same and the option holders are not required to exercise their IMPCO and Quantum options concurrently. Accordingly, the adoption of the Company's stock incentive plan did not give rise to a compensation charge. As of the Distribution date, 1,315,468 options were granted out of the Company's 2002 Stock Incentive Plan to IMPCO stock option holders.

IMPCO had stock option plans that provided for the issuance of options to key employees and directors of the Company at the fair market value at the time of grant. Options under those plans generally vested in four or

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five years and are generally exercisable while the individual is an employee or a director, or ordinarily within one month following termination of employment. In no event may options be exercised more than ten years after date of grant. The exercise price of the IMPCO options granted equaled the market price of the IMPCO stock on the grant date.

Options granted under the Company's 2002 Stock Incentive Plan subsequent to the Distribution vest over four years and are exercisable while the individual is an employee or a director, or within one month following termination of employment. All options expire ten years from the date of grant.

Below is a summary of options activity from the date of the Distribution through April 30, 2005:

	<u>Number of Shares</u>	<u>Weighted Average Exercise Price</u>
Options outstanding upon Distribution at July 23, 2002 .....	1,315,468	\$4.31
Options granted .....	1,210,500	3.60
Options exercised .....	—	—
Options forfeited .....	<u>(123,099)</u>	3.95
Options outstanding at April 30, 2003 .....	2,402,869	3.97
Options granted .....	1,511,500	4.79
Options exercised .....	(874,664)	3.90
Options forfeited .....	<u>(335,680)</u>	3.97
Options outstanding at April 30, 2004 .....	2,704,025	4.45
Options granted .....	1,540,000	5.77
Options exercised .....	(65,794)	3.88
Options forfeited .....	<u>(86,156)</u>	4.50
Options outstanding at April 30, 2005 .....	<u>4,092,075</u>	4.96
Shares exercisable at April 30, 2003 .....	<u>839,362</u>	<u>\$3.93</u>
Shares exercisable at April 30, 2004 .....	<u>291,368</u>	<u>\$4.43</u>
Shares exercisable at April 30, 2005 .....	<u>906,858</u>	<u>\$4.44</u>

The following table sets forth summarized information with respect to stock options outstanding and exercisable at April 30, 2005:

<u>Exercise Price Range</u>	<u>Outstanding</u>			<u>Exercisable</u>	
	<u>Number of Shares</u>	<u>Average Life</u>	<u>Average Price</u>	<u>Number of Shares</u>	<u>Average Price</u>
\$1.96 to \$2.95 .....	24,283	5.3	\$2.44	14,283	\$2.57
\$2.95 to \$3.93 .....	1,516,675	7.6	3.37	503,925	3.42
\$3.93 to \$4.91 .....	260,340	6.1	4.78	156,600	4.76
\$4.91 to \$5.89 .....	1,573,261	9.7	5.76	32,844	5.62
\$5.89 to \$6.87 .....	673,216	8.7	6.60	184,391	6.57
\$6.87 to \$7.86 .....	30,000	8.8	7.41	7,500	7.41
\$7.86 to \$8.84 .....	7,500	8.5	8.68	1,875	8.68
\$8.84 to \$9.82 .....	6,800	5.3	9.82	5,440	9.82
	<u>4,092,075</u>			<u>906,858</u>	

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At April 30, 2005, there were 38,074 options available for grant under the Company's 2002 Stock Incentive Plan.

**16. Business Segment and Geographic Information**

*Business Segments*

The Company classifies its business operations into three reporting segments: Quantum Fuel Systems, Tecstar Automotive Group, and Corporate. The reportable segments other than Corporate represent strategic businesses that are managed separately and offer products and services that can be differentiated. Corporate consists of general and administrative expense incurred at the corporate level.

The Quantum Fuel Systems business operations primarily consist of design, manufacture and supply of packaged fuel systems for use in alternative fuel vehicles and fuel cell applications. This segment generates product revenues through the sale of fuel cell-related fuel storage, fuel delivery, and electronic control systems to OEMs, and the installation of its fuel cell products into OEM vehicles. Product revenues are also generated through the sale of compressed natural gas, propane, and hydrogen fuel storage, fuel delivery, and electronic control systems for internal combustion engine applications. In addition to product sales, the Quantum Fuel Systems segment generates contract revenue by providing engineering design and support to the OEMs so that its fuel storage, fuel delivery, and electronic control systems integrate and operate with their fuel cell and alternative fuel applications. Prior to the acquisition of the Tecstar Automotive Group (formally Starcraft), the Quantum Fuel Systems business was reported in three separate segments which were aligned consistent with how previous operating performance was tracked. The prior year amounts reported have been restated to reflect the new presentation.

The Tecstar Automotive Group is comprised of virtually all of the business activities acquired via the merger with Starcraft. This segment's business operations are focused on the automotive supply industry and primarily consist of second stage manufacturing of pick-up trucks and sport utility vehicles for General Motors. Vehicle chassis are received from General Motors and certain appearance items such as ground effects, wheels and badging are added to the chassis. General Motors comprised 92.0% of the total Tecstar Automotive Group segment revenue reported for the period subsequent to the merger. The Tecstar Automotive group also has engineering and design capabilities for concept vehicles and distributes automotive accessories through a dealer network. Goodwill and intangible assets associated with the merger are reported in the Tecstar Automotive Group business segment.

All research and development is expensed as incurred and is included in the respective business segments. Research and development expense includes both customer-funded research and development and Company-sponsored research and development. Customer-funded research and development consists primarily of expenses associated with contract revenue. These expenses include applications development costs in the Company funded under customer contracts.

The chief operating decision maker allocates resources and tracks performance by the three reporting segments. The Company evaluates performance based on profit or loss from operations before interest and income taxes. The accounting policies of the reportable segments are the same as those described in Note 2, "Summary of Significant Accounting Policies."

*Geographic Information*

The Company's long-lived assets are primarily based in facilities in Texas, California, Michigan, Louisiana, Indiana, or Ontario, Canada.

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The Company's revenue to customers is as follows (in thousands):

<u>Revenue to Customers</u>	<u>Year Ended April 30</u>		
	<u>2003</u>	<u>2004</u>	<u>2005</u>
United States .....	\$20,465	\$13,652	\$40,069
Japan .....	1,754	12,261	5,277
Germany .....	1,416	2,095	6,224
Korea .....	4	111	—
Canada .....	—	—	2,693
Other .....	—	—	37
<b>Total .....</b>	<b><u>\$23,639</u></b>	<b><u>\$28,119</u></b>	<b><u>\$54,300</u></b>

*Financial Information by Business Segment*

Financial information by business segment for continuing operations follows (in thousands):

	<u>Year Ended April 30</u>		
	<u>2003</u>	<u>2004</u>	<u>2005</u>
<b>Revenue</b>			
Quantum Fuel Systems .....	\$ 23,639	\$28,119	\$ 22,982
Tecstar Automotive Group .....	—	—	31,318
Corporate Expenses .....	—	—	—
<b>Total .....</b>	<b><u>\$ 23,639</u></b>	<b><u>\$28,119</u></b>	<b><u>\$ 54,300</u></b>
<b>Operating Income (Loss)</b>			
Quantum Fuel Systems .....	\$(12,878)	\$(4,051)	\$ (8,143)
Tecstar Automotive Group .....	—	—	344
Corporate Expenses .....	(5,458)	(5,282)	(6,011)
<b>Total .....</b>	<b><u>\$(18,336)</u></b>	<b><u>\$(9,333)</u></b>	<b><u>\$(13,810)</u></b>
<b>Capital Expenditures</b>			
Quantum Fuel Systems .....	\$ 724	\$ 1,274	\$ 968
Tecstar Automotive Group .....	—	—	463
Corporate Expenses .....	359	193	469
<b>Total .....</b>	<b><u>\$ 1,083</u></b>	<b><u>\$ 1,467</u></b>	<b><u>\$ 1,900</u></b>
<b>Depreciation and Amortization</b>			
Quantum Fuel Systems .....	\$ 3,135	\$ 3,817	\$ 3,622
Tecstar Automotive Group .....	—	—	1,010
Corporate Expenses .....	1,631	1,396	922
<b>Total .....</b>	<b><u>\$ 4,766</u></b>	<b><u>\$ 5,213</u></b>	<b><u>\$ 5,554</u></b>

	<u>April 30</u>	
	<u>2004</u>	<u>2005</u>
<b>Identifiable Assets</b>		
Quantum Fuel Systems .....	\$ 31,657	\$ 29,331
Tecstar Automotive Group .....	—	194,513
Corporate Expenses .....	2,424	2,007
<b>Total identifiable assets .....</b>	<b>34,081</b>	<b>225,851</b>
Assets not specifically identifiable .....	69,366	51,811
<b>Total assets .....</b>	<b><u>\$103,447</u></b>	<b><u>\$277,662</u></b>



**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
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**17. Revenue**

The Company's revenues are derived primarily from General Motors and its affiliates. Tecstar Automotive Group's sole material customer at the time of the merger and for the approximate two-month period ended April 30, 2005 is General Motors. Revenues for development efforts are principally recognized by the percentage of completion method.

During fiscal years 2003, 2004 and 2005, General Motors and affiliated companies' revenue comprised 58.9%, 46.1%, and 77.4% of the Company's total revenue, respectively. As of April 30, 2004 and 2005, General Motors and affiliated companies' accounts receivable comprised 35.2% and 74.8% of the Company's total outstanding accounts receivable, respectively. During fiscal years 2003, 2004 and 2005, Toyota's revenue comprised 24.2%, 44.0%, and 11.3% of the Company's total revenue, respectively. As of April 30, 2004 and 2005, Toyota's accounts receivable comprised 42.1% and 0.8% of the Company's total outstanding accounts receivable, respectively.

**18. Purchases**

During fiscal years 2003, 2004 and 2005, respectively, purchases from one vendor constituted approximately 8%, 8% and 11% of net purchases. In fiscal year 2003, 2004 and 2005, 10 suppliers accounted for approximately 35%, 39% and 43% of net purchases, respectively.

**19. Minority Interest**

AM General LLC holds a minority interest equity position in the accounts of Amstar, an enterprise that was acquired in connection with the merger with Starcraft. As of the close of the merger on March 3, 2005 and as of April 30, 2005, Amstar has incurred accumulated deficits of \$246,816 and \$212,756, respectively.

In connection with the start up of operations in February 2005, AM General provided their initial and only capital contribution to date of \$50,000 to Amstar. AM General has no obligation to provide additional capital contributions to cover a deficit equity position. Accordingly, the portion of the accumulated deficits that exceed AM General's capital contribution has been allocated to the Company and there is no balance to be reported as minority interest as of and for the two month period ending April 30, 2005.

AM General advanced \$250,000 to Amstar on March 22, 2005 in exchange for an unsecured note payable bearing interest at 5.5%. The note is payable upon demand.

**20. Warranties**

The Company offers a warranty for all of its second stage manufacturing and alternative fuel products. The specific terms and conditions of those warranties vary depending on the platform and model year. Warranty is provided for terms similar to those offered by the OEM to its customers. The Company estimates the costs that may be incurred under its warranty and records a liability in the amount of such costs at the time product revenue is recognized. Factors that affect the Company's warranty liability include the number of units sold, historical and anticipated rates of warranty claims, and cost per claim.

The Company generally disclaims all warranties on its prototype hydrogen fuel storage systems. At its discretion or under certain programs, the Company may provide for the replacement cost or perform additional tests of prototype component parts subsequent to product delivery. The Company includes an estimate of these types of arrangements as part of its warranty liability.

**QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The Company periodically assesses the adequacy of its recorded warranty liabilities and adjusts the amounts as necessary.

Changes in the Company's product warranty liability are as follows (in thousands):

	<u>Balance at Beginning of Year</u>	<u>Starcraft Balance Acquired (1)</u>	<u>Warranties Issued</u>	<u>Settlements Made</u>	<u>Changes in Liability for Pre-Existing Warranties</u>	<u>Balance at End of Year</u>
April 30, 2003 .....	\$1,226	\$ —	\$ 89	\$(194)	\$ —	\$1,121
April 30, 2004 .....	1,121	—	134	(134)	(172)	949
April 30, 2005 .....	949	590	110	(205)	(186)	1,258

(1) Represents balance of warranty acquired in connection with Starcraft merger.

**21. Quarterly Results of Operations (unaudited)**

A summary of the unaudited quarterly results of operations follows (in thousands, except per share amounts):

	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
<b>Fiscal Year 2004 (1)</b>				
Product sales .....	\$ 6,550	\$ 5,349	\$ 2,753	\$ 3,972
Contract revenue .....	1,328	1,376	1,669	5,122
Total revenue .....	7,878	6,725	4,422	9,094
Cost of product sales .....	4,373	3,176	1,633	3,683
Gross profit on product sales .....	2,177	2,173	1,120	289
Research and development expense .....	2,693	3,022	3,496	4,787
Net loss .....	(1,768)	(2,037)	(3,095)	(2,034)
Net loss per share—basic and diluted .....	(0.08)	(0.09)	(0.10)	(0.06)
	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter (2)</u>
<b>Fiscal Year 2005 (1)</b>				
Product sales .....	\$ 3,358	\$ 2,253	\$ 2,903	\$32,234
Contract revenue .....	2,997	2,709	2,489	5,357
Total revenue .....	6,355	4,962	5,392	37,591
Cost of product sales .....	2,663	1,941	2,301	29,284
Gross profit on product sales .....	695	312	602	2,950
Research and development expense .....	3,711	3,753	3,625	6,087
Net loss .....	(2,426)	(3,309)	(2,920)	(4,444)
Net loss per share—basic and diluted .....	(0.08)	(0.10)	(0.09)	(0.10)

- (1) Certain reclassifications have been made to the quarterly results previously reported to be consistent with the Company's classifications as of April 30, 2005.
- (2) Includes the operations of Tecstar Automotive Group (formerly Starcraft) since the acquisition date, March 3, 2005.

**SCHEDULE II**  
**VALUATION AND QUALIFYING ACCOUNTS**

	<u>Balance at Beginning of Year</u>	<u>Additions Charged/ (Credited) to Cost and Expenses</u>	<u>Write-offs and Other Adjustments</u>	<u>Balance at End of Year</u>
Allowance for doubtful accounts for the year ended:				
April 30, 2003 .....	\$ (40,000)	\$ (12,136)	\$ 12,136	\$ (40,000)
April 30, 2004 .....	(40,000)	(107,000)	—	(147,000)
April 30, 2005 .....	(147,000)	(1,254,036)	157,141	(1,243,895)
Provision for obsolescence reserve for the year ended:				
April 30, 2003 .....	\$(2,530,941)	\$(1,679,190)	\$2,432,111	\$(1,778,020)
April 30, 2004 .....	(1,778,020)	(238,320)	1,078,772	(937,568)
April 30, 2005 .....	(937,568)	(1,237,815)	29,551	(2,145,832)
Warranty reserve for the year ended:				
April 30, 2003 .....	\$(1,225,898)	\$ (89,255)	\$ 194,399	\$(1,120,754)
April 30, 2004 .....	(1,120,754)	(133,302)	305,534	(948,522)
April 30, 2005 .....	(948,522)	(700,413)	390,816	(1,258,119)
Valuation allowance for medical self-insurance for the year ended:				
April 30, 2005 .....	\$ —	\$ (651,575)	\$ 380,989	\$ (270,586)

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: June 30, 2005

### QUANTUM FUEL SYSTEMS TECHNOLOGIES WORLDWIDE, INC.

By:           /s/  WILLIAM B. OLSON            
William B. Olson, Chief Financial Officer and Treasurer  
[Authorized Signatory and Principal Financial Officer]

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>          /s/  ALAN P. NIEDZWIECKI          </u> Alan P. Niedzwiecki	President, Chief Executive Officer and Director (Principal Executive Officer)	June 30, 2005
<u>          /s/  W. BRIAN OLSON          </u> W. Brian Olson	Chief Financial Officer and Treasurer (Principal Financial Officer)	June 30, 2005
<u>          /s/  BRADLEY J. TIMON          </u> Bradley J. Timon	Controller (Principal Accounting Officer)	June 30, 2005
<u>          /s/  DALE L. RASMUSSEN          </u> Dale L. Rasmussen	Chairman of the Board of Directors	June 30, 2005
<u>          /s/  JEFFREY P. BEITZEL          </u> Jeffrey P. Beitzel	Director and Chief Operating Officer	June 30, 2005
<u>          /s/  BRIAN A. RUNKEL          </u> Brian A. Runkel	Director	June 30, 2005
<u>          /s/  G. SCOTT SAMUELSEN          </u> G. Scott Samuelsen	Director	June 30, 2005
<u>          /s/  CARL E. SHEFFER          </u> Carl E. Sheffer	Director	June 30, 2005
<u>          /s/  THOMAS J. TYSON          </u> Thomas J. Tyson	Director	June 30, 2005

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## Officers

**Alan P. Niedzwiecki**  
President & Chief Executive Officer

**Jeffrey P. Beitzel**  
Chief Operating Officer

**W. Brian Olson**  
Chief Financial Officer & Treasurer

**Glenn D. Moffett**  
Vice President & General Manager of  
Operations

**Bradley J. Timon**  
Corporate Controller

**Kenneth R. Lombardo**  
General Counsel & Vice President,  
Legal

**Cathryn T. Johnston**  
Corporate Secretary & Director of  
Communications

**Corporate Counsel**  
Morrison & Foerster LLP

**Independent Auditors**  
Ernst & Young LLP

**Transfer Agent & Registrar**  
Mellon Investor Services LLP  
85 Challenger Road  
Ridgefield Park, NJ 07660  
+1-800-522-6645

**Annual Stockholder's Meeting**  
The annual meeting of stockholders for Quantum Fuel Systems Technologies Worldwide, Inc. will be held on September 9, 2005 at 1:30 p.m. local time, at the Marriott Hotel located at 18000 Von Karman, Irvine, California.

## Directors

**Dale L. Rasmussen, Chairman**  
Senior Vice President & Secretary of  
IMPCO Technologies, Inc.

**Alan P. Niedzwiecki**  
President & Chief Executive Officer of  
Quantum Fuel Systems Technologies  
Worldwide, Inc.

**Jeffrey P. Beitzel**  
Chief Operating Officer of Quantum Fuel  
Systems Technologies Worldwide, Inc.

**Paul E. Grutzner**  
Founder and Managing Partner of  
ClearPoint Financial

**Brian A. Runkel**  
Environmental Consultant & Director of  
the California Environmental Business  
Council

**G. Scott Samuelsen**  
Director for the National Fuel Cell  
Research Center & Professor at the  
University of California Irvine

**Carl E. Sheffer**  
Vice President, OEM Relations of  
Specialty Equipment Marketing  
Association

**Thomas J. Tyson**  
Retired Chief Executive Officer of  
General Electric's Energy &  
Environmental Research Corporation

This Annual Report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements include our expectations, hopes, beliefs or intentions regarding the future, including, but not limited to statements regarding our position within our industry and future opportunities, future growth, benefits and synergies of our merger with Starcraft Corporation, the development and commercialization of fuel cell vehicles and applications, new or expanded customer contracts, commitment of OEMs, governments and other entities to the hydrogen economy and its growth, and our business strategies. There are a number of important factors that could cause actual results or events to differ materially from those indicated by such forward-looking statements, including, but not limited to the factors set forth from time to time in our SEC reports, including those set forth under "Risk Factors" in our Form 10-K for the year ended April 30, 2005. All forward-looking statements in this Annual Report are made as of the date hereof, based on information available to us as of the date hereof, and we assume no obligation to update any forward-looking statements.

Quantum, known for its groundbreaking work with hydrogen technologies, has joined forces with Tecstar, known as the industry's go-to company for limited edition and specialty vehicle production and aftermarket products.

Providing solutions from concept to production for the road ahead.

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**QUANTUM**TECSTAR  
...from concept to production

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