

2012 Annual Report



PERMA-PIPE



Midwesco Mechanical and Energy





MFRI is a multi-line company with interests in specialty piping systems (Perma-Pipe), custom-designed industrial filtration elements (Midwesco Filter), and energy efficient heating, ventilation, and air conditioning (Midwesco Mechanical).

PERMA-PIPE

Perma-Pipe is one of the largest U.S. manufacturers of specialty piping systems for district heating and cooling, secondary containment and oil and gas gathering flowlines. District heating and cooling systems provide efficient energy distribution. Secondary containment piping systems, consisting of a product pipe inside a containment pipe, securely transports hazardous liquids and petroleum products. Oil and gas gathering flowlines are used to transport crude oil from the well head, either on land or on the ocean floor, to the offloading point.

Perma-Pipe's leak detection and location systems are sold as part of many of its piping systems and on a stand-alone basis, to monitor areas where fluid may contaminate the environment or damage equipment and property.



midwesco Filter Resources, Inc.

Midwesco Filter designs and manufactures filter elements for dust collectors used in air filtration. It offers more than 10,000 styles of filter elements designed to fit almost any baghouse or cartridge-type industrial filtration system. These systems are box-like structures where particulates, usually from industrial and utility sources, are removed from exhaust gases while passing through filter elements. Midwesco Filter makes filter elements for both original equipment manufacturers and aftermarket users.



Midwesco Mechanical and Energy

Midwesco Mechanical and Energy: Providing energy efficient heating, ventilation, and air conditioning (HVAC) systems for large commercial, industrial, and institutional projects.





Dear Fellow Shareholders,

A quick look at our 2012 results would indicate an extremely poor outcome but we encourage you to start your review by reading Note 13 – Subsequent Events, on page 50 of the enclosed 10-K. It is there we briefly describe the recent sale of our Thermal Care subsidiary and our forward focus on filtration and piping systems. During the first quarter of 2013, we will recognize the gain on that transaction coupled with the benefits of shipping product from the substantial backlog in our Piping Systems segment. In the fourth quarter of 2012, the Company recorded a full valuation allowance on domestic deferred tax assets. This resulted in a \$12.5 million non-cash charge. The Company also recorded a non-cash \$1.5 million asset impairment charge, together making up \$2.03 of the loss per share in 2012. Before non-cash charges described above, the net loss was \$4.5 million compared to net loss of \$5 million in 2011.

It is important to note that in 2012 the Company increased gross profit 5% on 9% fewer sales than the prior year. We will continue our focus on operational efficiency and asset utilization during 2013. The improvement to our balance sheet and liquidity from the Thermal Care transaction provides the financial strength we need to pursue our growth strategies in filtration and piping. We believe these and other factors set the stage for a very different and improved 2013.

Piping Systems

We fully expected that after our Saudi pipe plant inauguration in April 2012 that order flow and subsequent production would positively contribute to our results. That did not happen as anticipated due to customer driven delays but we ultimately succeeded by securing orders later in the year and into 2013. Among the orders received, two landmark projects are the Grand Mosque expansion in Mecca and the King Abdul-Aziz International airport in Jeddah, Saudi Arabia. The substantial backlog growth now transitions that operation from its "startup" phase to a fully operational business. Backlog in Piping Systems grew 66% to approximately \$90 Million by January 31, 2013, providing a strong sales foundation for 2013.

Filtration Products

The Filtration segment experienced continued softness in 2012 sales particularly driven by reduced demand for fabric filters serving coal fired power generation and the steel industry. Steel is a cyclical industry and we remained well positioned to take advantage of any recovery as the US economy starts to grow again. Electricity generation from coal has dropped significantly due to environmental compliance requirements and as natural gas supply and price makes it more attractive for energy producers. Yet, it still represents over one-third of US power supply and we believe pending environmental regulation will at some point support investment in upgrades of filtration systems. Our fabric filters are well suited for that mission. In the meantime, we are taking many steps to right size that part of the business to meet expected demand while improving profitability and cash utilization. Furthermore, we are well positioned to supply filter elements for gas turbine power plants, compressor stations and many other industrial dust collection systems.

Management Succession

At the end of our fiscal year management transitions occurred stemming from our very deliberate multi-year effort to ensure a smooth continuation of leadership for the organization. Bradley Mautner, the President succeeded the longtime CEO, David Unger who continues as Chairman of the Board. Our shared vision, integrity and unwavering commitment to customer needs are values we will carry forward. Our goal is to build on the platform we have developed together in order to improve results and shareholder value.

In addition, we welcomed a new CFO, Karl Schmidt to our management team. Karl joins the organization succeeding our longtime CFO, Michael Bennett. Michael has seen us through from our initial IPO in 1989 through the many changes to our Company over the past 24 years. He has been a steady hand and we appreciate his contributions and support. Karl brings to us a wealth of experience in manufacturing and international activities, which are increasingly important to the Company. His larger company experiences will serve us well as we pursue our growth initiatives.

We deeply appreciate the dedication of our approximately 1,200 employees around the world. We also appreciate your support and the confidence you have placed in us by your investment. We hope you will take the time to learn more about our Company by visiting our website, www.mfri.com, reading our attached 10-K report and/or calling us with your questions.

Sincerely,

DAVID UNGERChairman

BRADLEY E. MAUTNER
President and Chief Executive Officer

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 FORM 10-K

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

For the fiscal year ended January 31, 2013

Commission File No. 0-18370

MFRI, Inc.

(Exact name of registrant as specified in its charter)



Delaware

(State or other jurisdiction of incorporation or organization) 7720 N. Lehigh Avenue, Niles, Illinois (Address of principal executive offices)

36-3922969 (I.R.S. Employer Identification No.)

60714 (Zip Code)

(847) 966-1000

(Registrant's telephone number, including area code) Securities registered pursuant to Section 12(b) of the Act:

Title of each class

Name of each exchange on which registered

Common Stock, \$.01 per share

The NASDAQ Stock Market, LLC

Securities registered pursuant to Section 12(g) of the Act: None Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes \square No \boxtimes

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes □ No ⊠

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 whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T ($\S232.405$ of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes \boxtimes No \square

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405) 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 a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer", and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one): Large accelerated filer □ Accelerated filer □ Non-accelerated filer □ Smaller reporting company ☒

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act) □ No ⊠

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant (the exclusion of the market value of the shares owned by any person shall not be deemed an admission by the registrant that such person is an affiliate of the registrant) was \$41,911,558 based on the closing sale price of \$6.99 per share as reported on the NASDAQ Global Market on July 31, 2012.

The number of shares of the registrant's common stock outstanding at April 22, 2013 was 6,931,959.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the proxy statement for the 2013 Annual Meeting of Stockholders are incorporated by reference in Part III.

MFRI, Inc.

FORM 10-K

For the fiscal period ended January 31, 2013

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PART I

Forward Looking Statements

Statements in this Form 10-K that are not historical facts, so-called "forward-looking statements," are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Investors are cautioned that all forward-looking statements involve risks and uncertainties, including those detailed in MFRI's filings with the Securities and Exchange Commission ("SEC"). See "Risk Factors" in Item 1A.

Available Information

The Company files with and furnishes to the SEC, reports including annual meeting materials, annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, as well as amendments thereto. The Company maintains a website www.mfri.com, where these reports and related materials are available free of charge as soon as reasonably practicable after the Company electronically delivers such material to the SEC. The information on the Company's website is not part of this annual report on Form 10-K and is not incorporated into this or any other filings by the Company with the SEC.

Item 1. BUSINESS

MFRI, Inc., collectively with its subsidiaries ("MFRI", "Company" or "Registrant"), is engaged in the manufacture and sale of products in three reportable segments: piping systems, filtration products and industrial process cooling. Corporate and Other includes the installation of heating, ventilation and air conditioning ("HVAC") systems. This activity is not sufficiently large to constitute a reportable segment. The Company's fiscal year ends on January 31. Years and balances described as 2012 and 2011 are the fiscal years ended January 31, 2013 and 2012, respectively. In the year ended January 31, 2013, no customer accounted for 10% or more of the Company's net sales.

MFRI, Inc.'s Operating Units

Piping Systems	Filtration Products	Industrial Process Cooling	Heating, Ventilation and Air Conditioning
Perma-Pipe, Inc.	Midwesco Filter Resources, Inc.	Thermal Care, Inc.	Midwesco Mechanical
Niles, IL	Winchester, VA	Niles, IL	and Energy, Inc.
New Iberia, LA	TDC Filter Manufacturing, Inc.	Boe-Therm A/S	Niles, IL
Lebanon, TN	Bolingbrook, IL	Assens, Denmark	
Perma-Pipe Middle East FZC	Nordic Air Filtration A/S		
Fujarah, United Arab Emirates	Nakskov, Denmark		
Perma-Pipe Saudi Arabia, LLC			
Dammam, Kingdom of Saudi Arabia			
Perma-Pipe India Pvt. Ltd			
Gandidham, India			
Bayou Perma-Pipe Canada, Ltd.			
Alberta, Canada			

All operating units shown are, directly or indirectly, wholly owned by MFRI except Bayou Perma-Pipe Canada, Ltd., which is owned 49% by MFRI and 51% by an unrelated party.

Recent development. On April 26, 2013, the Company announced the signing of a definitive agreement to sell the domestic assets of its subsidiary Thermal Care, Inc. to IPEG, Inc. The transaction closed on April 30, 2013. The Company included Thermal Care, Inc. in its consolidated results of the industrial processing cooling segment in continuing operations as of January 31, 2013 since the decision to sell the assets occurred after that time. Disposition of Thermal Care, Inc. will enable MFRI, Inc. to focus on its two principal segments: piping systems and

filtration products. For further information, see Note 13 - Subsequent events, in the Notes to Consolidated Financial Statements

Piping Systems

Products and services. The Company engineers, designs, manufactures and sells specialty piping and leak detection and location systems. Piping systems include (i) industrial and secondary containment piping systems for transporting chemicals, hazardous fluids and petroleum products, (ii) insulated and jacketed district heating and cooling ("DHC") piping systems for efficient energy distribution to multiple locations from central energy plants and (iii) oil and gas gathering flow and long lines for oil and mineral transportation. The leak detection and location systems are sold with many of its piping systems and on a stand-alone basis to monitor areas where fluid intrusion may contaminate the environment, endanger personal safety, cause a fire hazard, impair essential services or damage equipment or property.

Piping systems frequently custom fabricates to job site dimensions and/or to incorporate provisions for thermal expansion due to varying temperatures. This custom fabrication helps to minimize the amount of field labor required by the installation contractor. Most of the piping systems are produced for underground installations and, therefore, require trenching, which is done by unaffiliated installation contractors.

Domestic piping systems is seasonal. See "Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") - Piping Systems."

Customers. The customer base is industrially and geographically diverse. In the United States of America ("U.S."), the Company employs national and regional sales managers who use and assist a network of independent manufacturers' representatives, none of whom sells products that are competitive with the Company's piping systems. Globally, the Company employs a direct sales force as well as an exclusive agent network for several countries in the Middle and Far East to market and sell products and services.

Recent development. Piping systems spent two years investing in Saudi Arabia. In April 2012, the Company opened a new factory in Dammam, Saudi Arabia, which produces the insulated pipe, spools and fittings with important support from the United Arab Emirates ("U.A.E.") factory. On November 23, 2012, the Company announced receipt of several orders for the Saudi facility totaling over \$23 million to supply engineered and insulated piping products for the chilled water distribution system utilized for a major expansion of the Grand Mosque in Mecca, Kingdom of Saudi Arabia. In addition, on February 5, 2013 the Company announced that its Perma-Pipe Saudi Arabia subsidiary received additional orders exceeding \$27 million for the first phase of the district cooling system expansion project at King Abdul-Aziz International airport in Jeddah, Saudi Arabia. These orders and others received since, bring the total of major project work in Saudi Arabia to over \$50 million.

The Grand Mosque expansion is one of the most prestigious projects in the Muslim world. The expansion project adds an area of about 1.8 million square meters (445 acres) to the current Mosque. The additional space will accommodate over 2 million pilgrims at one time compared to the current structure which is limited to 620,000 pilgrims. The project also comprises a number of new hotels, residential buildings, commercial centers and public facilities, as well as permanent housing for the people residing in the area. Chilled water flowing through Perma-Pipe's Poly-thermTM insulated piping systems will be used for air conditioning throughout the complex.

The King Abdul-Aziz International Airport is one of the largest projects in the recent history of the Kingdom of Saudi Arabia. The passenger terminal complex comprises an area over 6.7 million square feet (622,000 square meters) with 46 gates and 96 boarding bridges, including double deck access for the A380 Airbus. The total facilities span over 25,000 acres (100 square kilometers) including the chilled water distribution system, utility plants, utility tunnel, plant nursery, and a transportation center with integrated rail station.

We believe these orders represent a validation of the Company's strategy to expand its footprint to the rapidly developing Saudi market. Delivery on these orders is expected to be mostly completed during 2013.

Intellectual property. The Company owns several patents covering its piping and electronic leak detection systems. The patents are not material either individually or in the aggregate overall because the Company believes sales would not be materially reduced if patent protection were not available. The Company owns numerous trademarks connected with its piping and leak detection systems including the following U.S. trademarks:

Perma-Pipe®, Chil-Gard®, Double Quik®, Escon-A®, FluidWatch®, Galva-Gard®, Polytherm®, Pal-AT®, Stereo-Heat®, LiquidWatch®, PalCom®, Xtru-therm®, Auto-Therm®, Pex-Gard®, Multi-Therm®, Ultra-Therm®, Cryo-Gard™, Sleeve-Gard™ and Electro-Gard™. The Company also owns a number of trademarks throughout the world. Some of the Company's more significant trademarks include: Auto-Therm™, Cryo-Gard™, Electro-Gard™, Pal-at™, Permalert™, Perma-Pipe®, Polytherm®, Ric-Wil®, Sleeve-Gard™ and Xtru-therm®.

Backlog. As of January 31, 2013, the backlog (See "Risk Factors" in Item 1A for definition) was \$89.5 million. As of January 31, 2012, the backlog was \$53.8 million.

Raw materials. Basic raw materials used in production are pipes and tubes made of carbon steel, alloy, copper, ductile iron, plastics and various chemicals such as polyols, isocyanate, urethane resin, polyethylene and fiberglass, mostly purchased in bulk quantities. The Company believes there are currently adequate supplies or sources of availability of these needed raw materials.

The sensor cables used in the leak detection and location systems are manufactured to the Company's specifications by companies regularly engaged in manufacturing such cables. The Company owns patents for some of the features of its sensor cables. The Company assembles the monitoring component of the leak detection and location systems from components purchased from many sources.

Competition. Piping systems is highly competitive and believes its principal competition consists of between ten and twenty major competitors and more small competitors. The Company believes quality, service, a comprehensive product line and price are key competitive factors. The Company also believes it has a more comprehensive line for DHC than any competitor. Some competitors have greater financial resources and cost advantages as a result of manufacturing a limited range of products.

Government regulation. The demand for the Company's leak detection and location systems and secondary containment piping systems, a small percentage of the total annual piping sales, is driven by federal and state environmental regulation with respect to hazardous waste. The Federal Resource Conservation and Recovery Act requires, in some cases, that the storage, handling and transportation of fluids through underground pipelines feature secondary containment and leak detection. The National Emission Standard for hydrocarbon airborne particulates requires reduction of airborne volatile organic compounds and fugitive emissions. Under this regulation, many major refineries are required to recover fugitive vapors and dispose of the recovered material in a process sewer system, which then becomes a hazardous secondary waste system that must be contained. Although there can be no assurances as to the ultimate effects of these governmental regulations, the Company believes such regulations may increase the demand for its piping systems products.

Filtration Products

Products and services. The Company manufactures and sells a wide variety of filter elements for cartridge collectors and baghouse air filtration and particulate collection systems. The principal types of industrial air filtration and particulate collection systems in use are baghouses, cartridge collectors, electrostatic precipitators, scrubbers and mechanical collectors. This equipment is used to eliminate particulates from the air by passing particulate laden gases through fabric filters (filter bags) or pleated media filter elements, in the case of baghouses or cartridge collectors, between electrically charged collector plates, in the case of electrostatic precipitators and contact with liquid reagents (scrubbers). The Company manufactures filter elements in standard industry sizes, shapes and filtration media and to custom specifications, maintaining manufacturing standards for more than 10,000 styles of filter elements to suit substantially all industrial applications. Filter elements are manufactured from industrial yarn, fabric and paper purchased in bulk. Most filter elements are produced from cellulose, acrylic.

fiberglass, polyester, aramid, laminated membranes, or polypropylene fibers. The Company also manufactures filter elements from more specialized materials, sometimes using special finishes.

The Company markets numerous filter related products and accessories used during the installation, operation and maintenance of cartridge collectors and baghouses, including wire cages used to support filter bags, spring assemblies for proper tensioning of filter bags and clamps and hanger assemblies for attaching filter elements. In addition, the Company markets hardware items used in the operation and maintenance of cartridge collectors and baghouses. The Company also provides maintenance services, consisting primarily of air filtration system inspection and filter element replacement, using a network of independent contractors.

Over the past three years, the Company's filtration products have supplied filter elements to more than 4,000 user locations. The Company has particular expertise in supplying filter bags for use with electric arc furnaces in the steel industry. The Company believes its production capacity and quality control procedures make it a leading supplier of filter bags to large users in the electric power industry. Orders from the electric power industry tend to be substantial in size, but are usually at lower margins than other industries.

Customers. The customer base is industrially and geographically diverse. These products and services are used primarily by operators of utility and industrial coal-fired boilers, incinerators and cogeneration plants and by producers of metals, cement, chemicals and other industrial products.

Filtration products have an integrated sales program, which consists of field-based sales personnel, manufacturers' representatives, a telemarketing operation and computer-based customer information systems. The Company believes the computer-based information systems are instrumental in increasing sales of filter-related products and accessories and maintenance services, as well as sales of filter elements. Filtration products are marketed domestically under the names Midwesco Filter and TDC Filter Manufacturing.

The Company markets its U.S. manufactured filtration products internationally using domestically based sales resources to target major users in foreign countries. The Denmark filtration facility markets pleated filter elements throughout Europe and Asia, primarily to original equipment manufacturers.

Intellectual property. The Company owns the following trademarks covering its filtration products: Seamless Tube®, Leak Seeker®, Prekote®, We Take the Dust Out of Industry®, Pleatkeeper®, Pleat Plus® and EFC®. The trademarks are not material either individually or in the aggregate overall because the Company believes sales would not be materially reduced if trademark protection were not available.

Backlog. As of January 31, 2013, the backlog was \$25.8 million, of which approximately 45% is expected to be completed in 2013. As of January 31, 2012, the backlog was \$14.5 million.

Raw materials. The basic raw materials used are industrial fibers and media supplied by leading producers of such materials. The majority of raw materials purchased are woven fiberglass fabric, yarns for manufacturing Seamless Tube® products and other woven, felted, spun bond, laminated membranes and cellulose media. Only a limited number of suppliers are available for some of these materials. The Company believes supplies of all materials are adequate to meet current demand.

Competition. The filtration products industry is highly competitive. In addition, new installations of cartridge collectors and baghouses are subject to competition from alternative technologies including electrostatic precipitators, scrubbers and mechanical collectors described above under Products and Services. The Company believes, based on domestic sales, that its chief competitors consist of approximately five major and at least 50 smaller businesses, most of which are doing business on a regional or local basis. In Europe, several companies supply filtration products and the Company is a relatively small participant in that market. Some of the Company's competitors have greater financial resources than the Company.

The Company believes quality, service and price are the most important competitive factors in filtration products. Often, a manufacturer has a competitive advantage when its products have performed successfully for a particular

customer in the past. Additional effort is required by a competitor to market products to such a customer. In certain applications, the Company believes its proprietary Seamless Tube® product and customer support provide the Company with a competitive advantage. Some competitors may have a competitive advantage with respect to their own proprietary products and processes, such as specialized fabrics and fabric finishes. In addition, some competitors may have cost advantages with respect to products as a result of lower wage rates and/or greater vertical integration.

Government regulation. The sale of filtration products is influenced by governmental regulation of air pollution at the federal and state levels. The regulatory standards are implemented by each state individually. Emission standards are continually becoming more stringent and this drives the requirements for product performance.

Industrial Process Cooling

Recent developments. On April 26, 2013, the Company announced the signing of a definitive agreement to sell the domestic assets of its subsidiary Thermal Care, Inc. to IPEG, Inc. The transaction closed on April 30, 2013. Disposition of Thermal Care, Inc. will enable MFRI, Inc. to focus on its two principal segments: piping systems and filtration products. For further information, see Note 13 - Subsequent events, in the Notes to Consolidated Financial Statements.

Products and services. The Company engineers, designs, manufactures and sells cooling and temperature control equipment for industrial applications. The Company believes it manufactures the most complete line of chillers available in its primary markets. Products include: chillers (portable and central); cooling towers; plant circulating assemblies; hot water, hot oil and negative pressure temperature controllers; water treatment equipment; specialty cooling devices for printing presses and ink management; and replacement parts and various accessories relating to the foregoing products. The Company's products are used to optimize manufacturing productivity by quickly removing heat from manufacturing processes and providing accurate temperature control. The Company combines chillers and/or cooling towers with plant circulating systems to create plant wide systems that account for a large portion of its business. The Company specializes in customizing cooling systems and computerized controls according to customer specifications.

The principal markets for the Company's cooling and temperature control products are thermoplastics processing and the printing industries. The Company also sells its products to original equipment manufacturers, to other cooling manufacturers on a private branded basis and to manufacturers in the laser, metallizing, machine tool and various other industries.

Customers. The Company sells its products in the global thermoplastics and printing markets as well as to other industrial applications that require specialized heat transfer equipment. Domestic thermoplastics processors are the largest market served by industrial process cooling, representing the core of its business. The Company's cooling products are sold through independent manufacturers' representatives on an exclusive territory basis. Temperature control products are sold through a network of independent dealers/distributors in major industrial markets.

The Company believes the total annual U.S. market for water cooling equipment in the plastics industry was more than \$100 million on a pre-recession basis and the Company is one of the three largest suppliers of such equipment to the plastics industry. The Company believes the plastics industry is a mature industry with growth consistent with that of the national economy. The Company has increased sales to non-plastics industries that require specialized heat transfer equipment, usually sold to end users as a package by the supplier of the primary equipment, particularly in the laser, metallizing and machine tool industries. The Company believes the size of this market was more than \$200 million annually prior to the current recession. The original equipment manufacturer distributes products to the end user in these markets.

Intellectual property. The Company has registered the trademarks Thermal Care®, AWS® and Applied Web Systems®.

Backlog. As of January 31, 2013, the backlog was \$4.7 million, all of which is expected to be completed in 2013. As of January 31, 2012, the backlog was \$6.4 million.

Raw materials. The Company uses prefabricated sheet metal and subassemblies manufactured by both Thermal Care and outside vendors for chillers and temperature control fabrication. Cooling towers are manufactured using fiberglass and hardware components purchased from several sources. The Company believes its access to sheet metal, subassemblies, fiberglass and hardware components is adequate to meet demands.

Competition. The Company believes there are about 15 competitors selling cooling equipment in the domestic plastics market. The Company further believes three manufacturers, including the Company, account for approximately 50% of the domestic plastics cooling equipment market. Many international customers, with relatively small cooling needs, are able to purchase small refrigeration units (portable chillers), which are manufactured in their respective local markets at prices below that which the Company can offer due to issues such as freight cost and customs duties. However, such local manufacturers often lack the technology and products needed for plant wide cooling systems. The Company believes its reputation for producing quality plant wide cooling products results in a significant portion of the Company's business in the cooling product area. Temperature control units, which are sold globally, compete with both local and European manufacturers. The quality, reliability, features and range of temperature control applications addressed by the Company's products provide a competitive advantage.

The Company believes quality, service, a comprehensive product line and price are the key competitive factors in industrial process cooling. The Company believes it has a more comprehensive line of cooling products than any of its competitors. Certain competitors have cost advantages as a result of manufacturing in non-union shops and offering a limited range of products. Some of the Company's competitors may have greater financial resources than the Company.

Government regulation. The Company does not expect compliance with federal, state and local provisions regulating the discharge of materials into the environment or otherwise relating to the protection of the environment to have a material effect on capital expenditures, earnings or the Company's competitive position. Management is not aware of the need for any material capital expenditures for environmental control facilities for the foreseeable future. Regulations, promulgated under the Clean Air Act, prohibit the manufacture and sale of certain refrigerants. The Company does not use those refrigerants in its products. The Company expects that suitable refrigerants conforming to federal, state and local laws and regulations will continue to be available to the Company, although no assurances can be given as to the ultimate effect of the Clean Air Act and related laws on the Company.

Employees

As of February 28, 2013, the Company had 1,212 full-time employees, of whom 50% worked outside the U.S.

International

The Company's international operations as of January 31, 2013 include subsidiaries and a joint venture in five foreign countries on three continents. The Company's international operations contributed approximately 24.1% of revenue in 2012 and 15.7% of revenue in 2011.

Refer to the Business descriptions on pages 1 through 5 above and Note 1 - Business and segment information in the Notes to Consolidated Financial Statements for additional information on international activities. International operations are subject to risks inherent in conducting business in foreign countries, including price controls, exchange controls, limitations on participation in local enterprises, nationalization, expropriation and other governmental action, and changes in currency exchange rates.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following table sets forth information regarding the executive officers of the Company as of April 1, 2013:

Name	Offices and positions, if any, held with the Company; age	Executive officer of the Company or its predecessor since
Bradley E. Mautner	Director, President and Chief Executive Officer; Age 57	1994
Karl J. Schmidt	Vice President and Chief Financial Officer; Age 59	2013
Michael D. Bennett	Vice President, Secretary and Treasurer; Age 68	1989
Timothy P. Murphy	Vice President of Human Resources; Age 63	2008
Fati A. Elgendy	President and Chief Operating Officer, Perma-Pipe; Age 64	1990
Robert A. Maffei	Vice President, Perma-Pipe; Age 65	1987
John Mark Foster	President, Midwesco Filter; Age 51	2008
Stephen C. Buck	President, Thermal Care; Age 64	2007
Edward A. Crylen	President and Chief Operating Officer, Midwesco Mechanical and Energy; Age 61	2006

All of the executive officers serve at the discretion of the Board of Directors.

Bradley E. Mautner, Chief Executive Officer since February 2013. President since December 2004; Chief Operating Officer from December 2004 to January 2013; Executive Vice President from December 2002 to December 2004; Vice President from December 1996 through December 2002; Director since 1994.

Karl J. Schmidt, Appointed Vice President and Chief Financial Officer January 2013. From 2010 to 2012, Mr. Schmidt served as the Chief Financial Officer of Atkore International (previously Tyco Electrical and Metal Products), a manufacturer of steel pipe and tube products, electrical conduits, cable, and cable management systems. From 2002 to 2009, Mr. Schmidt served as the Executive Vice President and Chief Financial Officer of Sauer-Danfoss, Inc., a global manufacturer of hydraulic, electrical, and electronic components and solutions for offroad vehicles.

Michael D. Bennett, Vice President, Secretary and Treasurer since August 1989. Chief Financial Officer from August 1989 to October 2012.

Timothy P. Murphy, Vice President of Human Resources since May 2008. Prior to joining the Company, Mr. Murphy spent 28 years as a business consultant in roles including Principal Partner of Murphy & Hill Consulting, Managing Director of the Bay Area office of RHR, International and Consultant with YSC, Ltd. Mr. Murphy previously consulted to the Company from 1985 to 2008.

Fati A. Elgendy, President and Chief Operating Officer of Perma-Pipe since March 1995.

Robert A. Maffei, Vice President, Director of Sales and Marketing of Perma-Pipe since August 1996.

John Mark Foster, President of Midwesco Filter since August, 2008. Mr. Foster previously worked at Saint-Gobain (PAR: SGO) in the areas of industrial/project engineering and plant management, followed by positions in market management, human resources and a series of North American and European general management assignments.

Stephen C. Buck, President of Thermal Care since October 2007.

Edward A. Crylen, President and Chief Operating Officer of Midwesco Mechanical and Energy, since its formation in December 2006.

Item 1A. RISK FACTORS

The Company's business, financial condition, results of operations and cash flows are subject to various risks, including, but not limited to those set forth below, which could cause actual results to vary materially from recent results or from anticipated future results. These risk factors should be considered together with information included elsewhere in this Annual Report on Form 10-K.

Economic factors. In the latest recession, the economy experienced a severe and prolonged downturn which adversely impacted all of the Company's businesses, directly or indirectly. Downturns in such general economic conditions can significantly affect the business of our customers, which in turn affects demand, volume, pricing, and operating margin for our services and products. Many of our customers and suppliers felt the impact of the economic downturn. A downturn in one or more of our significant markets could have a material adverse effect on the Company's business, results of operations or financial condition. Because economic and market conditions vary within the Company's segments, the Company's performance by segment will also vary. In addition, the Company is exposed to fluctuations in currency exchange rates and commodity prices. Failure to successfully manage any of these risks could have an adverse impact on the Company's financial position, results of operations and cash flow.

Customer access to capital funds. Uncertainty about current economic market conditions poses risks that the Company's customers may postpone spending for capital improvement and maintenance projects in response to tighter credit markets or negative financial news, which could have a material negative effect on the demand for the Company's products. The adverse effect of the continuing decrease in federal and state spending has significantly decelerated government funding construction activity in the U.S., negatively impacting sales volume at the Company's domestic facilities.

Attracting and retaining senior management and key personnel. The Company's ability to meet strategic and financial goals will depend to a significant extent on the continued contributions of senior management. Future success will also depend in large part on the ability to identify, attract, motivate, effectively utilize and retain highly qualified managerial, sales and marketing and technical personnel. The loss of senior management or other key personnel or the inability to identify, attract and retain qualified personnel in the future could make it more difficult to manage the business and could adversely affect operations and financial results.

Rapid growth of business. Expansion may result in unanticipated adverse consequences, including significant strain on management, operations and financial systems as well as on the Company's ability to attract and retain competent employees. In the future, the Company may seek to grow business by investing in new or existing facilities, making acquisitions, entering into partnerships and joint ventures, or constructing new facilities, which could entail a number of additional risks, including:

- strain on working capital;
- diversion of management from other activities which could impair the operation of existing businesses;
- failure to successfully integrate the acquired businesses or facilities into existing operations;
- inability to maintain key pre-acquisition business relationships;
- loss of key personnel of the acquired business or facility;
- exposure to unanticipated liabilities; and
- failure to realize efficiencies, synergies and cost savings.

As a result of these and other factors, including the general economic risk, the Company may not be able to realize the expected benefits from any recent or future acquisitions, new facility developments, partnerships, joint ventures or other investments.

Changes in government policies and laws and worldwide economic conditions. International sales represent a significant portion of the Company's total sales and continued growth and profitability may involve further international expansion. The Company's financial results could be affected by changes in trade, monetary and fiscal policies, laws and regulations, or other activities of U.S. and non U.S. governments, agencies and similar organizations. These conditions include, but are not limited to, changes in a country's or region's economic or political conditions, trade regulations affecting production, pricing and marketing of products, local labor conditions and regulations, reduced protection of intellectual property rights in some countries, changes in the regulatory or legal environment, restrictions on currency exchange activities, burdensome taxes and tariffs and other trade barriers. International risks and uncertainties, including changing social and economic conditions as well as terrorism, political hostilities and war, could lead to reduced international sales and reduced profitability associated with such sales.

Government regulation. Demand for the Company's leak detection and location and secondary containment piping systems is driven primarily by government regulation with respect to hazardous waste. Laws such as the Federal Resource Conservation and Recovery Act and standards such as the National Emission Standard for Hydrocarbon Airborne Particulates have increased the demand for the Company's leak detection and location and secondary containment piping systems. Filtration products, to a large extent, are dependent on governmental regulation of air pollution at the federal and state levels. The Company believes that continuing growth in the sale of filtration products and services will be materially dependent on continuing enforcement of environmental laws such as the Clean Air Act. Although changes in such environmental regulations could significantly alter the demand for the Company's products and services, the Company does not believe such a change is likely to decrease demand in the foreseeable future.

Financing. If there were an event of default under the Company's current revolving credit facility, the holders of the defaulted debt could cause all amounts outstanding with respect to that debt to be due and payable immediately. The Company cannot assure that the assets or cash flow would be sufficient to fully repay amounts due under any of the financing arrangements, if accelerated upon an event of default, or, that the Company would be able to repay, refinance or restructure the payments under any such arrangements. Complying with the covenants under the Company's revolving credit facility may limit management's discretion by restricting options such as:

- · incurring additional debt;
- · entering into transactions with affiliates;
- · making investments or other restricted payments;
- · paying dividends or making other distributions; and
- · creating liens.

Any additional financing the Company may obtain could contain similar or more restrictive covenants. The Company's ability to comply with any covenants may be adversely affected by general economic conditions, political decisions, industry conditions and other events beyond management's control.

Competition. The businesses in which the Company is engaged are highly competitive. Many of the competitors are larger and have more resources. Additionally, many of the Company's products are also subject to competition from alternative technologies and alternative products. To the extent the Company relies upon a single source for key components of several of its products, the Company believes there are alternate sources available for such components; however, there can be no assurance that the interruption of supplies of such components would not have an adverse effect on the financial condition of the Company and that the Company, if required to do so, would be able to negotiate agreements with alternative sources on acceptable terms. In periods of declining demand, the Company's fixed cost structure may limit ability to cut costs, which may be a competitive disadvantage to firms with lower cost structures, or may result in reduced operating margins and operating losses.

Backlog. The Company defines backlog as the revenue value in dollars resulting from confirmed customer purchase orders that have not yet been recognized as revenue. However, by industry practice, orders may be canceled or modified at any time. If a customer cancels an order, the customer is responsible for all finished goods, all direct and indirect costs incurred and also for a reasonable allowance for anticipated profits. No assurance can be given that these amounts will be recovered after cancellation. Any cancellation or delay in orders may result in lower than expected revenue.

Percentage-of-completion revenue recognition. The Company measures and recognizes a portion of revenue and profits under the percentage-of-completion accounting methodology. This methodology allows revenue and profits to be recognized proportionally over the life of a contract by comparing the amount of the cost incurred to date against the total amount of cost expected to be incurred. The effect of revisions to revenue and total estimated cost is recorded when the amounts are known and can be reasonably estimated. These revisions can occur at any time and could be material. On a historical basis, management believes that reasonably reliable estimates of the progress towards completion on long-term contracts have been made. However, given the uncertainties associated with these types of contracts, it is possible for actual cost to vary from estimates previously made, which may result in reductions or reversals of previously recorded revenue and profits.

Regulatory and legal requirements. As a public company, the Company is required to comply with the reporting obligations of the Securities Exchange Act of 1934. Keeping informed of and in compliance with, changing laws, regulations and standards relating to corporate governance, public disclosure and accounting standards, including the Sarbanes-Oxley Act, Dodd-Frank Act, as well as new and proposed SEC regulations and accounting standards, has required an increased amount of management attention and external resources. Compliance with such requirements may result in increased general and administrative expenses and an increased allocation of management time and attention to compliance activities.

Item 1B. UNRESOLVED STAFF COMMENTS - None.

Item 2. PROPERTIES

Piping Systems

Illinois	Owned production facilities and office space	16,800 square feet
Louisiana	Owned production facilities and leased land	18,900 square feet
Tennessee	Owned production facilities and office space	131,800 square feet on approximately 23.5 acres
Canada	Joint venture owned production facilities and office space	87,160 square feet on approximately 128 acres
India	Leased production facilities, office space and land	33,700 square feet on approximately 1 acre
Kingdom of Saudi Arabia	Owned production facilities on leased land	89,000 square feet on approximately 19 acres
United Arab Emirates	Leased office space and production facilities on leased land	119,300 square feet on approximately 18 acres

Filtration Products

Illinois	Bolingbrook - owned production facilities and office space	101,500 square feet on 5.5 acres
	Cicero - owned production facilities and office space, currently idle	130,700 square feet on 2.8 acres
Virginia	Owned production facilities	97,500 square feet on 5.0 acres
	Leased office space	12,000 square feet
Denmark	Owned production facilities and office space	69,800 square feet on 3.5 acres

Industrial Process Cooling

Illinois	Owned production facilities and office space	87,600 square feet on 8.1 acres
Denmark	Owned production facilities and office space	16,500 square feet

The Company's principal executive offices, which occupy approximately 23,400 square feet of space in Niles, Illinois, are owned by the Company. The Company believes its properties and equipment are well maintained and in good operating condition and, that productive capacities will be adequate for present and currently anticipated needs.

The Company has several significant operating lease agreements as follows:

- Nine acres of land in the Kingdom of Saudi Arabia is leased through 2030 and an additional ten acres of land is leased through 2031.
- Land for production facilities in the U.A.E of approximately 80,200 square feet is leased until June 30, 2030. Office space and land for production facilities of approximately 37,700 square feet in the U.A.E. is leased until July 2032.
- Office space of approximately 12,000 square feet in Virginia is leased through July 31, 2013.

For further information, see Note 6 - Lease information, in the Notes to Consolidated Financial Statements.

Item 3. LEGAL PROCEEDINGS - The Company had no material pending litigation.

Item 4. MINE SAFETY DISCLOSURES - Not applicable.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

The Company's fiscal year ends on January 31. Years and balances described as 2012 and 2011 are the fiscal years ended January 31, 2013 and 2012, respectively.

The Company's Common Stock is traded on the Nasdaq Global Market under the symbol "MFRI". The following table sets forth, for the periods indicated, the high and low Common Stock sale prices as reported by the Nasdaq Global Market for 2012 and 2011.

	High	Low
2012		
First Quarter	\$8.14	\$7.00
Second Quarter	7.38	6.75
Third Quarter	7.00	5.34
Fourth Quarter	6.14	4.82
2011		
First Quarter	13.06	9.57
Second Quarter	10.21	6.96
Third Quarter	9.47	6.51
Fourth Quarter	7.51	6.43

As of March 15, 2013, there were 71 stockholders of record and other additional shareholders for whom securities firms acted as nominees.

The Company has never declared or paid a cash dividend and does not anticipate paying cash dividends on its Common Stock in the foreseeable future. Management presently intends to retain all available funds for the development of the business and for use as working capital. Future dividend policy will depend upon the Company's earnings, capital requirements, financial condition and other relevant factors. The Company's line of credit agreement does not permit the payment of dividends. For further information, see Note 5 - Debt, in the Notes to Consolidated Financial Statements.

Neither the Company nor any "affiliated purchaser" as defined in Rule 10b-18 purchased any shares of the Company's Common Stock during the period covered by this report. The Company has not made any sale of unregistered securities during the preceding three years.

The Transfer Agent and Registrar for the Common Shares is Continental Stock Transfer & Trust Company, 17 Battery Place, New York, New York 10004, (212) 509-4000.

Equity Compensation Plan Information

The following table provides information regarding the number of shares of Common Stock to be issued upon exercise of outstanding options, warrants and rights under the Company's equity compensation plans and the weighted average exercise price and number of shares of Common Stock remaining available for issuance under those plans as of January 31, 2013.

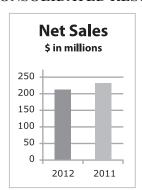
Plan Category	Number of shares to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of shares available for future issuance under equity compensation plans
Equity compensation plans approved by stockholders	969,328	\$10.77	572,587

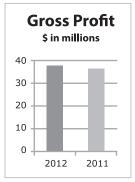
ITEM 6. SELECTED FINANCIAL DATA - Not applicable.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The statements contained under the caption MD&A and other information contained elsewhere in this annual report, which can be identified by the use of forward-looking terminology such as "may," "will," "expect," "continue," "remains," "intend," "aim," "should," "prospects," "could," "future," "potential," "believes," "plans," "likely" and "probable" or the negative thereof or other variations thereon or comparable terminology, constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended and Section 21E of the Securities Exchange Act of 1934, as amended and are subject to the safe harbors created thereby. These statements should be considered as subject to the many risks and uncertainties that exist in the Company's operations and business environment. Such risks and uncertainties could cause actual results to differ materially from those projected as a result of many factors, including but not limited to those under the heading Item 1A. Risk Factors.

CONSOLIDATED RESULTS OF OPERATIONS





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Consolidated Backlog (\$ in thousands):	2013	2012
Piping Systems	\$89,508	\$53,769
Filtration Products	25,834	14,473
Industrial Process Cooling	4,665	6,431
Corporate and Other	28,176	8,539
Total	\$148,183	\$83,212

MFRI, Inc. is engaged in the manufacture and sale of products in three reportable segments: piping systems, filtration products and industrial process cooling. Piping systems' domestic sales and earnings are seasonal, typically lower during the fourth and first quarters due to unfavorable weather for construction over much of North America and are correspondingly higher during the second and third quarters. The Company website address is www.mfri.com.

The analysis presented below and discussed in more detail throughout the MD&A was organized to provide instructive information for understanding the business going forward. However, this discussion should be read in conjunction with the Consolidated Financial Statements in Item 8 of this report, including the notes thereto. An overview of the segment results is provided in Note 1 - Business and segment information, in the Notes to Consolidated Financial Statements.

In the latest recession, the economy experienced a severe and prolonged downturn which adversely impacted all of the Company's businesses, directly or indirectly. Although improvement is expected, the timing of economic recovery in the markets we serve remains uncertain. The adverse effect of the continuing decrease in federal and state spending has significantly decelerated government funding construction activity in the U.S., negatively impacting sales volume at the Company's domestic facilities. Because economic and market conditions vary within the Company's segments, the Company's future performance by segment will vary. Should current economic conditions continue, or a further downturn occur in one or more of our significant markets, the Company could experience a period of declining net sales, which could adversely impact the Company's results of operations.

On April 26, 2013, the Company announced the signing of a definitive agreement to sell the domestic assets of its subsidiary Thermal Care, Inc. to IPEG, Inc. The transaction closed on April 30, 2013. Disposition of Thermal Care, Inc. will enable MFRI, Inc. to focus on its two principal segments: piping systems and filtration products. For further information, see Note 13 - Subsequent events, in the Notes to Consolidated Financial Statements.

2012 Compared to 2011

Net sales were \$212 million in 2012, a decrease of 9% from \$233.5 million in 2011. Reduced market demand for fabric filters led to a decrease of \$14.6 million in filtration products. Piping systems sales decreased \$7.3 million driven by a decline in U.S. sales in the second and third quarters partially offset by an increase in sales in the

Middle East. Corporate and other decreased by \$4.6 million partly due to customer decisions to extend project completion dates. Industrial process cooling sales increased \$5 million as order intake continued to improve.

Despite the decrease in sales, gross margin improved by 2 percentage points to 18% of net sales compared to 16% of net sales in 2011. Gross profit of \$38.1 million in 2012 increased 5% from \$36.3 million in 2011. Gross profit increased significantly in piping systems due to higher volume delivered by the U.A.E. facility and strong sales in industrial process cooling while filtration products gross profit decreased due to lower demand.

Operating expenses increased 9.6% to \$45.4 million from \$41.4 million. The primary increase was a non-cash \$1.5 million charge to recognize the impairment of fixed assets in filtration products related to its idle manufacturing facility located in Cicero, Illinois. Strategic consulting, audit and tax consulting increased a total of \$1.5 million. Start-up costs of \$0.9 million for the Saudi Arabia facility were also included. Industrial process cooling added staff and had increased management incentive compensation expense related to improved performance.

The Company's worldwide effective income tax rates for 2012 and 2011 were (140.2)% and (0.3)%, respectively. In the fourth quarter of 2012, the Company recorded a full valuation allowance on domestic deferred tax assets. This resulted in a \$12.5 million non-cash charge. For additional information, see the Income Tax section of the MD&A and see Note 7 - Income taxes, in the Notes to Consolidated Financial Statements.

Before non-cash charges described above, the net loss was \$4.5 million compared to net loss of \$5 million in 2011. Increased professional costs and filtration products' decrease in gross profit contributed to the increased loss. This was partially offset by piping systems' increase in gross profit.

Piping Systems

The manufacturing facility in Dammam, Saudi Arabia opened in April 2012. Expenses aggregating \$2.9 million for 2012 relating to this start-up facility were recorded to cost of goods sold, general and administrative and selling expenses.

Piping systems' domestic sales and earnings are seasonal, typically lower during the fourth and first quarters due to unfavorable weather for construction over much of North America and are correspondingly higher during the second and third quarters. Additionally because piping systems is based on large discrete projects, revenues can be subject to large swings in both geography and reporting period.

(\$ in thousands)	2012	2011	% (Decrease) Increase
Net sales	\$89,664	\$96,977	(7.5)%
Gross profit	17,020	14,410	18.1 %
Percentage of net sales	19%	15%	
Income from operations	3,452	1,143	202 %
Percentage of net sales	3.8%	1.2%	

Net sales of \$90 million decreased 7.5% from \$97 million, in the prior-year attributed to a decrease in sales of domestic district heating and cooling products ("DHC") and the prior-year included large domestic oil and gas projects. In 2012, sales increased in the U.A.E.

Gross margin increased to 19% of net sales from 15% of net sales in the prior-year. Gross profit increased due to higher volume produced at the U.A.E. facility.

General and administrative expense increased to \$9.8 million or 10.9% of net sales in 2012 from \$9.2 million or 9.3% of net sales in 2011. This increase is related to operational start-up costs for the Saudi Arabia facility.

Filtration Products

The timing of large orders can have a material effect on net sales and gross profit from period to period. Pricing on large orders was extremely competitive and therefore resulted in relatively low gross margins in all periods.

Filtration products is dependent on government regulation of air quality at the federal and state levels. The Company believes that growth in the sale of its filtration products and services will be materially dependent on continued enforcement of environmental laws such as the Clean Air Act. Although there can be no assurance what the ultimate effect of the Clean Air Act will be on filtration products, the Company believes the Clean Air Act is likely to have a positive long-term effect on demand for the Company's filtration products and services.

(\$ in thousands)	2012	2011	% Decrease
Net sales	\$79,143	\$93,705	(15.5)%
Gross profit Percentage of net sales	10,474 13.2 %	12,466 13.3%	(16.0)%
(Loss) income from operations Percentage of net sales	(2,962) (3.7)%	614 0.7%	(582.4)%

Net sales decreased 15.5% to \$79.1 million in 2012 from \$93.7 million in 2011. Sales declines were the result of lower market demand across most filtration products.

Gross margin decreased slightly to 13.2% of net sales from 13.3% of net sales in 2011. Gross profit decreased 16.0% to \$10.5 million from \$12.5 million in the prior-year due to lower sales volume.

General and administrative expenses and selling expenses remained consistent. In the fourth quarter, filtration product's recorded a \$1.5 million impairment on fixed assets relating to its idle manufacturing facility located in Cicero, Illinois.

Industrial Process Cooling

On April 26, 2013, the Company announced the signing of a definitive agreement to sell the domestic assets of its subsidiary Thermal Care, Inc. to IPEG, Inc. The transaction closed on April 30, 2013. Disposition of Thermal Care, Inc. will enable MFRI, Inc. to focus on its two principal segments: piping systems and filtration products. For further information, see Note 13 - Subsequent events, in the Notes to Consolidated Financial Statements.

The Company included Thermal Care, Inc. in its consolidated results of the industrial processing cooling segment in continuing operations as of January 31, 2013 since the decision to sell the assets occurred after that time. In future periods Industrial process cooling will be accounted for as a discontinued operation.

(\$ in thousands)	2012	2011	% Increase
Net sales	\$37,131	\$32,112	16%
Gross profit Percentage of net sales	10,240 27.6%	8,541 27%	20%
Income from operations	1,954	810	141%
Percentage of net sales	5.3%	2.5%	

Net sales of \$37 million increased 16% from \$32 million in 2011 due to improving business conditions in the North American plastic and industrial market sectors. Gross profit increased 20% to \$10.2 million from \$8.5 million in 2011. Gross margin slightly increased as a percentage of net sales.

General and administrative expenses increased to \$3.8 million from \$3.6 million in 2011 and decreased as a percentage of net sales to 10% from 11% in 2011 due to the effect of higher sales. The change in spending was a result of additional staffing, professional costs and increased management incentive compensation expense related to improved performance partially offset by lower legal costs.

Selling expenses increased to \$4.5 million in 2012 from \$4.2 million in 2011 due to higher commission expense as a result of additional sales, increased staffing after the 2011 first quarter and additional advertising expenses. Selling expenses as a percentage of net sales decreased to 12% from 13% of net sales in 2011 due to the effect of higher sales.

Corporate and Other

Net sales of \$6.1 million in 2012 decreased from \$10.7 million in 2011, due to HVAC customers decisions to extend project completion dates.

Corporate expenses include interest expense and general and administrative expenses that are not allocated to the segments. General and administrative expenses increased 19% to \$10.1 million or 4.8% of net sales from \$8.5 million or 3.7% of net sales in 2011. The spending was due to increased expenses of \$1.5 million for audit, tax consulting and other professional service expenses.

Interest expense increased to \$2.3 million from \$2.2 million in 2011. Interest income decreased to \$511 thousand from \$728 thousand due to less interest income earned overseas by piping systems as this cash was primarily deployed for the construction of the Saudi Arabia facility.

INCOME TAXES

The Company's worldwide effective tax rates ("ETR") were (140.2)% and (0.3)% in 2012 and 2011, respectively. The ETR in the periods presented was the result of the mix of income earned / losses incurred in multiple tax jurisdictions with various income tax rates. Income earned in the U.A.E. is not subject to any local country income tax. The ETR in 2012 was less than the statutory U.S. federal income tax rate, mainly due to the full valuation allowance of \$12.5 million recorded on the domestic deferred tax assets. The ETR in 2011 was less than the statutory U.S. federal income tax rate, due to foreign losses and repatriation of foreign earnings.

As of January 31, 2013, the Company had undistributed earnings of foreign subsidiaries for which deferred taxes have not been provided. The Company intends and has the ability to reinvest these earnings for the foreseeable future outside the U.S. If these amounts were distributed to the U.S., in the form of dividends or otherwise, the Company would be subject to additional U.S. income taxes. Determination of the amount of unrecognized deferred income tax liabilities on these earnings is not practicable because such liability, if any, is dependent on circumstances existing if and when remittance occurs.

A reconciliation of the ETR to the U.S. Statutory tax rate is as follows:

	2012	2011
Statutory tax rate	34.0 %	34.0 %
Valuation allowance for domestic deferred tax assets	(149.0)%	— %
Valuation allowance for state deferred tax assets	(13.9)%	(1.1)%
Differences in foreign tax rate	(10.9)%	(28.8)%
Foreign tax credit	0.9 %	26.2 %
Research tax credit	1.2 %	19.1 %
Repatriation	— %	(36.4)%
Valuation allowance for foreign NOLs	(8.0)%	(9.0)%
Nontaxable income from the Canadian joint venture	6.1 %	10.7 %
State taxes, net of federal benefit	2.8 %	(8.4)%
All other, net expense	(3.4)%	(6.6)%
Effective income tax rate	(140.2)%	(0.3)%

For further information, see Note 7 - Income taxes, in the Notes to Consolidated Financial Statements.

LIQUIDITY AND CAPITAL RESOURCES

Cash and cash equivalents as of January 31, 2013 were \$7 million as compared to \$4.2 million at January 31, 2012. Cash and cash equivalents were primarily held at the foreign subsidiaries. The Company's working capital was \$35.1 million at January 31, 2013 compared to \$43 million at January 31, 2012. Cash provided by operations in 2012 was \$5.3 million compared to cash used in operations of \$0.2 million in 2011. The Company does not believe that it will be necessary to repatriate cash held outside of the U.S.

Net cash used in investing activities in 2012 included \$5.4 million for capital expenditures, primarily for machinery and equipment in piping systems of which \$2.7 million was related to the new plant in Saudi Arabia. The Company estimates that capital expenditures for 2013 will be approximately \$5 million, of which the Company may finance capital expenditures through real estate mortgages, equipment financing loans, internally generated funds and its revolving line of credit. The majority of such expenditures relates to piping systems. In February 2012, the Company lent \$1 million to its Canadian joint venture to be used mainly for capital expenditures.

Debt totaled \$42 million at January 31, 2013, an increase of \$4.6 million since January 31, 2012. Net cash provided by financing activities was \$3.8 million. For additional information, see Note 5 - Debt, in the Notes to Consolidated Financial Statements. Other long-term liabilities of \$3.7 million were composed primarily of accrued pension cost and deferred compensation.

The following table summarizes the Company's estimated contractual obligations at January 31, 2013.

(\$ in thousands)	Year Ending January 31,						
Contractual obligations	Total	2014	2015	2016	2017	2018	Thereafter
Revolving line domestic (1)	\$13,989	\$—	\$	\$	\$13,989	\$—	\$—
Mortgages (2)	18,602	1,043	1,041	1,040	1,039	4,004	10,435
Revolving line foreign	2,968	1,885	56	56	56	56	859
Term loans (3)	11,162	2,847	2,400	1,803	1,792	411	1,909
Subtotal	46,721	5,775	3,497	2,899	16,876	4,471	13,203
Capitalized lease obligations	2,944	756	703	686	659	140	_
Operating lease obligations (4)	9,649	1,779	1,428	1,286	1,247	1,197	2,712
Projected pension contributions (5)	4,041	628	337	351	356	380	1,989
Deferred compensation (6)	5,833	163	163	163	103	39	5,202
Employment agreements (7)	101	_	_	_	_	_	101
Uncertain tax position obligations (8)	517	_	_	_	_	_	517
Total	\$69,806	\$9,101	\$6,128	\$5,385	\$19,241	\$6,227	\$23,724

Notes to contractual obligations table

- (1) Interest obligations exclude floating rate interest on debt payable under the domestic revolving line of credit. Based on the amount of such debt at January 31, 2013, and the weighted average interest rate of 3.57% on that debt, such interest was being incurred at an annual rate of approximately \$673 thousand.
- (2) Scheduled maturities, including interest.
- (3) Term loan obligations exclude floating rate interest on term loan with a January 31, 2013 balance of \$0.6 million. Based on the amount of such debt as of January 31, 2013, and the weighted average interest rate of 4.24% on that debt, such interest was being incurred at an annual rate of approximately \$36 thousand.
- (4) Minimum contractual amounts, assuming no changes in variable expenses.
- (5) Includes expected employer contributions for fiscal year ending January 31, 2014 and estimated future benefit payments reflecting expected future service.
- (6) Non-qualified deferred compensation plan The Company has deferred compensation agreements with key employees. Vesting based on years of service. Life insurance contracts have been purchased which may be used to fund the Company's obligation under these agreements. Includes payment estimates calculated by third party administrator.
- (7) Refer to the proxy statement for a description of compensation plans for Named Executive Officers.
- (8) Refer to Note 7 Income taxes, in the Notes to Consolidated Financial Statements for a description of the uncertain tax position obligations.

Financing

On July 11, 2002, the Company entered into a secured loan and security agreement with a financial institution ("Loan Agreement"). Under the terms of the Loan Agreement as amended, the Company can borrow up to \$38 million, subject to borrowing base and other requirements, under a revolving asset-based line of credit. The third amendment to the loan agreement executed March 15, 2013 extended the maturity date of the loan from November 30, 2013 to November 30, 2016. The Loan Agreement covenants restrict debt, liens, investments, do not permit payment of dividends, and require attainment of levels of profitability and cash flows. At January 31, 2013, the Company was in compliance with all covenants under the Loan Agreement. Interest rates are based on options selected by the Company as follows: (a) a margin in effect plus a prime rate; or (b) a margin in effect plus the LIBOR rate for the corresponding interest period. At January 31, 2013, the prime rate was 3.25%, the LIBOR rate was 0.25%, and the margins added to the prime rate and the LIBOR rate, which are determined each quarter based on the applicable financial statement ratio, were 0.5 and 2.75 percentage points, respectively. Monthly interest payments were made during the years ended January 31, 2013 and 2012. As of January 31, 2013, the Company had borrowed \$14 million and had \$4.8 million available to it under the revolving line of credit. In addition, \$0.2 million of availability was used under the Loan Agreement primarily to support letters of credit to guarantee amounts committed for inventory purchases. The Loan Agreement provides that all domestic receipts are deposited

in a bank account from which all funds may only be used to pay the debt under the Loan Agreement. At January 31, 2013, the amount of such restricted cash was \$0.1 million. Cash required for operations is provided by draw-downs on the line of credit.

On August 28, 2007, the Company amended and restated the Term Loan Note to \$3.0 million ("Term Loan"). The Company is scheduled to pay \$107 thousand of principal on the first days of March, June, and September, with the remaining unpaid principal payable on November 30, 2013. The third amendment to the loan agreement allows for an additional term loan of \$2.5 million less \$0.6 million, the amount outstanding on this loan, in 2013, subject to attaining certain performance levels.

On April 10, 2012, the Company obtained a loan from a U.A.E. bank to purchase equipment and office furniture for a building for the piping system's facility in Saudi Arabia, in the amount of 22.2 million Dirhams, approximately \$5.9 million U.S. dollars at the exchange rate prevailing on the transaction date. The loan bears interest at 5.5% with quarterly payments of approximately \$408 thousand for both principal and interest and matures April 2017.

The Company also has credit arrangements used by its Danish and Middle Eastern subsidiaries. These credit arrangements are in the form of overdraft facilities and project financing at rates competitive in the countries in which the Company operates. At January 31, 2013, borrowings under these credit arrangements totaled \$2.5 million; an additional \$2.9 million remained unused.

CRITICAL ACCOUNTING ESTIMATES AND POLICIES

The Company's significant accounting policies are discussed in the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K. The application of certain of these policies requires significant judgments or a historical based estimation process that can affect the results of operations and financial position of the Company as well as the related footnote disclosures. The Company bases its estimates on historical experience and other assumptions that it believes are reasonable. If actual amounts ultimately differ from previous estimates, the revisions are included in the Company's results of operations for the period in which the actual amounts become known.

Revenue recognition. The Company recognizes revenues including shipping and handling charges billed to customers, when all the following criteria are met: (i) persuasive evidence of an arrangement exists, (ii) the seller's price to the buyer is fixed or determinable, and (iii) collectability is reasonably assured. All subsidiaries of the Company, except as noted below, recognize revenues upon shipment or delivery of goods or services when title and risk of loss pass to customers.

Percentage of completion revenue recognition. All divisions recognize revenues under the above stated revenue recognition policy except for sizable complex contracts that require periodic recognition of income. For these contracts, the Company uses the "percentage of completion" accounting method. Under this approach, income is recognized in each reporting period based on the status of the uncompleted contracts and the current estimates of costs to complete. The choice of accounting method is made at the time the contract is received based on the expected length and complexity of the project. The percentage of completion is determined by the relationship of costs incurred to the total estimated costs of the contract. Provisions are made for estimated losses on uncompleted contracts in the period in which such losses are determined. Changes in job performance, job conditions, and estimated profitability, including those arising from contract penalty provisions and final contract settlements, may result in revisions to costs and income. Such revisions are recognized in the period in which they are determined. Claims for additional compensation due to the Company are recognized in contract revenues when realization is probable and the amount can be reliably estimated.

Inventories. Inventories are stated at the lower of cost or market. Cost is determined using the first-in, first-out method for all inventories.

Income taxes. Deferred income taxes have been provided for temporary differences arising from differences in the basis of assets and liabilities for tax and financial reporting purposes. Deferred income taxes on temporary

differences have been recorded at the current tax rate. The Company assesses its deferred tax assets for realizability at each reporting period.

The Company recognizes the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more likely than not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement with the relevant tax authority.

Equity-based compensation. Stock compensation expense for employee equity awards is recognized ratably over the requisite service period of the award. The Black-Scholes option-pricing model is utilized to estimate the fair value of awards. Determining the fair value of stock options using the Black-Scholes model requires judgment, including estimates for (1) risk-free interest rate - an estimate based on the yield of zero-coupon treasury securities with a maturity equal to the expected life of the option; (2) expected volatility - an estimate based on the historical volatility of the Company's Common Stock; and (3) expected life of the option - an estimate based on historical experience including the effect of employee terminations.

Fair value of financial instruments. The carrying values of cash and cash equivalents, accounts receivable and accounts payable are based upon reasonable estimates of their fair value due to their short-term nature. The carrying value of the cash surrender value of life insurance policies approximated fair value and was based on the market value of the underlying investments, which may increase or decrease due to fluctuations in the overall financial markets. The carrying amount of the Company's short-term debt, revolving line of credit and long-term debt approximate fair value because the majority of the amounts outstanding accrue interest at variable rates.

The Company entered into an interest rate swap agreement to reduce its exposure to market risks from changing interest rates under the revolving credit agreement. Any differences paid or received on the interest rate swap agreements are recognized as adjustments to interest expense over the life of the swap, thereby adjusting the effective interest rate on the underlying obligation.

Reclassifications. Reclassifications were made to prior-year financial statements to conform to the current-year presentations as required.

New accounting pronouncements. See Note 2 - Recent accounting pronouncements, in the Notes to Consolidated Financial Statements.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK - Not applicable.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The consolidated financial statements of the Company for each of the two years in the periods ended as of January 31, 2013 and 2012 and the notes thereto are set forth elsewhere herein.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE - None.

Item 9A. CONTROLS AND PROCEDURES

The Chief Executive Officer and Chief Financial Officer have evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of January 31, 2013. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of January 31, 2013 to ensure that information required to be disclosed in the reports that are filed or submitted under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported, within the time periods specified

in the SEC's rules and forms and is accumulated and communicated to the issuer's management, including the principal executive and financial officers, to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting. The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Exchange Act. As required by Rule 13a-15(c) under the Exchange Act, MFRI's management carried out an evaluation, with the participation of the Chief Executive Officer and Chief Financial Officer, of the effectiveness of its internal control over financial reporting as of the end of the last fiscal year. The framework on which such evaluation was based is contained in the report entitled "Internal Control-Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO Report").

The Company's system of internal control over financial reporting is 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. 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.

Based on its assessment, management has concluded that the Company has maintained effective internal control over financial reporting as of January 31, 2013, based on criteria in the COSO Report.

Changes in Internal Controls: There was a material weakness in internal control described in Item 9A of the Company's January 31, 2012 10-K/A filed on May 9, 2012. The Company's processes, procedures and controls related to the preparation, review and filing of its Annual Report on Form 10-K ("10-K") were not deemed effective at January 31, 2012 to ensure that its Independent Registered Public Accounting Firm ("Auditors") had completed its audit work and signed its Report and Consent prior to filing the 10-K. This material weakness did not result in any material adjustments to the Registrant's financial statements, notes thereto, or other disclosures in the 10-K.

In addition, the Company's processes, procedures and controls related to the preparation, review and filing of its Quarterly Report on Form 10-Q ("10-Q") were not effective at July 31, 2012 to ensure that contracts and significant adjustments outside the normal course of business had been properly approved, reviewed and reported in the Consolidated Interim Financial Statements. These material weaknesses did not result in a material adjustment to the Registrant's financial statements, notes thereto, or other disclosures in the 10-Q.

Other than the controls implemented to address the material weaknesses noted above, there has been no change in internal control over financial reporting during the year ended January 31, 2013 that has materially affected or is reasonably likely to materially affect, internal control over financial reporting except as discussed below.

Remediation Plan for the Material Weaknesses in Internal Controls over Financial Reporting: The Company increased senior management's direction and review of filings to ensure compliance with the Company's internal controls. Beginning with the filing of the Annual Report on Form 10-K/A filed on May 9, 2012, the Company adopted a procedure that requires the Auditors signed Report and Consent, or such other report that is required for filing any report with the SEC to be in hand prior to such filing.

Upon discovering the material weaknesses related to contracts and significant adjustments outside the normal course of business being properly adhered to, the Company immediately took steps to implement formal operating policies regarding approval, communication and reporting of contracts and significant adjustments outside the normal course of business, and controls to ensure that such policies have been followed.

On January 30, 2013, the Board of Directors of the Company appointed Karl J. Schmidt to serve as the Company's Vice President and Chief Financial Officer.

We believe the actions described above and resulting improvements in controls will strengthen the Company's processes, procedures and controls related to the preparation, review and filing of such reports, and will address the related material weaknesses that were identified as of January 31, 2012 and July 31, 2012.

Item 9B. OTHER INFORMATION - None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information with respect to this item is incorporated herein by reference to the Company's definitive proxy statement for the 2013 annual meeting of stockholders.

Information with respect to executive officers of the Company is included in Part I Item 1, hereof under the caption "Executive Officers of the Registrant".

Item 11. EXECUTIVE COMPENSATION

Information with respect to this item is incorporated herein by reference to the Company's definitive proxy statement for the 2013 annual meeting of stockholders.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information with respect to this item is incorporated herein by reference to the Company's definitive proxy statement for the 2013 annual meeting of stockholders.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information with respect to this item is incorporated herein by reference to the Company's definitive proxy statement for the 2013 annual meeting of stockholders.

Item 14. PRINCIPAL ACCOUNTANTING FEES AND SERVICES

Information with respect to this item is incorporated herein by reference to the Company's definitive proxy statement for the 2013 annual meeting of stockholders.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- a. List of documents filed as part of this report:
 - (1) Financial Statements Consolidated Financial Statements of the Company Refer to Part II, Item 8 of this report.
 - (2) Financial Statement Schedules Schedule II - Valuation and Qualifying Accounts
- b. Exhibits: The exhibits, as listed in the Exhibit Index included herein, are submitted as a separate section of this report.
- c. The response to this portion of Item 15 is submitted under 15a (2) above.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders MFRI Inc. and Subsidiaries

We have audited the accompanying consolidated balance sheets of MFRI, Inc. (a Delaware corporation) and Subsidiaries (the Company) as of January 31, 2013 and 2012, and the related consolidated statements of operations, comprehensive loss, stockholders' equity and cash flows for each of the two years ended January 31, 2013. Our audits of the consolidated financial statements included the financial statement schedule listed in the index appearing under Item 15(a)(2). These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement 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. The Company is not required to have, nor were we engaged to perform an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, 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 MFRI Inc. and subsidiaries as of January 31, 2013 and 2012, and the results of their operations and their cash flows for each of the two years in the period ended January 31, 2013, in conformity with accounting principles generally accepted in the United States of America. 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.

Chicago, Illinois May 2, 2013

MFRI, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENT OF OPERATIONS

	January 31,		
(In thousands, except per share data)	2013	2012	
Net sales	\$212,018	\$233,496	
Cost of sales	173,911	197,175	
Gross profit	38,107	36,321	
Operating expenses:			
General and administrative expense	30,178	26,252	
Selling expense	15,194	15,132	
Total operating expenses	45,372	41,384	
Loss from operations	(7,265)	(5,063)	
Income from joint venture	1,386	1,558	
Interest expense, net	1,816	1,437	
Loss before income taxes	(7,695)	(4,942)	
Income tax expense	10,790	17	
Net loss	(\$18,485)	(\$4,959)	
Weighted average number of common shares outstanding			
Basic and diluted	6,922	6,878	
Loss per share			
Basic and diluted	(\$2.67)	(\$0.72)	

MFRI, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENT OF COMPREHENSIVE LOSS

(In thousands)

	January 31,	
	2013	2012
Net loss	(\$18,485)	(\$4,959)
Other comprehensive income (loss)		
Currency translation adjustments, net of tax	(251)	(942)
Minimum pension liability adjustment, net of tax	112	(969)
Interest rate swap, net of tax	(6)	138
Other comprehensive loss	(145)	(1,773)
Comprehensive loss	(\$18,630)	(\$6,732)

MFRI, INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

	January 31,	
(In thousands, except per share data)	2013	2012
ASSETS		
Current assets		
Cash and cash equivalents	\$7,035	\$4,209
Restricted cash	725	1,854
Trade accounts receivable, less allowance for doubtful accounts of \$352 at January	27.942	29 100
31, 2013 and \$235 at January 31, 2012	27,842	28,109
Inventories, net	42,333	40,204
Prepaid expenses and other current assets	4,476	3,973
Deferred tax assets - current		1,946
Costs and estimated earnings in excess of billings on uncompleted contracts	1,935	2,375
Total current assets	84,346	82,670
Property, plant and equipment, net of accumulated depreciation	46,401	47,842
Other assets		
Deferred tax assets - long-term	1,766	10,967
Note receivable from joint venture	5,200	4,195
Investment in joint venture	6,022	4,636
Cash surrender value of deferred compensation plan	2,946	2,782
Other assets	2,425	3,860
Patents, net of accumulated amortization	373	331
Total other assets	18,732	26,771
Total assets	\$149,479	\$157,283
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Trade accounts payable	\$22,905	\$20,020
Commissions and management incentives payable	3,368	4,722
Accrued compensation and payroll taxes	5,112	4,571
Current maturities of long-term debt	5,419	2,736
Customers' deposits	7,571	2,432
Other accrued liabilities	2,524	2,610
Billings in excess of costs and estimated earnings on uncompleted contracts	1,572	1,978
Deferred tax liabilities - current	696	
Income tax payable	34	417
Total current liabilities	49,201	39,486
Long-term liabilities	,	,
Long-term debt, less current maturities	36,603	34,682
Deferred compensation liabilities	5,670	5,686
Other long-term liabilities	3,750	5,074
Total long-term liabilities	46,023	45,442
Stockholders' equity	,	,
Common stock, \$.01 par value, authorized 50,000 shares; 6,924 issued and outstanding January 31, 2013 and 6,913 issued and outstanding January 31, 2012	\$69	\$69
Additional paid-in capital	50,358	49,828
Retained earnings	4,553	23,038
Accumulated other comprehensive loss	(725)	(580)
Total stockholders' equity	54,255	72,355
Total liabilities and stockholders' equity	\$149,479	\$157,283
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MFRI, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY

	Common	Additional Paid-in	Retained	Accumulated Other Comprehensive	Total Stockholders'
(\$ in thousands, except share data)	Stock	Capital	Earnings	Income (Loss)	Equity
Total stockholders' equity at January 31, 2011	\$69	\$49,003	\$27,997	\$1,193	\$78,262
N I			(4.050)		(4.050)
Net loss		-10	(4,959)		(4,959)
Stock options exercised	_	210			210
Stock-based compensation		621			621
Excess tax benefit from stock options exercised		(6))		(6)
Interest Rate Swap				61	61
Pension liability adjustment				(1,563)	(1,563)
Foreign currency translation adjustment				(942)	(942)
Tax benefit on above items				671	671
Total stockholders' equity at January 31, 2012	\$69	\$49,828	\$23,038	(\$580)	\$72,355
Net loss			(18,485)		(18,485)
Stock options exercised	_	35	(10,100)		35
Stock-based compensation expense		484			484
Excess tax expense from stock options exercised		11			11
Interest Rate Swap				97	97
Pension liability adjustment				466	466
Foreign currency translation adjustment				(263)	(263)
Tax benefit on above items				(445)	(445)
Total stockholders' equity at January 31, 2013	\$69	\$50,358	\$4,553	(\$725)	\$54,255

Common stock shares	2012	2011
Balance beginning of year	6,912,771	6,851,471
Stock options exercised	11,313	61,300
Balance end of year	6,924,084	6,912,771

MFRI, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENT OF CASH FLOWS

	Januar	y 31,
(\$ in thousands)	2013	2012
Operating activities		
Net loss	(\$18,485)	(\$4,959)
Adjustments to reconcile net loss to net cash flows provided by (used in) operating activities		
Depreciation and amortization	5,806	5,582
Impairment on fixed assets	1,520	_
Deferred tax expense (benefit)	11,849	(989)
Income from joint venture	(1,386)	(1,558)
Stock-based compensation expense	484	621
Cash surrender value of deferred compensation plan	(163)	86
Loss on disposal of fixed assets	64	115
Changes in operating assets and liabilities		
Accounts payable	2,908	1,308
Accrued compensation and payroll taxes	(844)	(1,852)
Inventories	(2,080)	(4,683)
Customers' deposits	5,139	520
Income taxes receivable and payable	(384)	8
Prepaid expenses and other current assets	563	(234)
Accounts receivable, net	318	8,075
Costs and estimated earnings in excess of billings on uncompleted contracts	34	62
Other assets and liabilities	5	(2,292)
Net cash provided by (used in) operating activities	5,348	(190)
nvesting activities		
Additions to property, plant and equipment	(5,360)	(10,086)
Loan to joint venture	(989)	
Proceeds from sales of property and equipment	95	18
Net cash used in investing activities	(6,254)	(10,068)
Financing activities		
Borrowings	194,035	195,363
Payment of debt	(189,684)	(196,671)
Decrease in drafts payable	(8)	(475)
Payment on capitalized lease obligations	(591)	(293)
Stock options exercised	35	210
Tax benefit of stock options exercised	11	
Net cash provided by (used in) financing activities	3,798	(1,866)
Effect of exchange rate changes on cash and cash equivalents	(66)	(385)
Net increase (decrease) in cash and cash equivalents	2,826	(12,509)
Cash and cash equivalents - beginning of period	4,209	16,718
Cash and cash equivalents - end of period	\$7,035	\$4,209
Supplemental cash flow information		
Cash paid for		
Interest	\$2,314	\$2,117
Income taxes	200	439
See accompanying Notes to Consolidated Financial Statements		

MFRI, INC. AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS YEARS ENDED January 31, 2013 and 2012

(Tabular dollars in thousands, except per share data)

Note 1 - Business and segment information

MFRI, Inc. ("MFRI", the "Company", or the "Registrant") was incorporated in Delaware on October 12, 1993. MFRI is engaged in the manufacture and sale of products in three distinct segments: piping systems, filtration products and industrial process cooling.

Fiscal year. The Company's fiscal year ends on January 31. Years and balances described as 2012 and 2011 are the fiscal years ended January 31, 2013 and 2012, respectively.

Nature of business. Piping systems engineers, designs, manufactures and sells specialty piping and leak detection and location systems. This segment's specialty piping systems include (i) industrial and secondary containment piping systems for transporting chemicals, hazardous fluids and petroleum products, (ii) insulated and jacketed district heating and cooling piping systems for efficient energy distribution to multiple locations from central energy plants, and (iii) oil and gas gathering flow and long lines for oil and mineral transportation. Piping systems' leak detection and location systems are sold with many of its piping systems and on a stand-alone basis, to monitor areas where fluid intrusion may contaminate the environment, endanger personal safety, cause a fire hazard, impair essential services or damage equipment or property. Filtration products manufactures and sells a wide variety of filter elements for use in industrial air filtration systems and particulate collection systems. Air filtration systems are used in a wide variety of industries to limit particulate emissions, primarily to comply with environmental regulations. Filtration products markets air filtration related products and accessories, and provides maintenance services, consisting primarily of dust collector inspection, filter cleaning and filter replacement. Industrial process cooling designs, manufactures and sells industrial process cooling, including chillers, cooling towers, plant circulating systems, and related accessories for use in industrial process applications. Corporate and Other includes the installation of HVAC systems, that is not sufficiently large to constitute a reportable segment. The Company's products are sold both within the U.S. and internationally.

MFRI's reportable segments are strategic businesses that offer different products and services. Each is managed separately based on fundamental operating differences. Each strategic business was acquired as a unit and management at the time of acquisition was retained. The Company evaluates performance based on gross profit and income or loss from operations.

	2012	2011
Net sales		****
Piping Systems	\$89,664	\$96,977
Filtration Products	79,143	93,705
Industrial Process Cooling	37,131	32,112
Corporate and Other	6,080	10,702
Total net sales	\$212,018	\$233,496
Gross profit	#17.020	014410
Piping Systems	\$17,020	\$14,410
Filtration Products	10,474	12,466
Industrial Process Cooling	10,240	8,541
Corporate and Other	373	904
Total gross profit	\$38,107	\$36,321
Income (loss) from operations		
Piping Systems	\$3,452	\$1,143
Filtration Products	(2,962)	614
Industrial Process Cooling	1,954	810
Corporate and Other	(9,709)	(7,630)
Total loss from operations	\$(7,265)	\$(5,063)
Income (loss) before income taxes		
Piping Systems	\$4,838	\$2,701
Filtration Products	(2,962)	614
Industrial Process Cooling	1,954	810
Corporate and Other	(11,525)	(9,067)
Total loss before income taxes	\$(7,695)	\$(4,942)
Segment assets		
Piping Systems	\$83,944	\$74,953
Filtration Products	52,958	55,095
Industrial Process Cooling	11,451	10,810
Corporate and Other	1,126	16,425
Total segment assets	\$149,479	\$157,283
Capital expenditures	·	
Piping Systems	\$4,206	\$8,396
Filtration Products	995	1,449
Industrial Process Cooling	74	51
Corporate and Other	85	190
Total capital expenditures	\$5,360	\$10,086
Depreciation and amortization		
Piping Systems	\$3,344	\$3,076
Filtration Products	1,750	1,734
Industrial Process Cooling	120	154
Corporate and Other	592	618
Total depreciation and amortization	\$5,806	\$5,582
Impairment of fixed assets		
Filtration Products	\$1,520	\$0

Geographic information. Net sales are attributed to a geographic area based on the destination of the product shipment. Sales to foreign customers was 33% in 2012 compared to 30% in 2011. Long-lived assets are based on the physical location of the assets and consist of property, plant and equipment used in the generation of revenues in the geographic area.

	2012	2011
Net sales		
United States	\$142,454	\$163,104
Middle East	24,631	12,721
Europe	19,386	20,815
Canada	11,183	6,894
India	6,318	2,259
Other Americas	3,053	22,370
Other	4,993	5,333
Total net sales	\$212,018	\$233,496
Long-lived assets		
United States	\$27,151	\$30,366
Middle East	13,204	11,417
Denmark	5,065	4,623
India	981	1,436
Total long-lived assets	\$46,401	\$47,842

Note 2 - Significant accounting policies

Use of estimates. The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Revenue recognition. The Company recognizes revenues including shipping and handling charges billed to customers, when all the following criteria are met: (i) persuasive evidence of an arrangement exists, (ii) the seller's price to the buyer is fixed or determinable, and (iii) collectability is reasonably assured. All subsidiaries of the Company, except as noted below, recognize revenues upon shipment or delivery of goods or services when title and risk of loss pass to customers.

Percentage of completion revenue recognition. All divisions recognize revenues under the above stated revenue recognition policy except for sizable complex contracts that require periodic recognition of income. For these contracts, the Company uses the "percentage of completion" accounting method. Under this approach, income is recognized in each reporting period based on the status of the uncompleted contracts and the current estimates of costs to complete. The choice of accounting method is made at the time the contract is received based on the expected length and complexity of the project. The percentage of completion is determined by the relationship of costs incurred to the total estimated costs of the contract. Provisions are made for estimated losses on uncompleted contracts in the period in which such losses are determined. Changes in job performance, job conditions, and estimated profitability, including those arising from contract penalty provisions and final contract settlements, may result in revisions to costs and income. Such revisions are recognized in the period in which they are determined. Claims for additional compensation due the Company are recognized in contract revenues when realization is probable and the amount can be reliably estimated.

Shipping and handling. Shipping and handling costs are included in cost of goods sold, and the amounts invoiced to customers relating to shipping and handling are included in net sales.

Sales tax. Sales tax is reported on a net basis in the consolidated financial statements.

Operating cycle. The length of piping systems contracts vary, but are typically less than one year. The Company includes in current assets and liabilities amounts realizable and payable in the normal course of contract completion unless completion of such contracts extends significantly beyond one year. The Company's other businesses do not have an operating cycle beyond one year.

Consolidation. The consolidated financial statements include the accounts of the Company and its domestic and foreign subsidiaries, all of which are wholly owned. All significant intercompany balances and transactions have been eliminated.

Correction of immaterial errors. In the second quarter of 2012, management discovered prior period inventory errors. The cumulative adjustment for the inventory errors covering the period from February 1, 2006 to January 31, 2012, was approximately \$236 thousand. The adjustment applicable to the fourth quarter of 2011 was approximately \$28 thousand, no adjustment to the first three quarters of 2011 and the adjustment applicable to prior years (February 2006 - January 2011) totaled approximately \$208 thousand

Pursuant to the guidance of Staff Accounting Bulletin ("SAB") No. 99, *Materiality*, the Company concluded that the errors were not material to any of its prior period financial statements. Although the errors were immaterial to prior periods, the prior period financial statements were revised, in accordance with SAB No. 108, *Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements*, due to the significance of the out-of-period correction.

A reconciliation of the effects of the adjustments to the previously reported balance sheet at January 31, 2012 follows:

	As Reported	Adjustment	As Adjusted
Inventories, net	\$39,968	\$236	\$40,204
Total current assets	82,434	236	82,670
Total assets	157,047	236	157,283
Retained earnings	22,802	236	23,038
Total stockholders' equity	72,119	236	72,355
Total liabilities and stockholders' equity	157,047	236	157,283

A reconciliation of the effects of the adjustments to the previously reported statement of operations for the year ending January 31, 2012 follows:

	As Reported	Adjustment	As Adjusted
Cost of sales	\$197,203	(\$28)	\$197,175
Gross profit	36,293	28	36,321
Loss from operations	(5,091)	28	(5,063)
Loss before income taxes	(4,970)	28	(4,942)
Net loss	(4,987)	28	(4,959)

A reconciliation of the effects of the adjustments to the previously reported statement of cash flows for the year ending January 31, 2012 follows:

	As Reported	Adjustment	As Adjusted
Net loss	(\$4,987)	\$28	(\$4,959)
Inventories	(4,655)	(28)	(4,683)

A reconciliation of the effects of the adjustments to the previously reported statement of stockholders' equity for the year ending January 31, 2012 follows:

	As Reported	Adjustment	As Adjusted
Net loss	(\$4,987)	\$28	(\$4,959)
Retained earnings	22,802	236	23,038
Total comprehensive loss	(6,760)	28	(6,732)

Translation of foreign currency. Assets and liabilities of consolidated foreign subsidiaries are translated into U.S. dollars at exchange rates in effect at year-end. Revenues and expenses are translated at average exchange rates prevailing during the year. Gains or losses on foreign currency transactions and the related tax effects are reflected in net income. The resulting translation adjustments are included in stockholders' equity as part of accumulated other comprehensive income.

Contingencies. The Company is subject to various legal proceedings and claims that arise in the ordinary course of business, including those involving environmental, tax, product liability and general liability claims. The Company accrues for such liabilities when it is probable that future costs will be incurred and such costs can be reasonably estimated. Such accruals are based on developments to date, the Company's estimates of the outcomes of these matters, and its experience in contesting, litigating and settling other similar matters. The Company does not currently anticipate the amount of any ultimate liability with respect to these matters will materially affect the Company's financial position, liquidity or future operations.

Cash and cash equivalents. All highly liquid investments with a maturity of three months or less when purchased are considered to be cash equivalents. Cash and cash equivalents were \$7 million and \$4.2 million as of January 31, 2013 and 2012, respectively. The balance is primarily cash and cash equivalents at the foreign subsidiaries.

The Company has not experienced any losses as a result of its cash concentration. Consequently, no significant concentration of credit risk is considered to exist. Accounts payable included drafts payable of \$3.3 million as of January 31, 2013 and 2012, respectively.

Restricted cash. The Loan Agreement provides that all domestic receipts are deposited in a bank account from which all funds may only be used to pay the debt under the Loan Agreement. At January 31, 2013, the amount of such restricted cash was \$0.1 million and \$0.6 million of restricted cash was held by a foreign subsidiary.

Accounts receivable. The majority of the Company's accounts receivable are due from geographically dispersed contractors and manufacturing companies. Credit is extended based on an evaluation of a customer's financial condition, including the availability of credit insurance. In the U.S. collateral is not generally required. In the U.A.E., letters of credit are obtained for substantially all orders. Accounts receivable are due within various time periods specified in the terms applicable to the specific customer and are stated at amounts due from customers net of an allowance for claims and doubtful accounts. The allowance for doubtful accounts is calculated using a percentage of sales method based upon collection history and an estimate of uncollectible accounts. Management may exercise its judgment in adjusting the provision as a consequence of known items, such as current economic factors and credit trends. Past due trade accounts receivable balances are written off when the Company's collection efforts have been unsuccessful in collecting the amount due. Accounts receivable adjustments are recorded against the allowance for doubtful accounts.

Concentration of credit risk. The Company has a broad customer base doing business in all regions of the U.S. as well as other areas in the world. In the fiscal years ended January 31, 2013 and 2012, no customer accounted for 10% or more of the Company's net sales.

Accumulated other comprehensive loss. Represents the change in equity from non-owner transactions and consisted of foreign currency translation, minimum pension liability and interest rate swaps.

	2012	2011
Equity adjustment foreign currency	\$1,179	\$1,442
Minimum pension liability, gross	(2,479)	(2,945)
Interest rate swap, gross	(219)	(316)
Subtotal excluding tax effect	(1,519)	(1,819)
Tax effect of foreign exchange	12	_
Tax effect of minimum pension liability	765	1,119
Tax effect of interest rate swap	17	120
Total other comprehensive loss	(\$725)	(\$580)

Pension plan. The Winchester filtration hourly rated employees are covered by a defined benefit plan. The benefits are based on fixed amounts multiplied by years of service of retired participants. The Company engages outside actuaries to calculate its obligations and costs. The funding policy is to contribute such amounts as are necessary to provide for benefits attributed to service to date and those expected to be earned in the future. The amounts contributed to the plan are sufficient to meet the minimum funding requirements set forth in the Employee Retirement Income Security Act of 1974.

Inventories. Inventories are stated at the lower of cost or market. Cost is determined using the first-in, first-out method for all inventories.

	2012	2011
Raw materials	\$35,145	\$33,402
Work in process	3,506	2,927
Finished goods	4,476	4,715
Subtotal	43,127	41,044
Less allowances	794	840
Inventories, net	\$42,333	\$40,204

Long-lived assets. Property, plant and equipment are stated at cost. Interest is capitalized in connection with the construction of facilities and amortized over the asset's estimated useful life. Long-lived assets are reviewed for possible impairment whenever events indicate that the carrying amount of such assets may not be recoverable. If such a review indicates impairment, the carrying amount of such assets is reduced to an estimated fair value.

Depreciation is computed using the straight-line method over the estimated useful lives of the assets, which range from three to 30 years. Leasehold improvements are depreciated over the remaining life of the lease or its useful life whichever is shorter. Amortization of assets under capital leases is included in depreciation and amortization. Depreciation expense was approximately \$5.8 million in 2012 and \$5.6 million in 2011.

2012	2011
\$37,573	\$36,565
51,809	50,066
13,153	12,682
198	465
102,733	99,778
56,332	51,936
\$46,401	\$47,842
	\$37,573 51,809 13,153 198 102,733 56,332

Impairment of long-lived assets. The Company evaluates long-lived assets (including intangible assets) for impairment whenever events or changes in circumstances indicate that the carrying amount of a long-lived asset may not be recoverable. An asset is considered impaired if its carrying amount exceeds the undiscounted future net cash flow the asset is expected to generate.

The Company has an idle facility in Cicero, Illinois that has not yet been sold and does not meet the criteria to be presented as held for sale as of January 31, 2013. In 2012, management performed the required impairment analysis on the idle facility to determine if its carrying value was recoverable. Management identified recent sales data for similar facilities for sale in the area and analyzed the expected cash flows from different sales scenarios and determined that the carrying value of the idle facility was not fully recoverable. For 2012, management recorded an impairment loss of \$1.5 million, to adjust the idle facility to its estimated recoverable amount.

Other intangible assets with definite lives. The Company owns several patents including those covering features of its piping and electronic leak detection systems. The patents are not material either individually or in the aggregate overall because the Company believes sales would not be materially reduced if patent protection were not available. Patents are capitalized and amortized on a straight-line basis over a period not to exceed the legal lives of the patents. The Company expenses costs incurred to renew or extend the term of intangible assets. Gross patents were \$2.6 million and \$2.5 million as of January 31, 2013 and 2012, respectively. Accumulated amortization was approximately \$2.18 million and \$2.20 million as of January 31, 2013 and 2012, respectively. Future amortizations over the next five years ending January 31 will be \$49,200 in 2014, \$44,600 in 2015, \$41,400 in 2016, \$37,500 in 2017, \$34,400 in 2018, and \$165,600 thereafter.

Investment in joint venture. In October 2009, the Company invested \$5.9 million, which consisted of \$2 million for a 49% interest and \$3.9 million for a note receivable, in a Canadian joint venture with The Bayou Companies, Inc., a subsidiary of Aegion Corporation. The joint venture completed an acquisition of Garneau, Inc's pipe coating and insulation facility and associated assets located in Camrose, Alberta, Canada, which provides the Company the opportunity to participate in the growing oil sands market. In February 2012, the Company loaned \$1 million to its Canadian joint venture to be used for capital expenditures.

The Company accounts for the investment in joint venture using the equity method. The financial results included in the Company's consolidated financial statements.

	2012	2011
Share of income from joint venture	\$1,386	\$1,558

The following information summarizes the joint venture financial data as of January 31:

	2012	2011
Current assets	\$14,058	\$14,381
Noncurrent assets	19,442	14,259
Current liabilities	2,703	3,449
Noncurrent liabilities	18,274	15,403
Equity	12,524	9,789
Revenue	30,448	29,010
Gross profit	7,211	7,565
Income from continuing operations	3,380	5,137
Net income	\$2,680	\$3,189

Research and development. Research and development expenses consist of materials, salaries and related expenses of engineering personnel and outside services for product development projects. Research and development costs are expensed as incurred. Research and development expense was \$2.2 million in 2012 and 2011.

Income taxes. Deferred income taxes have been provided for temporary differences arising from differences in the basis of assets and liabilities for tax and financial reporting purposes. Deferred income taxes on temporary differences have been recorded at the current tax rate. The Company assesses its deferred tax assets for realizability at each reporting period.

The Company recognizes the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more likely than not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement with the relevant tax authority. For further information, see Note 7 - Income taxes in the Notes to Consolidated Financial Statements.

Net loss per common share. Earnings per share ("EPS") are computed by dividing net loss by the weighted average number of common shares outstanding (basic). The years 2012 and 2011 had net losses; therefore, the diluted loss per share were identical to the basic loss per share rather than assuming conversion, exercise, or contingent issuance of securities that would have an anti-dilutive effect on earnings per share.

Basic weighted average number of common shares outstanding	2012	2011
Basic weighted average number of common shares outstanding	6,922	6,878
Dilutive effect of stock options		_
Weighted average number of common shares outstanding assuming full dilution	6,922	6,878
Weighted average number of stock options not included in the computation of diluted EPS of common stock because the option exercise prices exceeded the average market prices	783	653
Canceled options during the year	(36)	(28)
Stock options with an exercise price below the average stock price	186	190

Equity-based compensation. Stock compensation expense for employee equity awards is recognized ratably over the requisite service period of the award. The Black-Scholes option-pricing model is utilized to estimate the fair value of awards. Determining the fair value of stock options using the Black-Scholes model requires judgment, including estimates for (1) risk-free interest rate - an estimate based on the yield of zero-coupon treasury securities with a maturity equal to the expected life of the option; (2) expected volatility - an estimate based on the historical volatility of the Company's Common Stock; and (3) expected life of the option - an estimate based on historical experience including the effect of employee terminations. If any of these assumptions differ significantly from actual, stock-based compensation expense could be impacted.

Fair value of financial instruments. The carrying values of cash and cash equivalents, accounts receivable and accounts payable are reasonable estimates of their fair value due to their short-term nature. The carrying amount of the Company's short-term debt, revolving line of credit and long-term debt approximate fair value because the majority of the amounts outstanding accrue interest at variable rates.

The Company entered into an interest rate swap agreement to reduce its exposure to market risks from changing interest rates under the revolving credit agreement. Any differences paid or received on the interest rate swap agreements are recognized as adjustments to interest expense over the life of the swap, thereby adjusting the effective interest rate on the underlying obligation.

Reclassifications. Reclassifications were made to prior-year financial statements to conform to the current-year presentations.

Recent accounting pronouncements. The Company evaluated recent accounting pronouncements and do not expect them to have a material impact on the consolidated financial statements.

Note 3 - Retention

Retention receivable is the amount withheld by a customer until a contract is completed. Retention receivables of \$1.6 million and \$0.6 million were included in the balance of trade accounts receivable as of January 31, 2013 and 2012, respectively.

Retention payable is the amount withheld by the Company until a contract is completed. Retention payables of \$0.5 million and \$0.4 million were included in the balance of trade accounts payable as of January 31, 2013 and 2012, respectively.

Note 4 - Costs and estimated earnings on uncompleted contracts

	2012	2011
Costs incurred on uncompleted contracts	\$71,382	\$61,938
Estimated earnings	16,215	11,550
Earned revenue	87,597	73,488
Less billings to date	87,234	73,091
Costs in excess of billings, net	\$363	\$397
Balance sheet classification		
Costs and estimated earnings in excess of billings on uncompleted contracts	\$1,935	\$2,375
Billings in excess of costs and estimated earnings on uncompleted contracts	(1,572)	(1,978)
Costs in excess of billings, net	\$363	\$397

Note 5 - Debt

	2012	2011
Revolving line domestic	\$13,989	\$18,252
Mortgage notes	12,312	11,012
Revolving lines foreign	2,529	1,526
Term loans	10,608	4,797
Capitalized lease obligations (See Note 6 - Lease information)	2,584	1,831
Total debt	42,022	37,418
Less current maturities	5,419	2,736
Total long-term debt	\$36,603	\$34,682

The following table summarizes the Company's scheduled maturities at January 31,:

	Total	2014	2015	2016	2017	2018	Thereafter
Revolving line domestic	\$13,989	\$—	\$	\$—	\$13,989	\$	<u>\$—</u>
Mortgages	12,312	357	370	389	408	3,598	7,190
Revolving line foreign	2,529	1,726	_	_	_	_	803
Term loans	10,608	2,729	2,302	1,715	1,706	328	1,828
Capitalized lease obligations	2,584	607	593	616	630	138	_
Total	\$42,022	\$5,419	\$3,265	\$2,720	\$16,733	\$4,064	\$9,821

On July 11, 2002, the Company entered into a secured loan and security agreement with a financial institution ("Loan Agreement"). Under the terms of the Loan Agreement as amended, the Company can borrow up to \$38 million, subject to borrowing base and other requirements, under a revolving asset-based line of credit. The third amendment to the loan agreement executed March 15, 2013 extended the maturity date of the loan from November 30, 2013 to November 30, 2016. The Loan Agreement covenants restrict debt, liens, investments, do not permit

payment of dividends, and require attainment of levels of profitability and cash flows. At January 31, 2013, the Company was in compliance with all covenants under the Loan Agreement. Interest rates are based on options selected by the Company as follows: (a) a margin in effect plus a prime rate; or (b) a margin in effect plus the LIBOR rate for the corresponding interest period. At January 31, 2013, the prime rate was 3.25%, the LIBOR rate was 0.25%, and the margins added to the prime rate and the LIBOR rate, which are determined each quarter based on the applicable financial statement ratio, were 0.5 and 2.75 percentage points, respectively. Monthly interest payments were made during the years ended January 31, 2013 and 2012. As of January 31, 2013, the Company had borrowed \$14 million and had \$4.8 million available to it under the revolving line of credit. In addition, \$0.2 million of availability was used under the Loan Agreement primarily to support letters of credit to guarantee amounts committed for inventory purchases. The Loan Agreement provides that all domestic receipts are deposited in a bank account from which all funds may only be used to pay the debt under the Loan Agreement. At January 31, 2013, the amount of such restricted cash was \$0.1 million. Cash required for operations is provided by draw-downs on the line of credit.

Revolving lines foreign. The Company also has credit arrangements used by its Danish and Middle Eastern subsidiaries. These credit arrangements are in the form of overdraft facilities and project financing at rates competitive in the countries in which the Company operates. At January 31, 2013, borrowings under these credit arrangements totaled \$2.5 million; an additional \$2.9 million remained unused.

The Company guarantees the subsidiaries' debt including all foreign debt.

Mortgages. On June 19, 2012, Perma-Pipe, Inc. borrowed \$1.8 million under a mortgage note secured by its manufacturing facility in Lebanon, Tennessee. The proceeds were used for payment of amounts borrowed. The loan bears interest at 4.5% with monthly payments of \$13 thousand for both principal and interest and matures July 1, 2027. On June 19, 2022, and on the same day of each year thereafter, the interest rate shall adjust to the prime rate provided the applicable interest rate shall not adjust more than 2% per annum, and shall be subject to ceiling of 18% and a floor of 4.5%.

On March 27, 2012, the Company obtained a loan in the amount of 7,927,000 Danish Kroners ("DKK") (approximately \$1.4 million U.S. dollars at the prevailing exchange rate on transaction date) from a Danish bank under a mortgage note secured by its filtration products manufacturing facility in Denmark. The loan has an interest rate of 2.21%, monthly payments of approximately \$7.5 thousand for both principal and interest and matures March 2032.

On July 10, 2010, the Company obtained a loan in the amount of 4,649,000 DKK (approximately \$850 thousand U.S. dollars at the prevailing exchange rate on transaction date) from a Danish bank under a mortgage note secured by its industrial process cooling manufacturing facility in Denmark. The loan has an interest rate of 3.29%, quarterly payments of approximately \$16 thousand for both principal and interest and matures July 2030.

On March 4, 2008, the Company borrowed \$5.4 million million under a mortgage note secured by the filtration products manufacturing facility located in Bolingbrook, Illinois and matures March 2033. The 25 mortgage resets its interest rate every five years based on a published index. The initial interest rate is 6.54% with monthly payments of \$37 thousand for principal and interest combined.

On January 18, 2008, the Company borrowed \$3.7 million under a mortgage note secured by its manufacturing and office facility in Niles, Illinois. The loan bears interest at 6.26% with monthly payments of \$23 thousand for both principal and interest based on an amortization schedule of thirty years with a balloon payment at maturity in January 2018.

Term loans. On August 28, 2007, the Company amended and restated the Term Loan Note to \$3 million ("Term Loan"). Interest rates under the Term Loan are based on options selected by the Company as follows: (a) a margin in effect plus a prime rate; or (b) a margin in effect plus the LIBOR rate for the corresponding interest period. At January 31, 2013, the prime rate was 3.25%, the LIBOR rate was 0.375% and the margin added to the prime rate, which is determined each quarter based on the applicable financial statement ratio, was 0.75 percentage points. The

Company is scheduled to pay \$107 thousand of principal on the first days of March, June, and September, with the remaining unpaid principal payable on November 30, 2013. The third amendment to the loan agreement allows for an additional term loan of \$2.5 million less \$0.6 million, the amount outstanding on this loan, in 2013 subject to attaining certain performance levels. The weighted average interest rates based on this loan at January 31, 2013 and 2012, were 4.24% and 3.34%, respectively.

On December 10, 2012, the Company obtained a loan in the amount of 1,360,000 Euros (approximately \$1.8 million U.S. dollars at the prevailing exchange rate on transaction date) from a Danish bank by its filtration products manufacturing facility in Denmark. Interest rate at January 31, 2013 was 3.69%. The loan has a variable interest rate plus margin, quarterly payments of approximately \$108 thousand for both principal and interest and matures December 2017.

Between November 25, 2012 and year end the Company obtained a loan in the amount of 423 thousand Dirhams, approximately \$115 thousand U.S. dollars at the exchange rate prevailing on the transaction date. The loan bears interest at 3.39% with monthly payments of \$5 thousand for both principal and interest and matures between January and March of 2015.

On April 10, 2012, the Company obtained a loan from a U.A.E. bank to purchase equipment and office furniture for a building for the piping system's facility in Saudi Arabia, in the amount of 22.2 million Dirhams, approximately \$5.9 million U.S. dollars at the exchange rate prevailing on the transaction date. The loan bears interest at 5.5% with quarterly payments of approximately \$408 thousand for both principal and interest and matures April, 2017.

On May 14, 2010, Perma-Pipe, Inc. borrowed \$1 million under an equipment loan secured by equipment. The loan bears interest at 5.84% with monthly payments of \$24 thousand for both principal and interest and matures May 2014.

The Company purchased insurance on the lives of key executive officers. As beneficiary, the Company receives the cash surrender value if the policy is terminated and, upon death of the insured, receives all benefits payable. Cash surrender value of life insurance is reported in long term assets on the balance sheet. On April 27, 2010, the Company obtained a loan with no maturity date in the amount of \$2 million collateralized by the cash surrender value of the policies. The loans carry interest at a rate of 4.25% and require interest only payments annually. At January 31, 2013, the balance was \$1.8 million.

On April 8, 2003, the Company obtained a loan from a Danish bank to purchase equipment and office furniture for a building for the filtration products' facility in Denmark, in the amount of 700,000 Euros, approximately \$800 thousand U.S. dollars at the exchange rate prevailing on the transaction date. The loan bears interest at 6.1% with quarterly payments of \$9 thousand for both principal and interest and matures April 2014.

Capital leases. On January 31, 2012, Perma-Pipe, Inc. borrowed \$1.2 million under an equipment loan secured by equipment. The loan bears interest at 6.7% with monthly payments of \$24 thousand for both principal and interest and matures January 2017.

On July 1, 2011, filtration products' Denmark location obtained a capital lease in the amount of 2,180,827 DKK (approximately \$387 thousand U.S. dollars at the prevailing exchange rate on the transaction date) from a Danish bank to finance capital expenditures. The loan bears interest at a fixed rate of 6.37% per annum with monthly principal payments of \$6 thousand, and quarterly interest payments and matures June 2016.

Between 2009 and 2011, the Company obtained several capital leases totaling \$273 thousand to finance capital computer equipment. The interest rate for these capital leases range from 3.8% to 5.8% per annum with monthly principal and interest payments of \$9 thousand and matures between October 2013 and May 2014.

During 2011, piping systems obtained several capital leases totaling 3,129,000 Indian Rupees (approximately \$57 thousand U.S. dollars at the prevailing exchange rate on the transaction date) to finance vehicle equipment.

The interest rate for these capital leases range from 14.4% to 17.8% per annum with monthly principal and interest payments of \$2.5 thousand and mature in 2014.

On April 23, 2010, filtration products' Denmark location obtained a capital lease in the amount of 952,600 DKK (approximately \$170 thousand U.S. dollars at the prevailing exchange rate on the transaction date) from a Danish bank to finance capital expenditures. The loan bears interest at a fixed rate of 5% per annum with monthly principal payments of \$2.5 thousand, and quarterly interest payments and matures April 2015.

Note 6 - Lease information

Property under capitalized leases	2012	2011
Machinery and equipment	\$3,325	\$1,956
Transportation equipment	42	63
Computer equipment	92	208
Subtotal	3,459	2,227
Less accumulated amortization	546	241
Total	\$2,913	\$1,986
Fixed assets acquired under capital leases	\$569	\$917
Fixed assets acquired in previous years now under capital leases		\$845

The Company has several significant operating lease agreements as follows:

- Nine acres of land in the Kingdom of Saudi Arabia is leased through 2030 and an additional ten acres of land is leased through 2031.
- Land for production facilities in the U.A.E of approximately 80,200 square feet is leased until June 30, 2030.
 Office space and land for production facilities of approximately 37,700 square feet in the U.A.E. is leased until July 2032.
- Office space of approximately 12,000 square feet in Virginia is leased through July 31, 2013.

At January 31, 2013, future minimum annual rental commitments under non-cancelable lease obligations were as follows:

	Operating Leases	Capital Leases
2013	\$1,779	\$756
2014	1,428	703
2015	1,286	686
2016	1,247	659
2017	1,197	140
Thereafter	2,712	_
Subtotal	9,649	2,944
Less Amount representing interest		360
Future minimum lease payments	\$9,649	\$2,584

Rental expense for operating leases was \$2.1 million and \$2.5 million in 2012 and 2011, respectively.

Note 7 - Income taxes

(Loss) income before income taxes	2012	2011
Domestic	(\$5,273)	\$4,517
Foreign	(2,422)	(9,459)
Total	(\$7,695)	(\$4,942)
Components of income tax expense (benefit)		
Current		
Federal	(\$1,255)	\$183
Foreign	229	627
State and other	(33)	253
Subtotal	(1,059)	1,063
Deferred		
Federal	11,816	(880)
Foreign	413	(273)
State and other	(380)	107
Subtotal	11,849	(1,046)
Total	\$10,790	\$17

The excess tax benefit (expense) related to stock options recorded through equity and did not affect net loss was \$11 thousand benefit and \$6 thousand expense in 2012 and 2011, respectively. The amounts were recorded to additional paid-in capital on the consolidated balance sheets and in financing activities in 2012 and operating activities in 2011 on the consolidated statement of cash flows.

The determination of the consolidated provision for income taxes, deferred tax assets and liabilities, and the related valuation allowances requires management to make judgments and estimates. As a company with subsidiaries in foreign jurisdictions, the Company is required to calculate and provide for estimated income tax expense for each of the tax jurisdictions. The process of calculating income taxes involves estimating current tax obligations and exposures in each jurisdiction as well as making judgments regarding the future recoverability of deferred tax assets. Changes in the estimated level of annual pre-tax income, in tax laws, and resulting from tax audits can affect the overall ETR, which impacts the level of income tax expense and net income. Judgments and estimates related to the Company's projections and assumptions are inherently uncertain; therefore, actual results could differ materially from projections.

The ETR in 2012 was less than the statutory U.S. federal income tax rate, mainly due to the full valuation allowance of \$12.5 million recorded on the domestic deferred tax assets. The 2012 and 2011 ETRs have been impacted by the mix of the U.A.E. (loss) earnings versus total (loss) earnings because the U.A.E. is not subject to any local country income tax. The ETR in 2011 was less than the statutory U.S. federal income tax rate, primarily due to foreign losses and repatriation of foreign earnings. Another contributing factor for both years to the unusual ETR is the valuation allowance set up on the NOL in Saudi Arabia. The Company does not record a tax benefit for its start-up entities. This facility began production in 2012.

The difference between the provision for income taxes and the amount computed by applying the Federal ETR of 34% was as follows:

	2012	2011
Tax benefit at federal statutory rate	(\$2,616)	(\$1,690)
Domestic valuation allowance	11,464	_
Valuation allowance for state NOLs	1,066	52
Differences in foreign tax rate	842	1,429
Foreign tax credit	(67)	(1,300)
Research tax credit	(91)	(951)
Repatriation	_	1,810
Valuation allowance for foreign NOLs	613	559
Nontaxable income from the Canadian joint venture	(471)	(530)
State taxes, net of federal benefit	(216)	308
All other, net expense	266	330
Total	\$10,790	\$17

The Company has a Federal operating loss carryforward of \$12.4 million that will begin to expire in the year ending January 31, 2030.

The deferred tax asset, ("DTA") for state NOL carryforwards of \$1.1 million relates to amounts that expire at various times from 2013 to 2031. The amount that expired in 2012 is approximately \$14 thousand.

The Company has a DTA for foreign NOL carryforwards of \$1 million that can be carried forward indefinitely and does not have a valuation allowance recorded against it. The ultimate realization of this tax benefit is dependent upon the generation of sufficient operating income in the foreign tax jurisdictions. The Company has a DTA foreign NOL carryforwards of \$1.2 million for its start-up subsidiary in Saudi Arabia which has a full valuation allowance recorded against it.

The Company periodically reviews the adequacy of its valuation allowance in all of the tax jurisdictions in which it operates, evaluates future sources of taxable income and tax planning strategies and may make further adjustments based on management's outlook for continued profits in each jurisdiction

For the year ending January 31, 2013, the Company has determined that there is not greater than 50% likelihood that all of the domestic DTAs will be realized based on the available evidence. The Company recorded a full valuation allowance against the remaining domestic net DTAs as of January 31, 2013 net of uncertain tax positions ("UTP").

In the prior year and the first three quarters of the current period, the Company relied heavily on Subpart F income as a future source of taxable income to support their conclusion that the domestic deferred tax assets were more-likely-than-not realizable. During the fourth quarter, legislation was passed which extended the provisions of IRC 954(c)(6). Because of this, the Company will not have Subpart F income related to royalty payments and can no longer rely on Subpart F income as a future source of taxable income during the periods that IRC 954(c)(6) is in effect. Accordingly, the Company has recorded a full valuation allowance against the net domestic DTA discretely during the fourth quarter.

The Company has not provided for Federal tax on unremitted earnings of its international subsidiaries. The Company anticipates that unremitted earnings will be reinvested overseas to fund current working capital requirements and expansion in foreign markets. Accordingly, a provision for income tax expense in excess of foreign jurisdiction income tax requirements relative to such unremitted earnings has not been provided in the accompanying financial statements. A deferred tax asset of \$1.3 million was established in 2011 for U.S. foreign

tax credits attributed to repatriated foreign earnings. The excess foreign tax credits are subject to a ten-year carryforward and will expire in January 31, 2022.

As of January 31, 2013, the Company had undistributed earnings of foreign subsidiaries for which deferred taxes have not been provided. The Company intends and has the opportunities to reinvest these earnings for the foreseeable future outside the U.S. If these amounts were distributed to the U.S., in the form of dividends or otherwise, the Company would be subject to additional U.S. income taxes. Determination of the amount of unrecognized deferred income tax liabilities on these earnings is not practicable because such liability, if any, is dependent on circumstances existing if and when remittance occurs. The most significant foreign entity, which has undistributed earnings is Perma-Pipe Middle East, FZC in the U.A.E., where cumulative undistributed earnings as of January 31, 2013 were \$17 million.

Components of deferred income tax assets	2012	2011
U.S. Federal NOL carryforward	\$3,680	\$3,728
Non-qualified deferred compensation	2,092	1,968
Research tax credit	1,964	1,858
Foreign NOL carryforward	2,241	2,726
Foreign tax credit	1,297	1,300
Stock compensation	1,417	1,243
Other accruals not yet deducted	1,077	1,233
State NOL carryforward	1,066	921
Accrued commissions and incentives	837	691
Accrued pension	428	578
Inventory valuation allowance	306	300
Other	94	225
Inventory uniform capitalization	132	128
Deferred tax assets, gross	16,631	16,899
Valuation allowance	(14,180)	(1,934)
Total deferred tax assets, net of valuation allowances	\$2,451	\$14,965
Components of the deferred income tax liability		
Depreciation	\$1,041	\$1,733
Prepaid	340	319
Total deferred tax liabilities	\$1,381	\$2,052
Deferred tax asset, net	\$1,070	\$12,913
Balance sheet classification		
Current assets	\$0	\$1,946
Long-term assets	1,766	10,967
Current liabilities	\$696	\$0
Total deferred tax assets, net of valuation allowances	\$1,070	\$12,913

The following table summarizes UTP activity, excluding the related accrual for interest and penalties:

	2012	2011
Balance at beginning of the year	\$1,213	\$1,202
Increases (decreases) in positions taken in a prior period	30	(52)
Increases in positions taken in a current period	200	89
Decreases due to lapse of statute of limitations	(70)	(26)
Balance at end of the year	\$1,373	\$1,213

Included in the total UTP liability at January 31, 2013 were estimated accrued interest of \$81 thousand and penalties of \$66 thousand and at January 31, 2012, accrued interest and penalties were \$82 thousand each. These non-current income tax liabilities are recorded in other long-term liabilities in the consolidated balance sheet. The Company's policy is to include interest and penalties in income tax expense. At January 31, 2013, the Company did not anticipate any significant adjustments to its unrecognized tax benefits caused by the settlement of the ongoing tax examinations detailed above, or other factors, within the next twelve months. Included in the balance at January 31, 2013 were amounts offset by deferred taxes (i.e., temporary differences) or amounts that could be offset by refunds in other taxing jurisdictions (i.e., corollary adjustments). Thus, \$1.4 million of the amount accrued at January 31, 2013 would impact the ETR, if reversed.

The Company is subject to income taxes in the U.S. federal jurisdiction, and various states and foreign jurisdictions. Tax regulations within each jurisdiction are subject to the interpretation of the related tax laws and regulations and require significant judgment to apply. Tax years back to January 31, 2010 are open for federal and state tax purposes. In addition, federal and state tax years January 31, 2002 through January 31, 2009 are subject to adjustment on audit, up to the amount of research tax credit generated in those years.

The Company's management periodically estimates the probable tax obligations of the Company using historical experience in tax jurisdictions and informed judgments. There are inherent uncertainties related to the interpretation of tax regulations in the jurisdictions in which the Company transacts business. The judgments and estimates made at a point in time may change based on the outcome of tax audits, as well as changes to or further interpretations of regulations. If such changes take place, there is a risk that the tax rate may increase or decrease in any period. Tax accruals for tax liabilities related to potential changes in judgments and estimates for federal, foreign and state tax issues are included in current liabilities on the consolidated balance sheet.

Note 8 - Retirement plans

Pension plan

The Winchester filtration hourly rated employees are covered by a defined benefit plan. The benefits are based on fixed amounts multiplied by years of service of retired participants. The Company engages outside actuaries to calculate its obligations and costs. The funding policy is to contribute such amounts as are necessary to provide for benefits attributed to service to date and those expected to be earned in the future. The amounts contributed to the plan are sufficient to meet the minimum funding requirements set forth in the Employee Retirement Income Security Act of 1974. The Company may contribute additional amounts at its discretion.

Asset allocation

Plan assets	Market Value
Vanguard balanced index fund	\$5,554
Vanguard inflation protected fund	279
Fifth Third Banksafe Trust	106
Vanguard REIT index fund	126
Total at January 31, 2013	\$6,065

The plans hold no securities of MFRI, Inc. 100% of the assets are held for benefits under the plan. The fair value of the major categories of the pension plans' investments are presented below. The FASB has established a fair value hierarchy that distinguishes between (1) market participant assumptions developed based on market data obtained from independent sources (observable inputs) and (2) an entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances (unobservable inputs). The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets and liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described below:

<u>Level 1</u> - Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

<u>Level 2</u> - Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, including quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates); and inputs that are derived principally from or corroborated by observable market data by correlation or other means.

<u>Level 3</u> - Inputs that are both significant to the fair value measurement and unobservable.

Level 1 market value of plan assets	2012	2011
Equity securities	\$3,343	\$3,018
U.S. bond market	2,183	1,968
High-quality inflation-indexed bonds issued by the U.S. Treasury and government agencies as well as domestic corporations	279	268
Real estate securities	126	110
Subtotal	5,931	5,364
Level 2 significant other observable inputs		
Money market fund	134	138
Total	\$6,065	\$5,502

At January 31, 2013, plan assets were held 55% in mutual funds, 41% in bond funds, 2% in real estate securities and 2% in a money market fund. The target asset allocation was 95% to 100% mutual funds. The investment policy is to invest all funds not needed to pay benefits and investment expenses for the year, with target asset allocations of 60% equities (plus or minus 10%) and 40% fixed income (plus or minus 10%), diversified across a variety of sub-asset classes and investment styles, following a flexible asset allocation approach that will allow the plan to participate in market opportunities as they become available. The expected long-term rate of return on assets is based on historical long-term rates of equity and fixed income investments and the asset mix objective of the funds.

Investment market conditions in 2012 resulted in \$574 thousand actual return on plan assets as presented below, which increased the fair value of plan assets at year end. The Company did not change its 8% expected return on plan assets used in determining cost and benefit obligations, the return that the Company has assumed during every profitable and unprofitable investment year since 1991. The plan's investments are intended to earn long-term returns to fund long-term obligations, and investment portfolios with asset allocations similar to those of the plan's investment policy have attained such returns over several decades. Future contributions that may be necessary to maintain funding requirements are not expected to materially affect the Company's liquidity.

Accumulated benefits \$6,650 \$6,576 Accumulated benefits \$7,240 \$7,186 Change in benefit obligation \$7,240 \$7,186 Benefit obligation - beginning of year \$7,186 \$5,570 Service cost 171 126 Interest cost 299 313 Actuarial (gain) loss (113) 1,380 Benefits paid (303) (203) Benefits paid (303) 203 Actuarial gain on plan assets \$7,240 \$7,186 Change in plan assets 574 342 Company contributions 292 274 Actual gain on plan assets 574 342 Company contributions 292 274 Benefits paid (303) (203) Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status \$(1,175) \$(1,684) Chier lange sheet classification \$328 \$305 Prepaid expenses and other current assets \$32 \$32 Other long-term liabilit	Reconciliation of benefit obligations, plan assets and funded status of plan	2012	2011
Change in benefit obligation \$7,240 \$7,186 Benefit obligation - beginning of year \$7,186 \$5,570 Service cost 171 126 Interest cost 299 313 Actuarial (gain) loss (113) 1,380 Benefits paid (303) (203) Benefit obligation - end of year \$7,240 \$7,186 Change in plan assets Fair value of plan assets - beginning of year \$5,502 \$5,089 Actual gain on plan assets 574 342 Company contributions 292 274 Benefits paid (303) (203) Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status \$(1,175) \$(1,684) Balance sheet classification Prepaid expenses and other current assets \$328 \$305 Other long-term liabilities (2,807) (3,250) Net amount recognized in accumulated other comprehensive income Unrecognized actuarial loss \$2,206 \$2,623 Unamortized prior service cost	Accumulated benefit obligations		
Change in benefit obligation Benefit obligation - beginning of year \$7,186 \$5,570 Service cost 171 126 Interest cost 299 313 Interest cost (113) 1,380 Benefits paid (303) (203) Benefit obligation - end of year \$7,240 \$7,186 Change in plan assets Fair value of plan assets - beginning of year \$5,502 \$5,089 Actual gain on plan assets 574 342 Company contributions 292 274 Benefits paid (303) (203) Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status \$(1,175) \$(1,684) Description of plan assets - end of year \$(1,175) \$(1,684) Prepaid expenses and other current assets \$328 \$305 Other long-term liabilities (2,807) (3,250) Net amount recognized \$(1,175) \$(1,684) Amount recognized in accumulated other comprehensive income \$(Vested benefits	\$6,650	\$6,576
Benefit obligation - beginning of year \$7,186 \$5,570 Service cost 171 126 Interest cost 299 313 Actuarial (gain) loss (113) 1,380 Benefits paid (303) (203) Benefit obligation - end of year \$7,240 \$7,186 Change in plan assets Eair value of plan assets - beginning of year \$5,502 \$5,089 Actual gain on plan assets 574 342 Company contributions 292 274 Benefits paid (303) (203) Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status \$(1,175) \$(1,684) Balance sheet classification Prepaid expenses and other current assets \$328 \$305 Other long-term liabilities (2,807) (3,250) Net amount recognized \$(1,175) \$(1,684) Amounts recognized in accumulated other comprehensive income Unrecognized actuarial loss \$2,206 \$2,623 Una	Accumulated benefits	\$7,240	\$7,186
Service cost 171 126 Interest cost 299 313 Actuarial (gain) loss (113) 1,380 Benefits paid (303) (203) Benefit obligation - end of year \$7,240 \$7,186 Change in plan assets Fair value of plan assets - beginning of year \$5,502 \$5,089 Actual gain on plan assets 574 342 Company contributions 292 274 Benefits paid (303) (203) Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status \$(1,175) \$(1,684) Balance sheet classification Prepaid expenses and other current assets \$328 \$305 Other assets 1,304 1,261 Other long-term liabilities (2,807) (3,250) Net amount recognized in accumulated other comprehensive income \$2,206 \$2,623 Unrecognized actuarial loss \$2,206 \$2,623 Unamortized prior service cost 273 322	Change in benefit obligation		
Interest cost 299 313 Actuarial (gain) loss (113) 1,380 Benefits paid (303) (203) Benefit obligation - end of year \$7,240 \$7,186 Change in plan assets Fair value of plan assets - beginning of year \$5,502 \$5,089 Actual gain on plan assets 574 342 Company contributions 292 274 Benefits paid (303) (203) Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status \$(1,175) \$(1,684) Balance sheet classification Prepaid expenses and other current assets \$328 \$305 Other assets 1,304 1,261 Other long-term liabilities (2,807) (3,250) Net amount recognized \$(1,175) \$(1,684) Amounts recognized in accumulated other comprehensive income Unrecognized actuarial loss \$2,206 \$2,623 Unamortized prior service cost 273 322	Benefit obligation - beginning of year	\$7,186	\$5,570
Actuarial (gain) loss (113) 1,380 Benefits paid (303) (203) Benefit obligation - end of year \$7,240 \$7,186 Change in plan assets Fair value of plan assets - beginning of year \$5,502 \$5,089 Actual gain on plan assets 574 342 Company contributions 292 274 Benefits paid (303) (203) Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status \$(1,175) \$(1,684) Balance sheet classification Prepaid expenses and other current assets \$328 \$305 Other long-term liabilities (2,807) (3,250) Other long-term liabilities (2,807) (3,250) Net amount recognized \$(1,175) \$(1,684) Amounts recognized in accumulated other comprehensive income Unrecognized actuarial loss \$2,206 \$2,623 Unamortized prior service cost 273 322	Service cost	171	126
Benefits paid (303) (203) Benefit obligation - end of year \$7,240 \$7,186 Change in plan assets Fair value of plan assets - beginning of year \$5,502 \$5,089 Actual gain on plan assets 574 342 Company contributions 292 274 Benefits paid (303) (203) Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status \$(1,175) \$(1,684) Balance sheet classification Prepaid expenses and other current assets \$328 \$305 Other long-term liabilities (2,807) (3,250) Net amount recognized \$(1,175) \$(1,684) Amounts recognized in accumulated other comprehensive income Unrecognized actuarial loss \$2,206 \$2,623 Unamortized prior service cost 273 322	Interest cost	299	313
Change in plan assets \$7,240 \$7,186 Fair value of plan assets - beginning of year \$5,502 \$5,089 Actual gain on plan assets 574 342 Company contributions 292 274 Benefits paid (303) (203) Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status \$(1,175) \$(1,684) Balance sheet classification \$328 \$305 Other assets 1,304 1,261 Other long-term liabilities (2,807) (3,250) Net amount recognized \$(1,175) \$(1,684) Amounts recognized in accumulated other comprehensive income \$(2,206) \$2,623 Unrecognized actuarial loss \$2,206 \$2,623 Unamortized prior service cost 273 322	Actuarial (gain) loss	(113)	1,380
Change in plan assets Fair value of plan assets - beginning of year \$5,502 \$5,089 Actual gain on plan assets 574 342 Company contributions 292 274 Benefits paid (303) (203) Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status \$(1,175) \$(1,684) Balance sheet classification \$328 \$305 Other assets 1,304 1,261 Other long-term liabilities (2,807) (3,250) Net amount recognized \$(1,175) \$(1,684) Amounts recognized in accumulated other comprehensive income \$(2,206) \$2,623 Unrecognized actuarial loss \$2,206 \$2,623 Unamortized prior service cost 273 322	Benefits paid	(303)	(203)
Fair value of plan assets - beginning of year \$5,502 \$5,089 Actual gain on plan assets 574 342 Company contributions 292 274 Benefits paid (303) (203) Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status \$(1,175) \$(1,684) Balance sheet classification Prepaid expenses and other current assets \$328 \$305 Other assets 1,304 1,261 Other long-term liabilities (2,807) (3,250) Net amount recognized \$(1,175) \$(1,684) Amounts recognized in accumulated other comprehensive income \$2,206 \$2,623 Unamortized prior service cost 273 322	Benefit obligation - end of year	\$7,240	\$7,186
Actual gain on plan assets 574 342 Company contributions 292 274 Benefits paid (303) (203) Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status Balance sheet classification Prepaid expenses and other current assets \$328 \$305 Other assets 1,304 1,261 Other long-term liabilities (2,807) (3,250) Net amount recognized \$(1,175) \$(1,684) Amounts recognized in accumulated other comprehensive income \$2,206 \$2,623 Unrecognized actuarial loss \$2,206 \$2,623 Unamortized prior service cost 273 322	Change in plan assets		
Company contributions 292 274 Benefits paid (303) (203) Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status \$(1,175) \$(1,684) Balance sheet classification Prepaid expenses and other current assets \$328 \$305 Other assets 1,304 1,261 Other long-term liabilities (2,807) (3,250) Net amount recognized \$(1,175) \$(1,684) Amounts recognized in accumulated other comprehensive income Unrecognized actuarial loss \$2,206 \$2,623 Unamortized prior service cost 273 322	Fair value of plan assets - beginning of year	\$5,502	\$5,089
Benefits paid (303) (203) Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status \$(1,175) \$(1,684) Balance sheet classification Prepaid expenses and other current assets \$328 \$305 Other assets 1,304 1,261 Other long-term liabilities (2,807) (3,250) Net amount recognized \$(1,175) \$(1,684) Amounts recognized in accumulated other comprehensive income Unrecognized actuarial loss \$2,206 \$2,623 Unamortized prior service cost 273 322	Actual gain on plan assets	574	342
Fair value of plan assets - end of year \$6,065 \$5,502 Unfunded status \$(1,175) \$(1,684) Balance sheet classification Prepaid expenses and other current assets \$328 \$305 Other assets 1,304 1,261 Other long-term liabilities (2,807) (3,250) Net amount recognized \$(1,175) \$(1,684) Amounts recognized in accumulated other comprehensive income Unrecognized actuarial loss \$2,206 \$2,623 Unamortized prior service cost 273 322	Company contributions	292	274
Unfunded status\$(1,175)\$(1,684)Balance sheet classificationPrepaid expenses and other current assets\$328\$305Other assets1,3041,261Other long-term liabilities(2,807)(3,250)Net amount recognized\$(1,175)\$(1,684)Amounts recognized in accumulated other comprehensive incomeUnrecognized actuarial loss\$2,206\$2,623Unamortized prior service cost273322	Benefits paid	(303)	(203)
Balance sheet classificationPrepaid expenses and other current assets\$328\$305Other assets1,3041,261Other long-term liabilities(2,807)(3,250)Net amount recognized\$(1,175)\$(1,684)Amounts recognized in accumulated other comprehensive incomeUnrecognized actuarial loss\$2,206\$2,623Unamortized prior service cost273322	Fair value of plan assets - end of year	\$6,065	\$5,502
Prepaid expenses and other current assets Other assets Other long-term liabilities Other long-term liabilities Net amount recognized Amounts recognized in accumulated other comprehensive income Unrecognized actuarial loss Unamortized prior service cost \$328 \$305 \$305 \$(2,807) \$(3,250) \$(1,175) \$(1,684) \$(1,175) \$(1,684) \$2,206 \$2,623 \$2,206 \$2,623	Unfunded status	\$(1,175)	\$(1,684)
Other assets1,3041,261Other long-term liabilities(2,807)(3,250)Net amount recognized\$(1,175)\$(1,684)Amounts recognized in accumulated other comprehensive incomeUnrecognized actuarial loss\$2,206\$2,623Unamortized prior service cost273322	Balance sheet classification		
Other long-term liabilities(2,807)(3,250)Net amount recognized\$(1,175)\$(1,684)Amounts recognized in accumulated other comprehensive incomeUnrecognized actuarial loss\$2,206\$2,623Unamortized prior service cost273322	Prepaid expenses and other current assets	\$328	\$305
Net amount recognized \$\(\)(1,175) \$\(\)(1,684)\$ Amounts recognized in accumulated other comprehensive income Unrecognized actuarial loss \$2,206 \$2,623 Unamortized prior service cost \$273 322	Other assets	1,304	1,261
Amounts recognized in accumulated other comprehensive income Unrecognized actuarial loss \$2,206 \$2,623 Unamortized prior service cost 273 322	Other long-term liabilities	(2,807)	(3,250)
Unrecognized actuarial loss\$2,206\$2,623Unamortized prior service cost273322	Net amount recognized	\$(1,175)	\$(1,684)
Unamortized prior service cost 273 322	Amounts recognized in accumulated other comprehensive income		
·	Unrecognized actuarial loss	\$2,206	\$2,623
Net amount recognized \$2,479 \$2,945	Unamortized prior service cost	273	322
	Net amount recognized	\$2,479	\$2,945

The amount of unamortized prior service cost and net loss to be amortized in the year ended January 31, 2014 is \$50 thousand.

Weighted-average assumptions used to determine net cost and benefit obligations	2012	2011
End of year benefit obligation	4.00%	4.25%
Service cost discount rate	4.25%	5.78%
Expected return on plan assets	8.00%	8.00%
Rate of compensation increase	N/A	N/A

The discount rate was based on a Citigroup pension discount curve of high quality fixed income investments with cash flows matching the plans' expected benefit payments. The Company determines the expected long-term rate of return on plan assets by performing a detailed analysis of historical and expected returns based on the strategic asset allocation approved by the Board of Directors and the underlying return fundamentals of each asset class. The Company's historical experience with the pension fund asset performance is also considered.

Components of net periodic benefit cost	2012	2011
Service cost	\$171	\$126
Interest cost	299	313
Expected return on plan assets	(444)	(405)
Amortization of prior service cost	50	127
Recognized actuarial loss	173	62
Net periodic benefit cost	\$249	\$223
Amounts recognized in other comprehensive income		
Actuarial gain (loss) on obligation	\$113	\$(1,380)
Actual gain (loss) on plan assets	303	(1)
Reclassify prior service cost	50	127
Total in other comprehensive income (loss)	\$466	\$(1,254)
Cash flows		
Expected employer contributions for 2013 [fiscal year ending 1/31/2014]		\$300
Expected employee contributions for 2013 [fiscal year ending 1/31/2014]		_
Estimated future benefit payments reflecting expected future service for the fiscal year(s) ending January 31,:		
2014		328
2015		337
2016		351
2017		356
2018		380
2019 - 2023		\$1,989

401(k) plan

The domestic employees of the Company participate in the MFRI, Inc. Employee Savings and Protection Plan, which is applicable to all employees except employees covered by collective bargaining agreement benefits. The plan allows employee pretax payroll contributions of up to 16% of total compensation. The Company matches 50% of each participant's contribution, up to a maximum of 3% of each participant's salary.

Contributions to the 401(k) plan were \$560 thousand and \$558 thousand for the years ended January 31, 2013 and 2012, respectively.

Deferred compensation plan

The Company has deferred compensation agreements with key employees. Vesting is based on years of service. Life insurance contracts have been purchased which may be used to fund the Company's obligation under these agreements. Participants receive distributions from the plan at the later of age 65 or six months after termination of employment. Distributions can be lump sum or annual payments over a specified number of years based on elections made when the participant enters the plan.

Multi-employer plans

The Company contributes to a multi-employer plan for certain collective bargaining U.S. employees and for foreign employees according to their countries requirements. The risks of participating in this multi-employer plan are different from a single employer plan in the following aspects:

• Assets contributed to the multi-employer plans by one employer may be used to provide benefits to employees of other participating employers.

- If a participating employer ceases contributing to the plan, the unfunded obligations of the plan may be inherited by the remaining participating employers.
- If the Company chooses to stop participating in the multi-employer plan, the Company may be required to pay those plans an amount based on the underfunded status of the plan, referred to as a withdrawal liability.

The Company has assessed and determined that the multi-employer plans to which it contributes are not significant to the Company's consolidated financial statements. The Company does not expect to incur a withdrawal liability or expect to significantly increase its contribution over the remainder of the contract period. The Company made contributions to the bargaining unit supported multi-employer pension plans resulting in expense of approximately \$1.9 million and \$2.6 million for the years ended January 31, 2013 and 2012, respectively.

Note 9 - Stock options

Under the 2004 Stock Option Plan ("Option Plan"), 250,000 shares of common stock are reserved for issuance to employees of the Company and its affiliates as well as advisors and consultants to the Company. In addition, under the Option Plan, the number of shares that may be issued shall be increased by an additional two percent of the aggregate number of shares of Common Stock outstanding as of the last day of the most recently completed fiscal year of the Company, beginning January 31, 2005. Option exercise prices will be no less than fair market value for the common stock on the date of grant. The options granted under the Option Plan may be either non-qualified options or incentive options.

Under the 2009 Independent Directors' Stock Option Plan, 100,000 shares of common stock are reserved for issuance to Directors of the Company. In addition, the number of shares that may be issued shall be increased May 1, 2010 and each May 1 thereafter until May 1, 2019, pursuant to the terms of this Plan by the number equal to 0.35% of the aggregate number of shares of common stock outstanding as of the last day of the most recently ended fiscal year of the Company. Pursuant to the 2009 Independent Directors' Stock Option Plan, an option to purchase 10,000 shares of common stock is granted automatically to each director who is not an employee of the Company (an "Independent Director") on the date the individual is first elected as an Independent Director. An option to purchase 1,000 shares was granted to each Independent Director acting on June 23, 2009, and options to purchase 1,000 shares are granted to each Independent Director upon each date such Independent Director is re-elected as an Independent Director, commencing with the Company's annual meeting for the year 2009.

Such options vest ratably over four years and are exercisable for up to ten years from the date of grant. To cover the exercise of vested options, the Company issues new shares from its authorized but unissued share pool. The Company calculates all stock compensation expense based on the grant date fair value of the option and recognizes expense on a straight-line basis over the four-year vesting period of the option.

The fair value of each option award was estimated on the date of grant using the Black-Scholes Merton option-pricing model that used the assumptions noted in the following table. The principal variable assumptions utilized in valuing options and the methodology for estimating such model inputs include:

- 1. risk-free interest rate an estimate based on the "Market yield on U.S. Treasury securities at the rate for the period described in assumption 3 below, quoted on investment basis" for the end of week closest to the stock option grant date, from the Federal Reserve website;
- 2. expected volatility an estimate based on the historical volatility of MFRI Common Stock's weekly closing stock price for the period 1/1/93 to the date of grant; and
- 3. expected life of the option an estimate based on historical experience including the effect of employee terminations.

		2012	2011
1.	Risk-free interest rate	.74%-3.57%	1.54%-5.13%
2.	Expected volatility	53.90%-66.82%	51.72%-66.82%
3.	Expected life in years	4.9 to 5.7	4.9 to 5.7
4.	Dividend yield	_	_

The following summarizes the activity related to options outstanding under the plans for the years ended January 31, 2012 and 2013:

	Options	Weighted average exercise price	Weighted average remaining contractual term	Aggregate intrinsic value
Outstanding at January 31, 2011	777	\$11.88	6.9	\$2,241
Granted	155	7.68		
Exercised	(61)	3.42		240
Expired or forfeited	(28)	19.29		
Outstanding at January 31, 2012	843	11.48	6.9	430
Options exercisable at January 31, 2012	470	\$14.37	5.7	217
Granted	173	6.78		
Exercised	(11)	3.10		46
Expired or forfeited	(36)	10.47		
Outstanding at January 31, 2013	969	10.77	6.6	40
Options exercisable at January 31, 2013	586	\$13.30	5.3	\$37

The weighted average fair value of options granted, net of options surrendered, during 2012 and 2011 are estimated at \$3.31 and \$3.84, per share, respectively, on the date of grant.

Unvested options outstanding	Options	Weighted-average grant date fair value	
Outstanding at beginning of year	373	\$7.84	\$212
Granted	173	6.78	
Vested	(152)		
Expired or forfeited	(11)	7.06	
Outstanding at end of year	383	\$6.91	\$4

Based on historical experience the Company expects 85% of these options to vest.

As of January 31, 2013, there was \$1 million of unrecognized compensation cost related to unvested stock options granted under the plans. That cost is expected to be recognized over the weighted-average period of 2.5 years. The stock-based compensation expense for the years ended January 31, 2013 and 2012 was \$0.5 million and \$0.6 million, respectively.

Note 10 - Stock rights

On September 15, 2009, the Company entered into the Amendment ("Amendment") to Rights Agreement dated as of September 15, 1999. Among other things, the Amendment extends the term of the Rights Agreement until September 15, 2019 and amends definitions to include positions in derivative instruments related to the Company's common stock as constituting beneficial ownership of such stock.

On September 15, 1999, the Company's Board of Directors declared a dividend of one common stock purchase right (a "Right") for each share of MFRI's common stock outstanding at the close of business on September 22, 1999. The stock issued after September 22, 1999 and before the redemption or expiration of the Rights is also entitled to one Right for each such additional share. Each Right entitles the registered holders, under certain circumstances, to purchase from the Company one share of MFRI's common stock at \$25, subject to adjustment. At no time will the Rights have any voting power.

The Rights may not be exercised until 10 days after a person or group acquires 15% or more of the Company's common stock, or announces a tender offer that, if consummated, would result in 15% or more ownership of the Company's common stock. Separate Rights certificates will not be issued and the Rights will not be traded separately from the stock until then. Should an acquirer become the beneficial owner of 15% or more of the Company's common stock, Rights holders other than the acquirer would have the right to buy common stock in MFRI, or in the surviving enterprise if MFRI is acquired, having a value of two times the exercise price then in effect. Also, MFRI's Board of Directors may exchange the Rights (other than those of the acquirer which will have become void), in whole or in part, at an exchange ratio of one share of MFRI common stock (and/or other securities, cash or other assets having equal value) per Right subject to adjustment. The Rights described in this paragraph and the preceding paragraph shall not apply to an acquisition, merger or consolidation approved by the Company's Board of Directors.

The Rights will expire on September 15, 2019, unless exchanged or redeemed prior to that date. The redemption price is \$0.01 per Right. MFRI's Board of Directors may redeem the Rights by a majority vote at any time prior to the 20th day following public announcement that a person or group has acquired 15% of MFRI's common stock. Under certain circumstances, the decision to redeem requires the concurrence of a majority of the independent directors.

Note 11 - Interest expense, net

Interest income	2012	2011
	,327	\$2,165
Interest expense not	(511)	(728)
Interest expense, net	,816	\$1,437

Note 12 - Fair value of financial instruments

At January 31, 2013, interest rate swap agreements were in effect with a notional value of \$9 million that matures November 30, 2013 and a value of \$1.3 million that matures December 2021. The swap agreements, which reduces the exposure to market risks from changing interest rates, exchanges the variable rate to fixed interest rate payments of 2.23% plus LIBOR margin and 2.47%, respectively. The exchange-traded swaps are valued on a recurring basis using quoted market prices and classified within Level 2 of the fair value hierarchy because the exchange is not deemed to be an active market. The derivative mark to market of \$219 thousand was classified as a long-term liability on the balance sheet.

Note 13 - Subsequent events

Sale of assets. Subsequent to the year-end, on April 26, 2013, the Company announced the signing of a definitive agreement to sell most of the domestic assets of its subsidiary Thermal Care, Inc. to a subsidiary of IPEG, Inc. The transaction closed April 30, 2013. Industrial process cooling designs, manufactures and sells industrial process cooling, including chillers, cooling towers, plant circulating systems, and related accessories for use in industrial process applications.

Upon closing the Company transferred the applicable assets, liabilities and employees of the business to a subsidiary of IPEG, Inc. The acquiring company has signed a leased for the current office space and production facilities Thermal Care currently occupies. The Company estimates that the taxable gain will be approximately

\$11.6 million and based on that estimate approximately \$3 million of the valuation allowance recorded on the domestic DTAs will be reversed and taken into income in the first quarter of 2013.

Disposition of Thermal Care, Inc. will enable MFRI, Inc. to focus on its two principal segments: piping systems and filtration products. The Company included Thermal Care, Inc. in its consolidated results of the industrial processing cooling segment in continuing operations as of January 31, 2013 since the decision to sell the assets occurred after that time. In future periods industrial process cooling will be reported as a discontinued operation.

Bank amendments. The third amendment to the loan agreement executed March 15, 2013 extended the maturity date of the loan from November 30, 2013 to November 30, 2016. The fixed charge coverage ratio covenant beginning February 1, 2013 will be calculated on a domestic consolidated basis instead of a world-wide consolidated basis. The fourth amendment to the loan agreement executed April 25,2013 changed the excess availability required for the periods ended February and March 31, 2013 and approved the sale of Thermal Care assets.

Schedule II

MFRI, INC. AND SUBSIDIARIES VALUATION AND QUALIFYING ACCOUNTS For the Years Ended January 31, 2013 and 2012

	Balance at beginning of period	Charged to costs and expenses	Deductions from reserves (1)	Charged to other accounts (2)	Balance at end of period
Year Ended January 31, 2013 Allowance for possible losses in collection of trade receivables	\$235	\$181	\$81	\$17	\$352
Year Ended January 31, 2012 Allowance for possible losses in collection of trade receivables	\$346	\$63	\$20	\$ (154)	\$235

⁽¹⁾ Uncollectible accounts charged off

⁽²⁾ Primarily related to recoveries from accounts previously charged off and currency translation

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

MFRI, INC.

Date:	May 2, 2013	/s/ Bradley E. Mautner
		Bradley E. Mautner
		Director and Chief Executive Officer
		(Principal Executive 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 and in the capacities and on the date indicated.

BRADLEY E. MAUTNER*	Director and Chief Executive Officer (Principal Executive Officer))
KARL J. SCHMIDT*	Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)) May 2, 2013
DAVID UNGER*	Director and Chairman of the Board of Directors)
DENNIS KESSLER*	Director)
ARNOLD F. BROOKSTONE*	Director)
EUGENE MILLER*	Director)
STEPHEN B. SCHWARTZ*	Director)
MICHAEL J. GADE*	Director)
MARK A. ZORKO*	Director)
DAVID S. BARRIE*	Director)
*By: /s/ Bradley E. Mautner Bradley E. Mautner	_ Individually and as Attorney in Fact	

EXHIBIT INDEX

Exhibit No.	Description
3(i)	Certificate of Incorporation of MFRI, Inc. [Incorporated by reference to Exhibit 3.3 to Registration Statement No. 33-70298]
3(ii)	By-Laws of MFRI, Inc. amended and restated [Incorporated by reference to Exhibit 3.1 filed on July 27, 2009]
0.004	Specimen Common Stock Certificate [Incorporated by reference to Exhibit 4 to Registration Statement No. 33-70794]
4(a)	2010 Rights Agreement as amended [Incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed on September 17, 2009]
10(b)	1994 Stock Option Plan [Incorporated by reference to Exhibit 10(c) to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 1994]
10(c)	2001 Independent Directors Stock Option Plan, as amended [Incorporated by reference to Exhibit 10(d)(5) to the Company's Schedule filed on May 25, 2001]
10(d)	Form of Directors Indemnification Agreement Certificate [Incorporated by reference to Exhibit 10.1 to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2006 filed on May 15, 2006]
10(e)	MFRI 2004 Stock Incentive Plan [Incorporated by reference to Exhibit 10(e) to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2004]
10(f)	Second Amended and Restated Loan and Security Agreement between the Company and Bank of America dated December 15, 2006 [Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 20, 2006]
10(g)	Code of Conduct [Incorporated by reference to Exhibit 14 of the Company's Annual Report on Form 10-K/A for the fiscal year ended January 31, 2004]
10(i)	Employment agreement with Fati Elgendy dated February 1, 2007 [Incorporated by reference to DEF14A Schedule filed on May 29, 2008]
10(j)	2009 Non-Employee Directors Stock Option Plan [Incorporated by reference to Exhibit 10(k) to the Company's Annual Report on Form 10-K for the fiscal year ended January 31, 2010]
10(k)	Deferred Stock Purchase Plan [Incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Forms S-8 File No. 333-186055, effective January 16, 2013]
10(l)*	Fourth Amendment to Second Amended and Restated Loan and Security Agreement dated April 25, 2013
21*	Subsidiaries of MFRI, Inc.
23*	Consent of Independent Registered Public Accounting Firm - Grant Thornton LLP
24*	Power of Attorney executed by directors and officers of the Company
31*	Rule 13a - 14(a)/15d - 14(a) Certifications (1) Chief Executive Officer certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (2) Chief Financial Officer certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32*	Section 1350 Certifications (1) Chief Executive Officer certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (2) Chief Financial Officer certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS*	XBRL Instance
101.SCH*	XBRL Taxonomy Extension Schema
101.CAL*	XBRL Taxonomy Extension Calculation
101.DEF*	XBRL Taxonomy Extension Definition
101.LAB*	XBRL Taxonomy Extension Labels
101.PRE*	XBRL Taxonomy Extension Presentation

^{*}Filed herewith

Officers & Directors

David Unger

Chairman of the Board MFRI, Inc.

Timothy P. Murphy

Vice President – Human Resources MFRI, Inc.

Michael J. Gade Independent Director

Executive-in-Residence University of North Texas Founding Partner of the Challance Group, LLP Bradley E. Mautner

Director, President and Chief Executive Officer MFRI, Inc.

Dennis Kessler Lead Independent Director

President, Kessler Management Consulting and Former Co-President of Fel-Pro Inc.

Eugene Miller Independent Director

Executive-in-Residence and Adjunct Professor Florida Atlantic University

Filtration Products

Midwesco Filter Resources, Inc.

André Radley Grundahl

Sales and Business Development

Group Vice President of Operations

Midwesco Filter Resources, Inc.

Midwesco Filter Resources, Inc.

Dhananjay Maslekar

Stephen C. Buck

Group Vice President of

Karl J. Schmidt

Vice President and Chief Financial Officer MFRI, Inc.

David S. Barrie Independent Director

Principal of Barrie International, LLC

Stephen B. Schwartz Independent Director

Retired Senior Vice President IBM Corporation

Michael D. Bennett

Vice President Secretary and Treasurer MFRI, Inc.

Arnold F. Brookstone Independent Director

Retired Chief Financial & Planning Officer Smurfit-Stone Corporation

Mark A. Zorko Independent Director

Former Chief Financial Officer Steel Excel. Inc.

Piping Systems

Fati A. Elgendy

President
Perma-Pipe, Inc.

John Carusiello

Vice President Perma-Pipe, Inc.

Robert A. Maffei

Vice President Perma-Pipe, Inc.

Brian Pollack

Vice President Perma-Pipe, Inc.

Avin Gidwani

President PPME, PPSA, PPIL Other

Kim Lauridsen

Managing Director BOE-THERM A/S

Edward A. Crylen

President

Midwesco Mechanical and Energy, Inc.

Transfer/Rights Agent

Continental Stock Transfer & Trust Company 17 Battery Place New York, NY 10004

Independent Registered Public Accountants

Grant Thornton LLP 175 West Jackson Blvd. Chicago, IL 60604-2615

Annual Meeting

The Annual Meeting of Stockholders of MFRI, Inc. will be held at 10:00 a.m., Thursday, June 20, 2013 at:

Hilton Rosemont Chicago O'Hare 5550 North River Road Rosemont, Illinois 60018





Corporate Headquarters

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Phone: 847-966-1000 Fax: 847-966-8563 Web: www.mfri.com

Offices & Manufacturing Facilities

PERMA-PIPE

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Business Offices 7720 North Lehigh Avenue Niles, Illinois 60714

Phone: 847-966-2235 www.permapipe.com

Perma-Pipe, Inc.

Manufacturing Plants 1310 Quarles Drive Lebanon, Tennessee 37087 Phone: 615-444-4910

Perma-Pipe, Oil & Gas

5008-11 Curtis Lane New Iberia, Louisiana 70560 Phone: 337-560-9116

Perma-Pipe Middle East FZC

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Perma-Pipe India Ltd.

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Dammam Industrial City – 2 Al Madinah Al Munawarah Road Dammam, Kingdom of Saudi Arabia

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385 Battaile Drive Winchester, Virginia 22601 Phone: 540-667-8500 www.midwescofilter.com

TDC Filter Manufacturing, Inc.

2 Territorial Court Bolingbrook, Illinois 60440 Phone: 630-410-6200 www.tdcfilter.com

Nordic Air Filtration A/S

Bergenvej 1 DK-4900 Nakskov, Denmark Phone: 45-5495-1390 www.nordic-air-filtration.dk



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