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# 1988 IVACO INC. ANNUAL REPORT



# IVACO





## OFFICERS

ISIN IVANIER  
Chairman

PAUL IVANIER  
President and  
Chief Executive Officer

SYDNEY IVANIER  
Senior Vice-President

MICHAEL HERLING  
Senior Vice-President  
and Secretary

JOHN LOVERIDGE  
Vice-President

M.R. CAIRNS  
Vice-President

ALBERT A. KASSAB  
Vice-President and  
Chief Financial Officer

GEORGE GOLDSTEIN  
Vice-President

Ivaco is one of North America's largest steel producers with steelmaking and rolling capacity in excess of 2 million tons. Steel is produced in modern electric furnace "midi" mills in Ontario, Georgia and Illinois and incorporates sophisticated alloy steels and a comprehensive range of carbon steels. The Company produces billets, hot rolled wire rods, hot rolled bars, strip and pipe. It is also a major manufacturer of steel products such as wire, welded wire fabric, fencing, nails, fasteners, wire ropes, high carbon prestressed strand, forgings and precision machined components.

Ivaco is also a substantial producer of plastic, concrete and iron pipe; paper machine clothing; coppermetals and other products. It fabricates and erects steel structures in both Canada and the U.S.

Ivaco has 70 plants of which 43 are in Canada, 26 in the U.S. and 1 in Australia. It employs 12,000 people.

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## HEAD OFFICE

Place Mercantile  
770, rue Sherbrooke ouest  
Montréal (Québec) Canada H3A 1G1  
(514) 288-4545

## TRANSFER AGENT AND REGISTRAR

The Royal Trust Company in Montréal, Toronto, Calgary, Winnipeg, Regina, Vancouver and Halifax.

## SHARES LISTED

The Montréal Exchange  
The Toronto Stock Exchange

## ANNUAL MEETING

The annual meeting of the Company will be held on May 25, 1989 at 11:00 a.m. in the Oval Room of the Ritz-Carlton Hotel, Montréal, Québec.

Pour recevoir un exemplaire de la version française de ce rapport, veuillez écrire à Ivaco Inc., Place Mercantile, 770, rue Sherbrooke ouest, Montréal (Québec) Canada H3A 1G1.

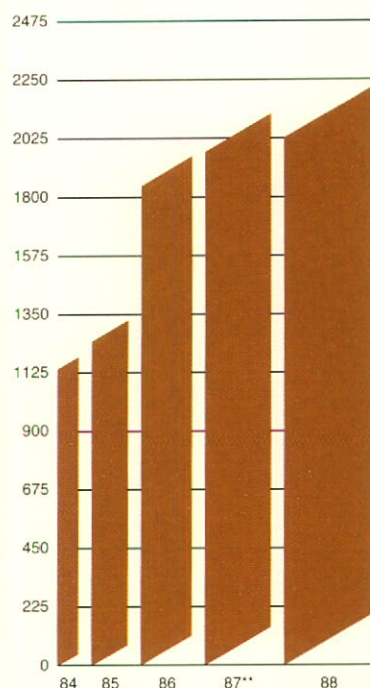
## FINANCIAL HIGHLIGHTS

THOUSANDS OF DOLLARS EXCEPT PER SHARE AMOUNTS

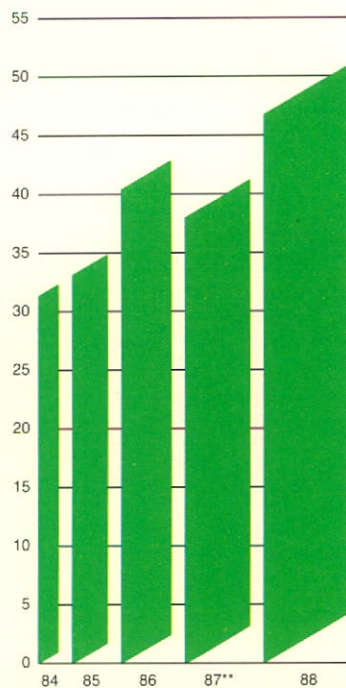
	1988	1987*
Sales	<b>\$2,238,346</b>	\$2,127,827
Earnings from operations	<b>\$ 166,369</b>	\$ 144,474
Earnings from continuing operations before income taxes and other items	<b>\$ 102,848</b>	\$ 91,478
Earnings from continuing operations	<b>\$ 51,513</b>	\$ 41,524
Earnings before extraordinary items	<b>\$ 43,793</b>	\$ 38,351
Net earnings	<b>\$ 41,916</b>	\$ 33,337
Earnings per share		
From continuing operations	<b>\$ 1.55</b>	\$ 1.00
Before extraordinary items	<b>\$ 1.13</b>	\$ 0.83
After extraordinary items	<b>\$ 1.03</b>	\$ 0.55
Working capital	<b>\$ 508,455</b>	\$ 474,150
Net additions to fixed assets	<b>\$ 89,772</b>	\$ 88,477

\*1987 results have been restated to reflect discontinued operations.

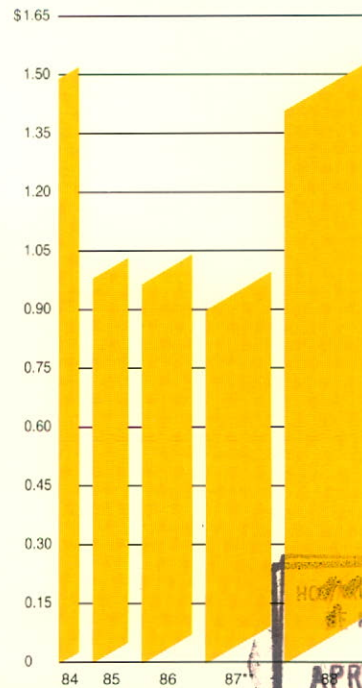
**SALES**  
(millions of dollars)



**EARNINGS (from continuing operations)**  
(millions of dollars)



**EARNINGS PER SHARE\***  
(from continuing operations)



\* AFTER DEDUCTING DIVIDENDS ON PREFERRED SHARES.  
\*\* 1987 RESULTS HAVE BEEN RESTATED TO REFLECT DISCONTINUED OPERATIONS.







*Isin Ivanier  
Chairman*

March 15, 1989

Ivaco achieved improved results in 1988 despite the significantly adverse effects of the stronger Canadian dollar which reduced after tax earnings by \$18 million or 98 cents per share.

It is encouraging to report that sales reached new records at \$2.24 billion and that earnings from continuing operations were a highly satisfactory \$51.5 million compared with \$41.5 million for the same operations in the previous year. What is most encouraging is that the 1988 reported earnings from continuing operations were the highest in the Company's history.

It was a good year for the steel industry in both Canada and the United States, particularly for highly efficient producers like Ivaco. Production was at or near rated capacity throughout the year at each of the



*Paul Ivanier  
President and Chief Executive Officer*

Company's steelmaking and rolling mill complexes. In addition, marked progress continued to be made within a long standing program to maintain productivity at state-of-the-art levels and extending the product mix to higher quality standards.

This program is given major attention at Ivaco, not only in the steel mills but throughout the downstream product manufacturers as well. By way of example, expenditures for net additions to fixed assets in 1988 were \$89.8 million. This investment was directed predominantly to modernization as well as upgrading of productivity and is part of a disciplined and sustained strategy to maintain Ivaco's status as one of the lowest cost producers in each of its major fields of manufacturing.



Amongst the notable additions to productive assets were the installation of ladle metallurgy furnaces at Ivaco Rolling Mills and Atlantic Steel; oxy-fuel burners at Laclede; extension of computer assisted defect detectors in the rolling mill at L'Original; addition of very sophisticated wire drawing by the Sivaco Wire Group; expansion of heat treating at the fastener plants and the installation of a new high speed boltmaker; and commissioning of what is believed to be the world's largest loom to manufacture wet felts for paper machines.

As announced last year, Atlantic Steel has made substantial progress in preparing for the consolidation of its steelmaking into a world class facility at Cartersville, Georgia. When completed in early 1990, this state-of-the-art facility will consist of two electric arc furnaces, one of which is an ultra-high power eccentric bottom tapping furnace; an advanced design ladle metallurgy furnace; and two side by side continuous casting lines, one having six strands and the other four strands. These and other production facility upgrades will result in substantial economies of scale and enhancement of product quality including extended capacity for the production of special quality and alloy steels.

Subsequent to the end of the year, a decision was made to rationalize production of three facilities within the Sivaco Wire Group, referred to in the past as the Canadian Wire Group. The manufacturing operations of Lundy Steel and Virginia Wire and Fabric together with some of the equipment of Sivaco Ontario will be relocated to enlarged facilities at Marieville and Chambly, Québec and Tonawanda, New York later this year. Ivaco will produce about 15% more tons of product from the three enlarged facilities than it produced from the six plants prior to the move. The relocation will result in significant cost savings from higher productivity and economies of scale and it is expected to increase earnings substantially. The estimated costs for the relocation have been

recognized in the 1988 financial statements as an extraordinary item.

During the year Canron Inc. disposed of a surplus land holding and booked a substantial extraordinary gain. This transaction has reminded a number of people that several of Ivaco's operating units are located in or near major urban centers and that land values in these areas have escalated dramatically in recent years beyond the industrial property norm. The two most notable examples are Atlantic Steel's Atlanta works, which covers approximately 125 acres close to that city's revitalized urban core, and approximately 40 acres occupied by ArrowHead Metals in Toronto.

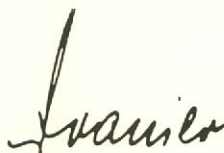
It is comforting to know that their value as prime development real estate is very substantial while their recorded value on the books is a negligible amount.

We were saddened during the year by the passing of Edward J. Buell, Sr. a long time director of Ivaco. He is sadly missed.

In closing, the Company wishes to acknowledge with appreciation the fine contribution made by its 12,000 employees during the year.

The outlook for 1989 is for continued strong performance for production and shipments. However, earnings are being adversely affected by today's high scrap prices and by the high level of the Canadian dollar. As a result, first quarter earnings will not reach the levels attained in 1988.

On behalf of the Board of Directors:



Isin Ivanier  
Chairman



Paul Ivanier  
President and  
Chief Executive Officer





Isin Ivanier  
Chairman of the  
Company



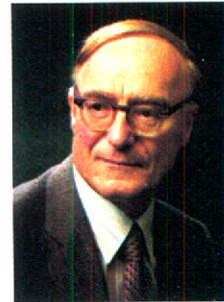
Paul Ivanier  
President and  
Chief Executive  
Officer of the  
Company



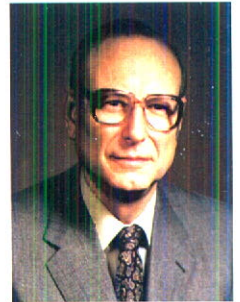
Sydney Ivanier  
Senior  
Vice-President of  
the Company



Michael Herling  
Senior  
Vice-President and  
Secretary of the  
Company



John Loveridge  
Chairman,  
Ingersoll Machine  
and Tool Company,  
Limited



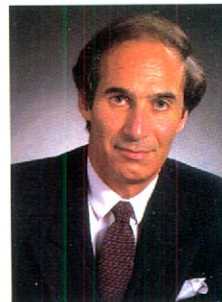
Donald G. Lawson  
Chairman,  
Moss, Lawson &  
Co. Limited



H.B. McNally, Q.C.  
Partner,  
Byers Casgrain



M.R. Cairns  
President,  
Niagara Lockport  
Industries Inc.



Albert A. Kassab  
Vice-President and  
Chief Financial  
Officer of  
the Company

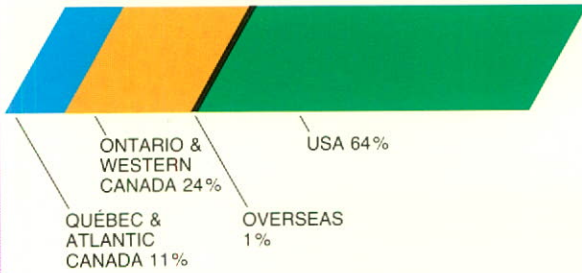


George Goldstein  
Vice-President of  
the Company

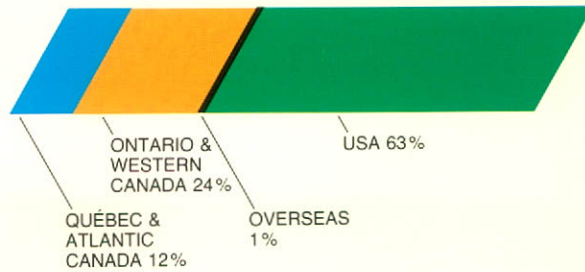


SALES DISTRIBUTION

1988

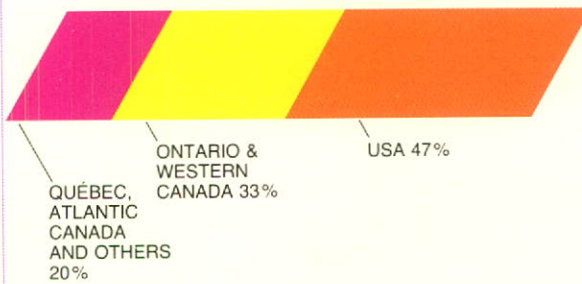


1987

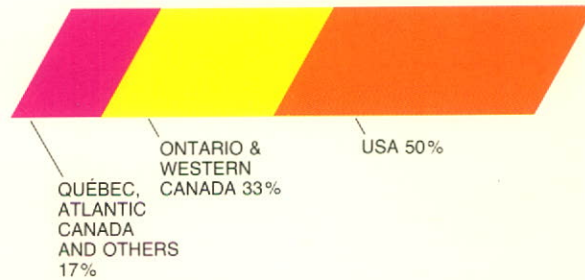


FIXED ASSETS DISTRIBUTION

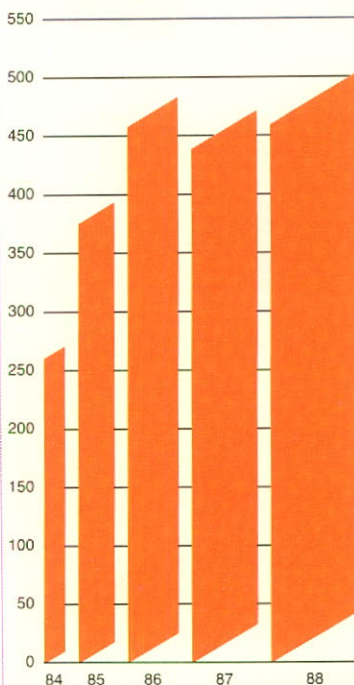
1988



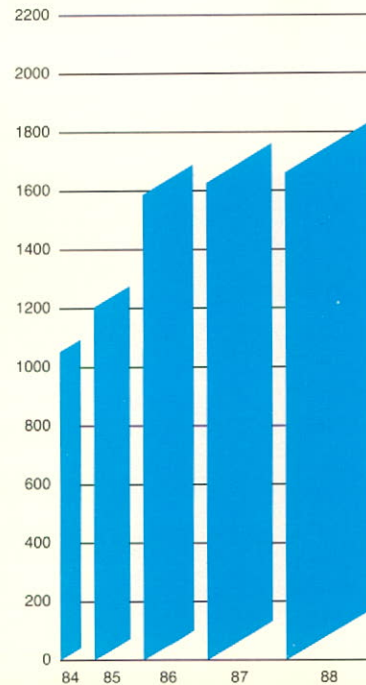
1987



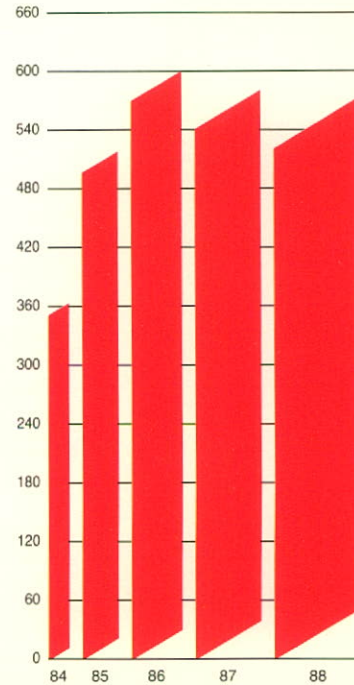
WORKING CAPITAL  
(millions of dollars)



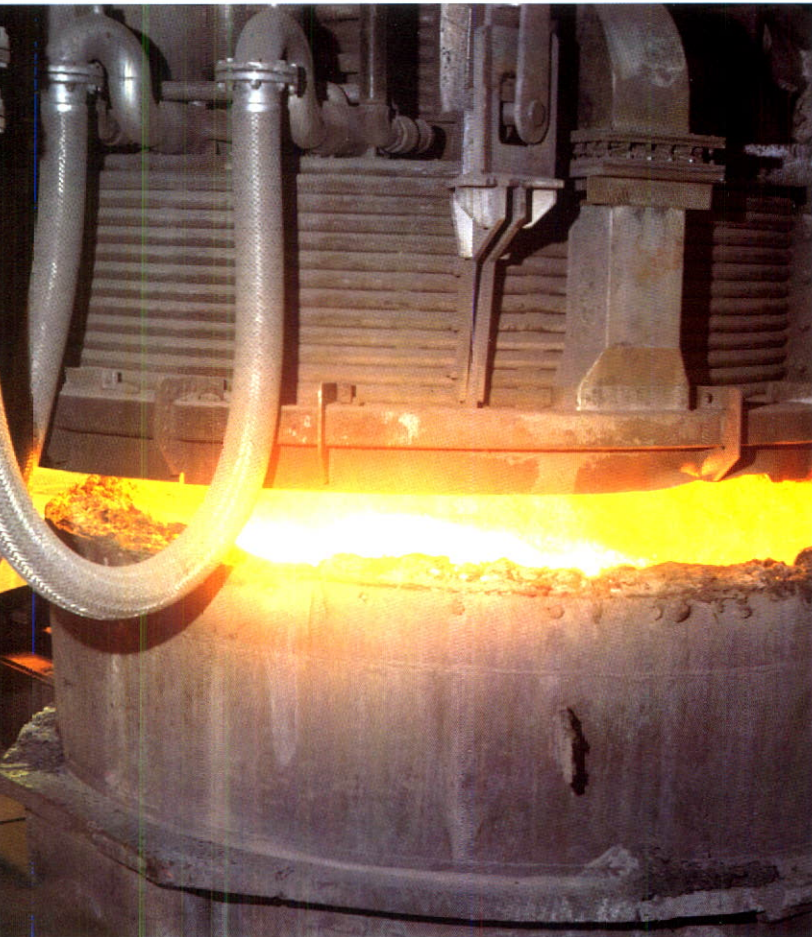
TOTAL ASSETS  
(millions of dollars)



SHAREHOLDERS' EQUITY  
(millions of dollars)







*The roof of this ladle metallurgy furnace at Cartersville, Georgia swings into place to finish a heat of steel.*

### **THE STEELMAKING GROUP**

It was a year of excellent progress for the steelmaking and rolling mill operations. Production increased; markets remained more stable than they have been for several years; and throughput efficiencies and other cost cutting benefits continued to flow from the Company's capital spending in recent years to improve productivity.

Ivaco's more than 2 million tons of steelmaking and rolling capacity continued to receive substantial investment during

the year. This achieved some moderate capacity increase and more importantly, it sustained the continuing program to produce higher volumes of quality assured, more sophisticated and higher margin steels.

The Company remains North America's largest producer of hot rolled wire rods.

Ivaco has three steelmaking operations and all utilize high performance electric furnaces and all have sophisticated rolling mills. Production in Canada occurs at Ivaco Rolling Mills, L'Original, Ontario. It is undertaken in the U.S. by Atlantic Steel, in Georgia, and 51%-owned Laclede Steel in Alton, Illinois. Approximately 80% of the Company's two million tons of steel is produced by the continuous cast method.

### **Ivaco Rolling Mills**

Ivaco Rolling Mills at L'Original is an extremely efficient unit which achieves high levels of productivity by specializing in one type of product: hot rolled wire rods which is the principal raw material for a host of downstream steel products.

The melt shop has two advanced-technology electric furnaces, a recently commissioned ladle furnace and is 100% continuous cast. It produces low, medium and high carbon as well as low alloy steels to exacting quality specifications.

Significant progress was made during the year for the production of increased tonnage of billets. These billets must meet precise criteria for quality, and major attention was given to the continued enhancement of quality control operations.

Product quality is also a function of basic production technology and three major improvements were put into place during 1988:

- Submerged tapping was installed on both furnaces to minimize slag carry-over during tapping;





*Molten steel is tapped from a furnace into a ladle at L'Original.*



- A new tundish make-up facility was put in place to improve the reliability of auxiliary equipment to the continuous caster;
- An advanced design ladle metallurgy furnace was installed which allows for improved quality steel products and also shortens tap to tap time for the melt furnaces, thus improving productivity.

Other productivity and capacity enhancements were achieved through replacement of the furnace shells with larger diameter shells and the commissioning of a ladle crane scale which makes it possible to produce constant and maximum heat sizes.

In addition to the broad quality ranges available from the steel produced on site, the rolling mill has been designed with substantial additional capacity to run special grades of purchased billets. During 1988, Ivaco Rolling Mills consumed more than 200,000 tons of Q.I.T. billets produced from high purity pig iron and their performance was excellent. These billets are available through a long term purchase agreement with Q.I.T. Inc., of Sorel, Québec.

The rolling mill operates two strands simultaneously and is equipped with no-twist finishing, controlled cooling and a fully automated compacting system which ensures delivery of tight, neat coils to customers.

During the year just past, installation of an on-line automated rod surface defect detector was completed. This commitment to quality is continuing through three major plant improvements which will come on stream in 1989. One is the addition of the first rod mill installation in North America of ORBIS gauges which will monitor the rod profile at the exit of both finishing mills and will result in wire rod which meets tight size and profile tolerances. The second is an automated tracking and recording system which will automatically record operating data from the time a billet is charged into

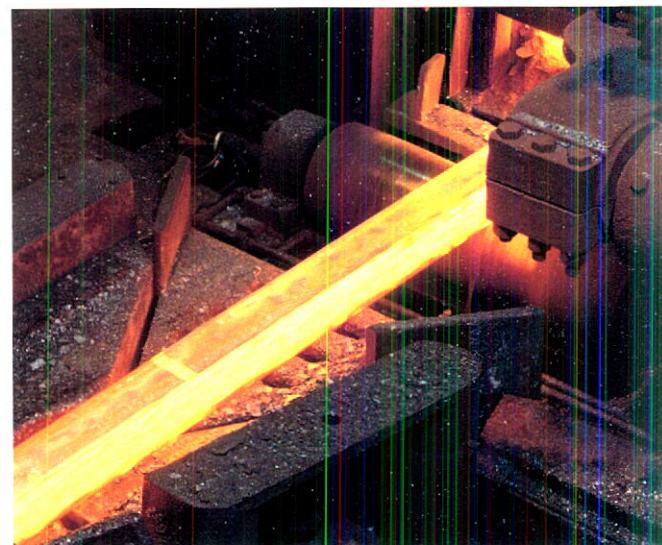
the reheat furnace to the time it reaches the storage yard as wire rod in coil form. This computer controlled system will record quality factors from start to finish and will be a major benefit to customers. The third major quality-oriented improvement is the addition of computerized controls for the reheat furnace which will optimize billet temperatures based on the grade being rolled and on mill operating conditions.

### Atlantic Steel

Atlantic Steel set production records in both of its electric furnace melt shops and all three of its rolling mills in 1988. Shipments were also at record levels, and the proportion of higher quality steels in the product mix continued to increase.

In late 1988, Atlantic's new ladle furnace began operation in the Cartersville, Georgia steelmaking facility. The ladle furnace uses state-of-the-art technology. It has a short payback period and will not only enhance productivity and product quality but also will reduce consumption for significant items in the steelmaking process such as electrical energy, electrodes and alloy additives.

To enhance the quality of steel going to the ladle furnace, Atlantic installed a rapid



*Steel billet leaving the reheat furnace to be rolled into wire rod at L'Original.*



back-tilt system on its Cartersville melting furnace. This system reduces slag carryover during tapping and thus significantly improves quality and reduces cost.

During the year Atlantic Steel continued to develop its quality enhancement program for special chemistry steels.

Construction also continued in Cartersville to prepare for installation of a new ultra-high power eccentric bottom tapping furnace in late 1989. This program includes the revamp, upgrade and relocation of the Atlanta continuous caster to Cartersville. By early 1990, Atlantic Steel will complete the consolidation of its steelmaking operations into a single world-class facility in Cartersville that will afford further improvements in both cost reduction and product quality.

The project will cost some U.S.\$25 million and will have a relatively short payback. It will involve minimum downtime and result in considerable improvements for the production of special quality and alloy steels.

Atlantic Steel has placed emphasis in recent years on expanding its markets for special and high quality steels and opening new markets for high carbon hot rolled wire rods. Major advances in both areas were achieved during the past year.

Testing was completed during the year to establish the feasibility of using the special quality Q.I.T. supplied billets for critical special bar quality applications. The preliminary indications are positive and additional work is planned so that the Company can reinforce its position as a significant supplier of these steels within the more demanding quality ranges.

The market for high carbon rods has also been penetrated successfully. This is one of the most demanding markets known to steelmakers and to date several manufacturers of tire bead, P.C. Strand, spring wire, and high tensile galvanized wire, have become regular Atlantic Steel customers.



*Finished pipe is readied for shipment by Laclede.*

The move to increase the proportion of output to higher and more complex grades of steel will be continued at a gradual but consistent pace throughout the coming year.

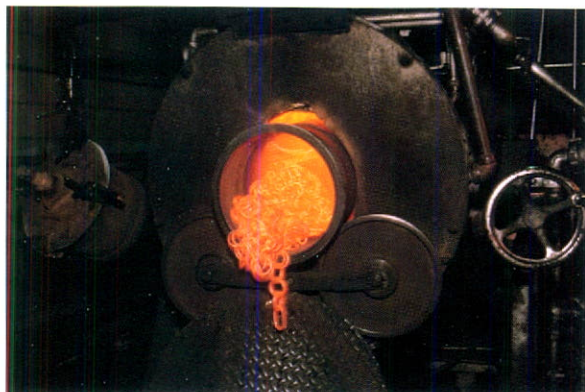
#### **Laclede Steel**

Laclede Steel is a major producer of carbon and alloy steel utilizing two high capacity electric furnaces at Alton, Illinois.

It is a major manufacturer of continuous weld pipe, hot rolled alloy and special quality bars and hot rolled wire rods. It is North America's largest manufacturer of oil tempered spring wire and is a major producer of wire and chain products.

1988 was an excellent year for Laclede. Tonnage produced reached new records, and earnings were the second highest in its history. This not only reflected some improvement in market conditions but also resulted from several years of consistent attention to the upgrading of productivity, investment in cost cutting procedures and emphasis on value added product.





*Concluding a heat treating cycle at Laclede Chain.*

During the year Laclede acquired a pipe finishing facility at Benwood, West Virginia which not only relieved a production bottleneck at Alton but also established an important presence in eastern U.S. markets. The facility at Benwood achieved anticipated shipping levels very rapidly and serious consideration is being given to extend the product line.

At Alton, the electric furnaces were upgraded by the addition of oxy-fuel burners which increased steelmaking capacity. Studies were begun to assess other steps which would increase capacity. Preliminary indications suggest that a meaningful increase in steelmaking capacity can be achieved at a relatively modest cost.

In addition to its finished products such as wire, hot rolled bars, and pipe which are produced at Alton, Laclede has three other businesses which make finished steel products.

Laclede Chain, acquired in 1984, is a large chain producer with its plant at Maryville, Missouri. It makes a full line of hardware and industrial chain, tire chain and chain accessories. Substantial additions to product capacity were put into place in 1987 and 1988, and among the important additions to the product lines are transport and alloy-chain.

Late last year, Laclede acquired La Grand Chain, a major chain distributor which serves the logging and other large markets in the U.S. Northwest.

Laclede Mid America adds to the Company's position as a major producer of oil tempered spring wire. It has a highly efficient manufacturing facility at Fremont, Indiana and it set new production records in 1988.

Presidents Island Steel & Wire of Memphis, Tennessee, produces both high and low carbon products. The addition of two heat treating furnaces is expected to help the Company develop new markets in the important specialty cold heading quality wire business. The new furnaces are now in operation and functioning very well.

The overall outlook for the Steelmaking Group is for continued successful growth in 1989.

#### **WIRE, WIRE PRODUCTS AND NAILS**

Ivaco's wire, wire products and nail manufacturing operations are strategically located to cover the entire Eastern Seaboard and the central industrialized heartland of North America. They are substantial consumers of hot rolled wire rods and important suppliers of all major wire and wire based products within their extensive coverage area.

Operations are conducted by several Ivaco units. These include:

- The Sivaco Wire Group, (referred to in the past as the Canadian Wire Group) with facilities in Québec, Nova Scotia, Ontario and New York State;
- National Wire, which has plants in Maryland, Georgia, Florida, Ohio and Alabama;
- Atlantic Steel in Georgia;
- Laclede Steel with facilities in Illinois, Indiana and Tennessee.

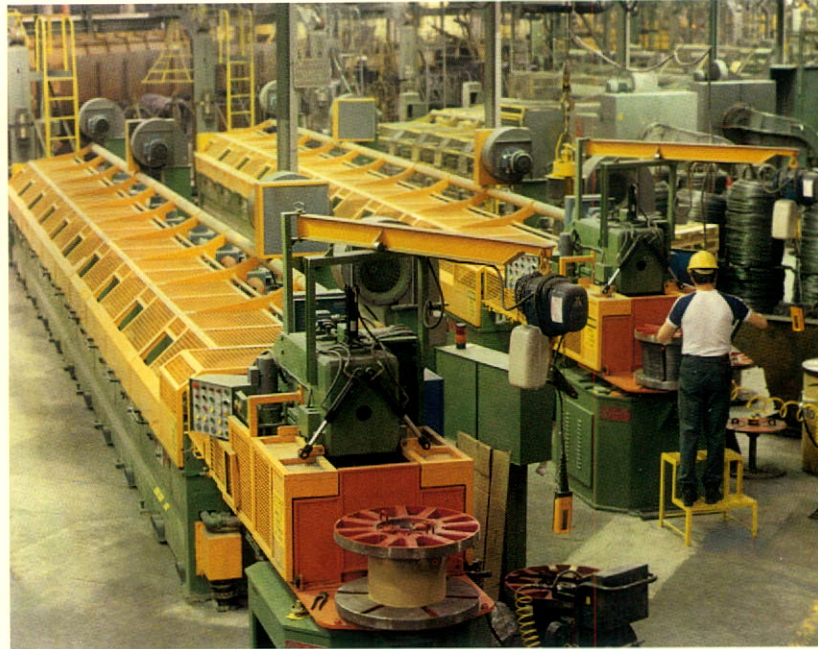


The Company offers one of the most comprehensive product mixes of any producer in the U.S. and Canada. It incorporates a vast array of sizes, grades and finishes, for both wire and nails, and to illustrate market share, it is the continent's largest producer of oil tempered spring wire, welded wire fabric and nails in addition to being one of the most substantial suppliers of low and high carbon wire, fencing and wire masonry products.

Ivaco places great emphasis on quality, service and volume, all of which positively affect its competitive abilities. In addition, major attention is given to continuous broadening of product lines to include penetration of the most quality demanding market niches such as cold heading wire in low, medium and high carbon chemistries, roping wire, products annealed to precise specifications, and galvanizing to required zinc coating weight.

A high standard of customer service is one of the Company's competitive advantages. It is an industry leader in product availability and it is able to respond rapidly for large orders requiring special chemistry steels or other specific customer requirements.

As the year progressed, it became apparent to the Sivaco Wire Group that conditions called for the rationalization of manu-



*Two ultra modern 10-hole wire drawing systems at the Sivaco Wire Group's Marievalle, Québec plant.*

facturing into fewer high productivity, large scale units. Subsequent to year end, plans were completed to relocate production from three plants to three other existing facilities and expansions were initiated at Marievalle and Chambly. The net result will be a 15% increase in tonnage capacity from the three enlarged facilities, compared with capacity at the six plants prior to the move, in addition to significant cost reduction benefits. At Chambly, a major expansion is underway especially to add capacity for production of collated nails and to incorporate fencing products.

On the technical front, a number of innovative steps were taken. Investment remained substantial to improve productivity and for the attainment of even higher standards for product quality and reliability. One notable addition to capacity was the installation at Marievalle, Québec, of two 10-hole wire drawing systems. These units reduce the wire rods through 10 successive reduction dies at very high speed without intermediate processing and put out an exceptionally high quality wire.



*Producing high quality wire at Newnan, Georgia.*



National Wire expanded its presence in the field of masonry products by acquiring a Birmingham, Alabama company, now called National Wire Products Industries of Birmingham, Inc. This acquisition opens attractive new market potential in the Southeast and, in addition, fills out National Wire's masonry products to full line status.

The wire operations are expected to show improved operating results for 1989.

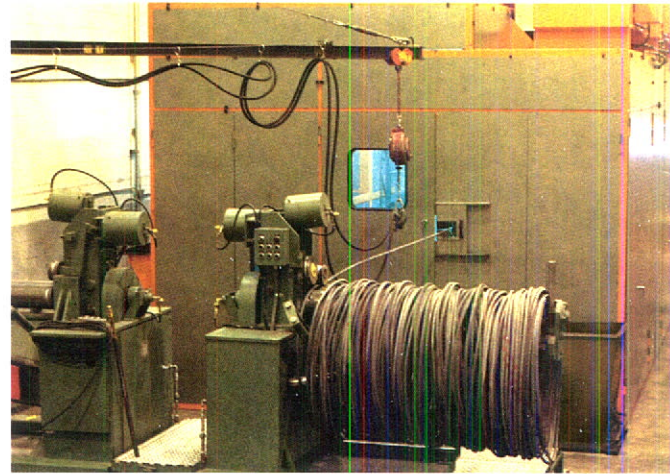
### **FASTENERS**

Ivaco is one of the world's largest manufacturers of cold forged standard fasteners and, in addition, is a major producer of up-market specialty fasteners for such technically demanding consumers as the automotive, transport and industrial machinery industries.

1988 was a satisfactory year despite pressure on margins which resulted from the strengthening of the Canadian dollar and the acceleration of competitive activities by other producers in the U.S. and elsewhere.

The Infasco plant at Marievalle, Québec, expanded its production facilities substantially during the year while, at the same time, focusing investment on resources to stress quality, productivity, customer service and the environment. Among the improvements were:

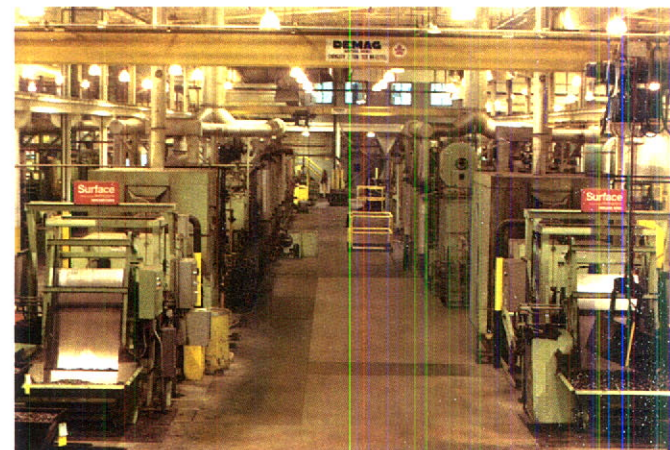
- Installation of a new high speed boltmaker built to the highest current technological standards;
- Completion and start up of a new facility for the chemical descaling of wire rods;
- Addition of new annealing furnaces and computer controlled heat treating furnaces to produce the more sophisticated specialized fastener products;



*One of Infasco's large size boltmakers, enclosed for environmental protection.*

- Streamlining of warehousing and expansion of automated packing equipment to achieve increased capacity for just-in-time deliveries;
- Addition of environmental control features to reduce noise levels and provide cleaner air.

Galvano, located in Beloeil, Québec, provides zinc and phosphate coatings to fasteners. It has recently expanded output with the addition of an advanced zinc barrel plating line. The new system features high productivity based on fully automated process control technology. Because the system



*Automated heat treating furnaces at Infasco's Marievalle, Québec plant.*



is computer assisted, it has the flexibility to run different sizes of fasteners at the same time without compromising the quality and uniformity of plating.

At Ingersoll Fasteners, Ingersoll, Ontario, the Company concentrates on specialty fasteners for especially demanding market niches. Some 90% of the Ingersoll output utilizes alloy or medium carbon steels and a substantial portion of production is shipped directly to the assembly lines of North America's major auto manufacturers.

Ingersoll Fasteners has increased its tonnage of product shipped in each of the recent years and 1988 was no exception. Throughput of very high grade, high quality specialty fasteners increased by more than 20% in the year.

The outlook for the Fastener Group for the coming year is for continued high production and growing market share in the face of severe pricing competition.

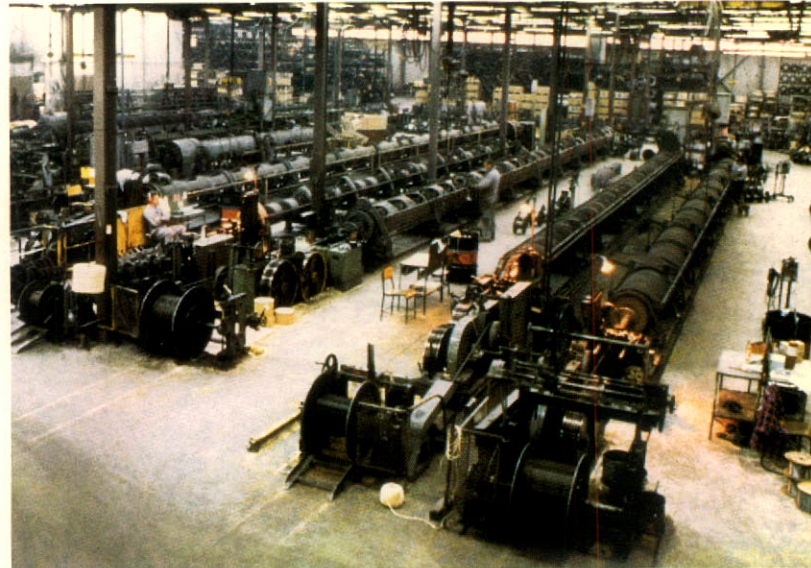
#### **WIRE ROPES, CABLES AND STRAND**

Ivaco has built an important position in recent years in the technically sophisticated field of products manufactured from high carbon wire rods. It is a leading producer in both Canada and the U.S. and the Group reported an excellent year in 1988.

Wrights Canadian Ropes has an efficient and productive wire rope manufacturing facility in Richmond, B.C. This plant, which is in the process of expansion, manufactures wire ropes, cables, and strand for the logging, marine, mining and construction industries.

Wrights has an enviable reputation across the country for product quality and service. Part of its expansion includes the installation of state-of-the-art equipment and facilities. This will enable Wrights to continue its process of penetrating new markets in North America.

Demand for its products in both western Canada and the northwest U.S. re-



*Part of Wrights Canadian Ropes production facility at Richmond, B.C.*

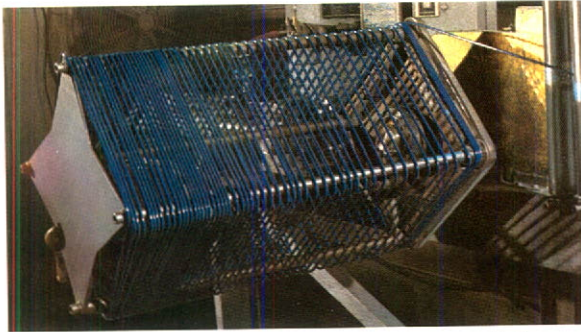
mained generally strong in 1988. In the eastern areas of Canada, Wrights' high standards of quality and customer service have enabled it to take full advantage of the buoyant economy, particularly in Québec.

Wrights' development and marketing of 'swaged' wire rope has played a major role in its successful market penetration in both eastern and western markets of Canada and the U.S.

Wire ropes are stranded at high speed. They utilize fine wire which is drawn from wire rods made from special chemistry steels. The product must meet exacting standards for quality and reliability and Wrights has achieved substantial market share gains in recent years because of its very high quality standards and for its productivity in the plant, combined with excellent engineering and other services.

Florida Wire and Cable enjoyed outstanding performance in 1988. Production of pre-stressed concrete strand, guy strand and related products reached record levels.





*One of Florida Wire and Cable's successful new products: epoxy coated steel square spirals.*

The Company is the largest manufacturer of high carbon steel strand for prestressed concrete in the U.S. in addition to being the country's largest producer of guy strand for the utility industry.

During the year, construction activity for roads, bridges, and other concrete structures which utilize strand continued at a very high level. Similarly, rapid growth was experienced by the utility industry which is a large consumer of guy strand and poleline accessories. These are manufactured or distributed by Florida Wire and Cable.

To service the Company's rapidly growing market share for guy strand, production at the Amerstrand Division at Oakland City, Indiana, was doubled during the year. The utility industry has responded positively to the recent creation of FWC Supply Division and its separate distribution center for poleline hardware. Among the products now being manufactured in-house to service this sector are utility grips, aluminum armour rods, cross member bracing and specialty tendons of PC Strand for utility poles. A comprehensive line of other products required to service the industry is acquired from other sources and warehoused for rapid delivery to customers.

The Company's relatively new and proprietary epoxy coated strand and accessory products, such as reinforced round and

square spirals, have gained solid market acceptance. These corrosion resistant products have significant appeal in seaboard regions and also for such specialized structures as parking garages.

Florida Wire and Cable's 50% owned Amercord Inc. is one of the leading producers of tire cord and tire bead used in the manufacture of auto and truck tires. In 1988, the worldwide shortage of high carbon steel tire cord resulted in excellent sales for Amercord. It completed the first of a three phase expansion program during the year by expanding its capacity substantially to make high tensile products. The second phase, underway this year, calls for the addition of rod preparation and wire finishing equipment to support a 15% capacity increase.

Tire cord and tire bead are made from fine filaments of precise quality high carbon steel wire which are plated with brass or bronze and then twisted.

Tire makers around the world are moving steadily toward the use of larger proportions of high tensile product and Amercord is strategically positioned to deliver this premium priced, premium quality material.

The outlook for the Wire Ropes, Cables and Strand Group is for excellent results in 1989.

#### **PAPER MACHINE CLOTHING**

Demand for paper remained strong worldwide during 1988 and Ivaco's paper machine clothing operations had an excellent year.

Paper machine clothing is one of the most important products utilized in the papermaking process. There are three basic types: forming fabrics on which the fibers are laid down initially, wet felts which transport the sheet through the press section, and dryer fabrics which carry the





*Niagara Lockport's 30 meter loom can weave wet felts for the world's largest paper machines.*

sheet through the dryers to the end of the production process. All require precise engineering for each individual paper machine.

Niagara Lockport is one of the principal suppliers of these customized products in North America and in several major paper-making countries worldwide. It has five plants, three in Canada and two in the United States.

All of Niagara Lockport's production facilities were engaged in vigorous expansion programs during the year and this expansion will be continued throughout 1989. At present, all plants are operating at capacity and Niagara Lockport is on schedule for the completion of major new capacity to coincide with significant new paper mill expansions.

Paper manufacturers will put some 20 new high speed paper machines into production in Canada and the United States in the foreseeable future and Niagara Lockport has built an enviable reputation as the clothing supplier of choice for new machine startups. This represents a major opportunity for the Company because Niagara Lock-

port is a leader in the application of new technologies to optimize the quality of output and productivity of its customers. In addition to engineering innovation, it has an extremely active statistical process control program in place at each plant and this has been instrumental in Niagara Lockport being recognized as a premier supplier of paper machine clothing.

Three of the Company's most significant innovations during the past year were in the production of wet felts.

One was the commissioning of a 30 meter loom, believed to be the world's largest, which can produce felts for the largest press positions in operation. The felts made on this loom, located at Starkville, Mississippi, are particularly well suited for use in the tissue segment of the paper industry. Tissue positions are traditionally the most demanding applications in papermaking and run at speeds up to 7,000 feet per minute.

Another major product introduced last year was a wet felt which can be seamed on the paper machine. This new technology is



a significant improvement over the traditional endless felt because it allows faster installation, is safer to install, and permits the use of heavier felts which deliver greater water handling capability.

The third new Niagara Lockport advance for wet felts is greatly improved technology for those paper machines utilizing an extended or long nip press. Niagara Lockport's engineered press felt eliminates or reduces imperfections in the paper sheet at the point (nip) where the rolls meet during water extraction.

In the field of forming fabrics, one of the most demanding of paper machine clothing applications, Niagara Lockport's emphasis on engineering, quality and service resulted in market share gain during the year.

The outlook for 1989 is for another excellent year for the Paper Machine Clothing Group.

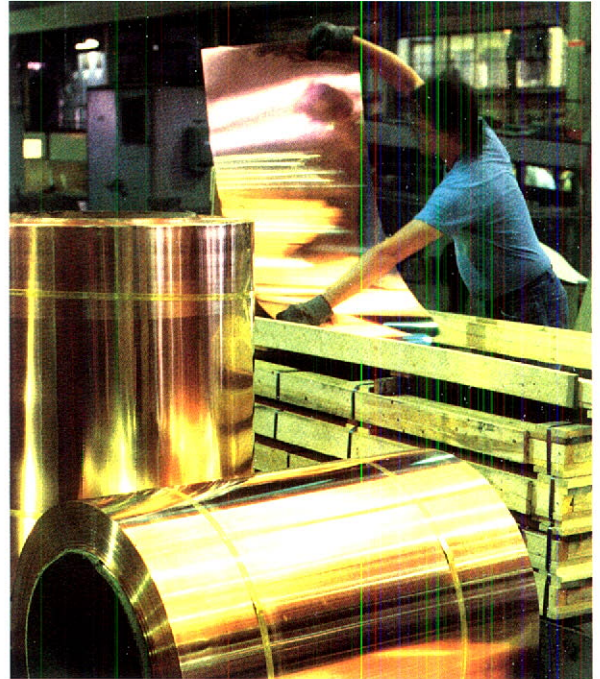
#### **ARROWHEAD AND DOCAP**

ArrowHead Metals is Canada's leading producer of coppermetals. It faced a difficult year. A strike commenced early in January and lasted until late February 1988, thereby disrupting production schedules and plant shipments.

When work resumed, shipments rapidly increased, helped by the strong housing markets both in Canada and the United States. Much of ArrowHead's products are shipped to manufacturers of plumbing and electrical supplies, who generally enjoyed an excellent year. In these industries, the outlook for 1989 is encouraging.

The new dual-headed milling line installation was completed in the late summer and is now performing to specification. Both productivity and quality improvements have resulted and it is expected that the additional capacity made available to the flat roll mill by the new installation will be fully utilized in 1989.

Docap is two-thirds owned by Ivaco and is a major distributor of automotive and



*Roofing copper is examined at ArrowHead prior to shipment.*

industrial products. It has a particularly strong supply position to the automotive aftermarket. It maintains distribution facilities across Canada for its 20,000 products.

#### **PRECISION MACHINED COMPONENTS, AXLES AND FORGINGS**

The market for trucks, trailers and construction equipment remained relatively strong with the result that Ingersoll Machine and Tool and its P.C. Drop Forgings subsidiary reported good results for the year.

Ingersoll operates one of Canada's leading precision machining facilities in which it produces a wide range of axles and components for engines, suspension systems and related areas. Production is automated to a high degree through the use of computer controlled machine tools.

Axle production has grown steadily in each of the last several years and 1988 was no exception. The Company makes a large variety of axle sizes and types including



such specialized items as steering axles and drop center axles. It is also a large supplier of water pumps and other engine components and it has just recently reinforced its leadership position in this field by committing to a long-term agreement to supply water pumps to one of the world's largest diesel engine manufacturers.

Expansion during this past year included a new building to accommodate the growth of axle sales. The new facility incorporates the relocated axle manufacturing line and also provides substantial new space for warehousing. Machining capacity will be increased during the current year with the addition of a high volume rotary transfer system. The system is capable of very high precision and will reduce machining costs materially.

P.C. Drop Forgings encountered slowdowns in demand in 1988 for both commercial and defence products. It is a quality forging supplier to industrial product manufacturers and also supplies projectile blanks to Ingersoll Machine and Tool for finishing under an agreement with the Government of Canada.

The outlook for the Precision Machined Components, Axles and Forgings Group is for continued growth in 1989.

## CANRON

Canron, which is 79% owned by Ivaco, reported a somewhat disappointing year in terms of operating performance. Canron did, however, record a substantial extraordinary gain from the sale of surplus land which increased net earnings for the year.

Canron operates in three business segments: pipe, steel fabrication and service, and machinery and equipment.

The Pipe segment consists of three operating divisions which manufacture and distribute plastic, iron, and concrete pipe and their appropriate fittings.



*Precise measurement is part of the quality control process at Canron's Brossard, Québec plant.*

Canron's Plastics Division, with production facilities across the country, is Canada's leading manufacturer of plastic pipe. Among its products is a proprietary large diameter, high strength, lightweight pipe called Perma-Loc™. Sales of this product have grown substantially. Growth in another important area was achieved during the year through the installation of 53 kilometers of pipe for agricultural irrigation in southern Alberta.

In the U.S., Canron Pipe closed a small facility in Massachusetts and consolidated its manufacturing at the Macon, Georgia facility. Modest operating improvements were attained during the year.

The Iron Pipe Division is the leading Canadian producer of ductile iron pipe and fittings for municipal and other water distribution. During the year work commenced to upgrade the pipe finishing line at Hamilton, Ontario. The modernization at Hamilton will be completed in 1989 and will provide for greater manufacturing efficiency and allow for the introduction of international standard zinc-coated ductile iron pipe. The iron pipe fittings foundry at St. Thomas, Ontario was closed.



The Hyprescon Pipe Division, with its plant at Anjou, Québec, is the largest manufacturer of high pressure pipe and fittings in Canada. Demand was strong throughout the year and the outlook for the future is sufficiently strong that a new manufacturing facility is under construction near Saskatoon, Saskatchewan to serve the rapidly growing market for large diameter irrigation pipe.

Canron's Steel Fabrication and Service segment is a major fabricator and erector of structural steel serving the Canadian, U.S. and international markets. It has plants in Ontario, Alberta, British Columbia, New York and Oregon.

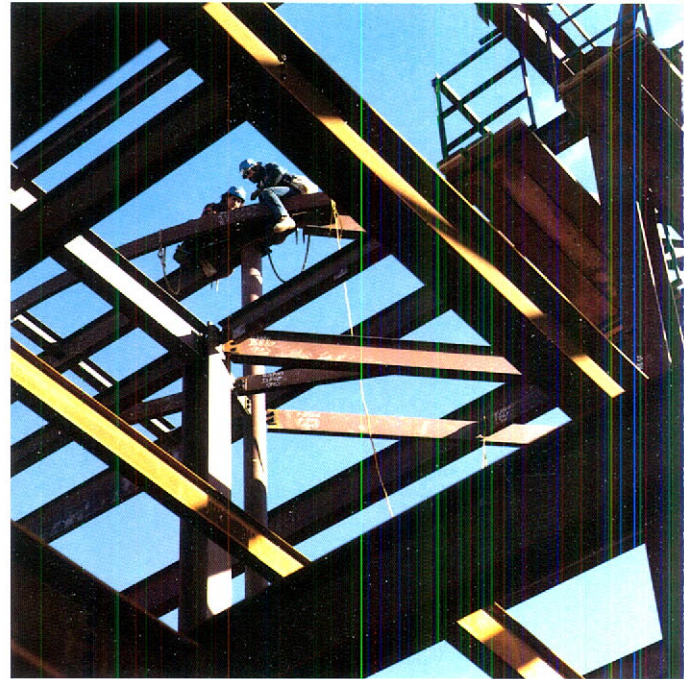
Operations in eastern Canada and the eastern U.S. moderated somewhat during the year as a number of large-scale projects were completed. However, tendering activity began accelerating early in 1989 and stronger markets are anticipated in the early 1990s.

One highly visible current project, which is proceeding well, is the fabrication and erection of structural steel for the Swiss Bank Tower in New York City. Another is the fabrication and erection of steel for Terminal Three at Toronto's Lester B. Pearson International Airport.

Activity in western Canada and the western U.S. expanded during the year. One major move was the acquisition of the structural steel and joist operations of Great West Steel. The acquisition provides additional fabrication capacity in both Alberta and British Columbia.

Markets for structural steel firmed during the year in western Canada and the U.S. Northwest and backlogs are high in both areas.

The Machinery and Equipment segment is comprised of two operating units. These are: Tamper Corp., which manufactures, sells and contracts railway track maintenance equipment, and the Mechanical Division which manufactures and rebuilds components for specialized heavy machinery.



*A steel girder is moved into place by a crew from Canron's Eastern Structural Division.*

Tamper is a technology leader for such products as rail flaw detection and rail profile measurement.

Canron's Mechanical Division, located in Trois-Rivières, Québec, fabricates peripheral equipment for pulp mills, assembles paper machines, and repairs industrial equipment. As 1988 was a banner year for the paper industry, the Mechanical Division reported improved operating results.

The division has also developed a highly promising new product. It is a modular wood harvesting machine developed in conjunction with the Forest Engineering Research Institute of Canada and with funding from the Government of Canada. Field testing will be completed in 1989.



## CONSOLIDATED STATEMENT OF EARNINGS

FOR THE YEAR ENDED DECEMBER 31, 1988

	Thousands of dollars	
	1988	1987 (Note 12)
Net sales	<b>\$ 2,238,346</b>	\$ 2,127,827
Cost of sales and operating expenses	<b>2,011,925</b>	1,926,629
Depreciation and amortization	<b>60,052</b>	56,724
	<b>2,071,977</b>	1,983,353
Earnings from operations	<b>166,369</b>	144,474
Interest on long-term liabilities	<b>52,434</b>	47,384
Other interest	<b>17,422</b>	11,588
Investment income	<b>(6,335)</b>	(5,976)
	<b>63,521</b>	52,996
Earnings from continuing operations before income taxes and other items	<b>102,848</b>	91,478
Provision for income taxes (Note 11)		
Current	<b>13,196</b>	22,478
Deferred	<b>26,538</b>	20,508
	<b>39,734</b>	42,986
Earnings from continuing operations before other items	<b>63,114</b>	48,492
Minority interest	<b>11,601</b>	6,968
Earnings from continuing operations	<b>51,513</b>	41,524
Loss from discontinued operations (Note 12)	<b>(7,720)</b>	(3,173)
Earnings before extraordinary items	<b>43,793</b>	38,351
Extraordinary items (Note 13)	<b>(1,877)</b>	(5,014)
Net earnings	<b>\$ 41,916</b>	\$ 33,337
Earnings (loss) per share		
Continuing operations	<b>\$1.55</b>	\$1.00
Discontinued operations	<b>(0.42)</b>	(0.17)
Before extraordinary items	<b>1.13</b>	0.83
Extraordinary items	<b>(0.10)</b>	(0.28)
Earnings per share	<b>\$1.03</b>	\$0.55



## CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AS AT DECEMBER 31, 1988

		Thousands of dollars	
		1988	1987 (Note 10)
<b>Current assets</b>	Cash	\$ 3,389	\$ 24,770
	Accounts receivable	283,599	278,667
	Inventories (Note 2)	671,107	598,474
	Prepaid expenses	14,629	14,017
	<b>Total current assets</b>	<b>972,724</b>	915,928
<b>Current liabilities</b>	Bank indebtedness, partly secured	103,140	71,444
	Accounts payable and accrued liabilities		
	Trade and other	321,306	321,922
	Directors	4,720	7,970
	Income taxes	2,060	7,031
	Current maturities of long-term liabilities	27,689	26,487
	Deferred income taxes	5,354	6,924
	<b>Total current liabilities</b>	<b>464,269</b>	441,778
<b>Working capital</b>		<b>508,455</b>	474,150
	Portfolio investments (Note 3)	117,303	117,303
	Investments and other assets (Note 4)	62,550	52,020
	Fixed assets (Note 5)	703,874	681,928
<b>Total investment</b>		<b>1,392,182</b>	1,325,401
	<b>Deduct</b>		
	Long-term liabilities (Note 6)	508,166	449,844
	Exchangeable debentures (Notes 3 and 7)	95,235	95,235
	Accrued costs of pension plans (Note 8)	16,882	26,013
	Deferred income taxes	96,861	78,270
	Minority interests	96,125	91,885
		<b>813,269</b>	741,247
<b>Shareholders' equity</b>		<b>\$ 578,913</b>	\$ 584,154
<b>Represented by</b>	Capital stock (Note 9)	\$ 432,817	\$ 433,719
	Retained earnings	146,758	138,868
	Cumulative translation adjustment	(662)	11,567
		<b>\$ 578,913</b>	\$ 584,154

On behalf of the Board

ISIN IVANIER, Director

PAUL IVANIER, Director



## CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

FOR THE YEAR ENDED DECEMBER 31, 1988

Thousands of dollars

		1988	1987 (Note 12)
<b>Operating activities</b>	Operations		
	Earnings before extraordinary items	\$ 43,793	\$ 38,351
	Depreciation and amortization	60,052	56,724
	Deferred income taxes	26,538	20,508
	Minority interest	11,601	6,968
	Other items	(5,128)	(104)
	Working capital provided from operations	136,856	122,447
	(Increase) decrease in non-cash working capital items	(93,873)	9,935
	Other items	(7,478)	(3,137)
	Cash provided by operating activities	35,505	129,245
<b>Cumulative translation adjustment</b>		<b>(12,029)</b>	<b>(17,130)</b>
<b>Financing activities</b>	Dividends	(34,069)	(34,193)
	Additional long-term liabilities	113,023	104,215
	Repayment of long-term liabilities	(27,869)	(83,738)
	Other items	(3,453)	(3,209)
	Cash provided by (used in) financing activities	47,632	(16,925)
<b>Investing activities</b>	Net additions to fixed assets	(89,772)	(88,477)
	Business acquisitions (Note 14)	(12,144)	(6,425)
	Mortgage receivable	(12,879)	—
	Discontinued operations	(11,573)	—
	Other items	2,183	2,983
	Cash used in investing activities	(124,185)	(91,919)
<b>Bank indebtedness, net of cash</b>	(Increase) decrease in bank indebtedness	(53,077)	3,271
	Balance at beginning of year	(46,674)	(49,945)
	Balance at end of year	\$ (99,751)	\$ (46,674)



## CONSOLIDATED STATEMENT OF RETAINED EARNINGS

FOR THE YEAR ENDED DECEMBER 31, 1988

	Thousands of dollars	
	1988	1987
Balance at beginning of year, as restated (Note 10)	<b>\$ 138,868</b>	\$139,675
Add		
Net earnings	<b>41,916</b>	33,337
Gain on purchase of preferred shares	<b>43</b>	49
	<b>180,827</b>	173,061
Deduct		
Preferred dividends	<b>23,073</b>	23,205
Dividends on Class A and Class B shares	<b>10,996</b>	10,988
	<b>34,069</b>	34,193
Balance at end of year	<b>\$ 146,758</b>	\$138,868

## AUDITORS' REPORT

The Shareholders,  
Ivaco Inc.

We have examined the consolidated statement of financial position of Ivaco Inc. as at December 31, 1988 and the consolidated statements of earnings, retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the Company as at December 31, 1988 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Montréal, Québec,  
February 28, 1989.

Touche Ross & Co.  
Chartered Accountants



## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 1988

- 1. Significant accounting policies**
- The Company follows accounting principles generally accepted in Canada in the preparation of its consolidated financial statements.
- Basis of consolidation*  
 The consolidated financial statements include the accounts of Ivaco Inc. and its subsidiaries. The excess of cost over net assets at the dates of acquisition is allocated to fixed assets and is being depreciated over the estimated useful lives of the respective fixed assets.
- Investments in enterprises in which the Company has a 20% to 50% ownership interest are carried on the equity method of accounting. The differences between the underlying book value of net assets at the dates of acquisition and the purchase price are being amortized over the estimated useful lives of the investees' fixed assets.
- Foreign exchange translation*  
*Foreign operations*  
 Assets and liabilities of foreign operations are translated into Canadian dollars at year-end exchange rates. Cumulative gains and losses on translation are deferred and included as a separate component of shareholders' equity. Income and expenses are translated at average exchange rates prevailing during the year.
- Canadian operations*  
 Foreign assets and liabilities of Canadian operations are translated into Canadian dollars at year-end exchange rates. Gains and losses are included in the determination of net earnings except for unrealized translation gains and losses on long-term liabilities which are deferred and are amortized over the remaining lives of the related items. Income and expenses are translated at average exchange rates prevailing during the year.
- Inventories*  
 Inventories are stated at the lower of cost (determined substantially on the first-in, first-out method) and net realizable value. Costs to date on uncompleted contracts less progress billings for the fabrication and erection of structural steel are included as a component of semi-finished inventories.
- Fixed assets and depreciation*  
 Fixed assets are stated at cost after deducting related investment tax credits and government grants. Interest costs related to major capital expenditures are capitalized during the period of construction. Depreciation is computed principally on the straight-line method over the estimated useful lives of the respective assets as follows:
- |  |          |
|--|----------|
| Buildings                              | 40 years |
| Steelmaking and rolling mill equipment | 25 years |
| Manufacturing equipment                | 15 years |
- Deferred preproduction and development costs*  
 Certain costs relating to the start-up of new facilities and major plant additions, incurred prior to the commencement of commercial production, are deferred and amortized over periods of up to five years.



**1. Significant accounting policies**  
(Continued)

Research and development expenditures are expensed as incurred with the exception of costs related to the development of new products, processes and systems to the extent that their recovery can be reasonably assured. Deferred development costs are amortized on commencement of operation or commercial production over appropriate future periods.

*Earnings per share*

Earnings per Class A and Class B share are calculated after deducting dividends on preferred shares and second preferred shares using the weighted average number of shares outstanding during the year. Fully diluted earnings per Class A and Class B share are calculated assuming conversion of second preferred shares and assuming stock options had been exercised at the beginning of the year.

**2. Inventories**

	Thousands of dollars	
	1988	1987
Finished and semi-finished*	\$ 355,565	\$ 306,839
Raw materials and supplies	315,542	291,635
<b>Total inventories</b>	<b>\$ 671,107</b>	<b>\$ 598,474</b>

\*Includes costs to date of uncompleted contracts for the fabrication and erection of structural steel of \$75,953 (1987 — \$48,490) less progress billings of \$56,037 (1987 — \$39,930).

**3. Portfolio investments**

Pursuant to the terms of trust agreements, the Company pledged 2,976,095 common shares of Dofasco Inc. to secure the exchange privileges attached to the 9.5% exchangeable debentures and 3,000,000 common shares of Dofasco to secure the exchange privileges attaching to the \$2.72 cumulative redeemable exchangeable second preferred shares, Series 4.

**4. Investments and other assets**

	Thousands of dollars	
	1988	1987
Mortgage receivable	\$ 12,879	\$ —
Net assets of discontinued operations	13,092	9,478
Investment in non-consolidated companies, at equity	14,484	15,841
Deferred preproduction and development costs and other deferred charges, less amortization	11,335	9,394
Deferred financing costs, less amortization	6,283	6,421
Deferred translation adjustment, less amortization	(4,110)	1,917
Other items	8,587	8,969
<b>Total investments and other assets</b>	<b>\$ 62,550</b>	<b>\$ 52,020</b>

**5. Fixed assets**

	Thousands of dollars	
	1988	1987
Land	\$ 33,208	\$ 29,176
Buildings	195,121	195,271
Machinery and equipment	1,002,457	978,817
	1,230,786	1,203,264
Less: Accumulated depreciation	526,912	521,336
<b>Total fixed assets</b>	<b>\$ 703,874</b>	<b>\$ 681,928</b>



**6. Long-term liabilities**

	Thousands of dollars	
	1988	1987
Secured		
Debtures maturing to 1994		
Series A at 11.74% (\$9.4 million U.S.)	\$ 11,210	\$ 14,942
Series B at 12.48%	7,500	9,200
Series E at 9.25%	4,435	4,954
Series F at 13.875%	14,220	15,480
Industrial Revenue Bonds principally at 8% maturing to 2001 (\$17 million U.S.)	20,285	21,634
Mortgages principally at 10.3% maturing to 2002 of which \$2.9 million are in U.S. funds	12,678	13,707
Revolving bank loans maturing to 1997 of which \$49.7 million are in U.S. funds <sup>*/**</sup>	66,978	67,600
Bank loan maturing in 1995 <sup>**</sup>	50,000	50,000
Unsecured		
Revolving bank loans maturing to 1997 of which \$58.2 million are in U.S. funds <sup>*/**</sup>	162,200	125,991
Bank loans maturing to 1995 <sup>**</sup> (\$74.8 million U.S.)	89,619	58,626
Notes principally at 8.2% maturing to 2001 (\$33.1 million U.S.)	39,465	46,514
Others principally at 10.5% maturing to 1995 of which \$20.3 million are in U.S. funds	57,265	47,683
	<b>535,855</b>	<b>476,331</b>
Less current maturities	<b>27,689</b>	<b>26,487</b>
<b>Total long-term liabilities</b>	<b>\$ 508,166</b>	<b>\$ 449,844</b>

Required payments of long-term liabilities excluding revolving bank loans, over the next five years, are as follows: \$27.1 million in 1989; \$46.7 million in 1990; \$44.4 million in 1991; \$40.5 million in 1992; and \$52.1 million in 1993.

\* Revolving bank loans for the most part extend for periods of 3 years and are extendable annually for a further year. The amount unpaid at the end of the revolving period becomes payable over additional periods of up to 6 years. Assuming these revolving loans are not extended beyond the revolving period, the required payments over the next five years would be as follows: \$0.6 million in 1989; \$3.6 million in 1990; \$39.0 million in 1991; \$36.7 million in 1992; and \$25.4 million in 1993.

\*\* The revolving bank loans and bank loans bear interest generally at the lower of prime, bankers' acceptance rates, domestic fixed rates or U.S. dollar LIBOR rates. The Company has negotiated fixed rates of interest averaging 9.2% on \$137.1 million of such debt for periods of up to seven years. The remainder of this debt aggregating \$231.7 million bears interest at an average floating rate of 11% at December 31, 1988. The Company may negotiate fixed rates of interest on such debt for periods of up to 7 years.

**7. Exchangeable Debentures**

The exchangeable debentures which are exchangeable, at the option of the holders, for 2,976,095 common shares of Dofasco Inc. bear interest at 9.5% per annum to April 15, 1990 and after April 15, 1990 at a semi-annual rate equal to the sum of (i) the cash dividends paid by Dofasco per Dofasco common share during the six calendar months immediately preceding the interest payment date divided by \$32.00, expressed as a percentage and (ii) 2.5%.



8. **Pensions and accrued costs of pension plans** The Company and its subsidiaries have pension plans covering substantially all employees. The majority of the plans are defined benefit plans. The following is based on information at December 31:

	Thousands of dollars	
	1988	1987
Actuarial present value of accrued pension obligations	\$ 364,536	\$ 384,332
Less: Market value of pension fund assets	(283,526)	(275,414)
Accrued costs of pension plans and other amounts recorded in consolidated statement of financial position	(37,608)	(44,116)
Net unrecorded pension obligations	\$ 43,402	\$ 64,802

Pension expense for 1988 was \$19.2 million (1987 — \$19.5 million).

9. **Capital stock** *Authorized*  
An unlimited number of preferred shares issuable in series, second preferred shares issuable in series, subordinated non-voting preferred shares, Class A subordinate voting shares (Class A shares) and Class B voting shares (Class B shares) — all without par value.

*Issued and outstanding*

	Number of shares		Thousands of dollars	
	1988	1987	1988	1987
Preferred shares				
\$4.425 Series C	195,550	207,550	\$ 9,778	\$ 10,378
\$2.50 Series D	675,235	681,935	16,880	17,048
\$2.40 Series E	817,680	823,580	20,442	20,590
			47,100	48,016
Convertible second preferred shares				
\$2.00 Series 1	1,846,762	1,846,762	46,169	46,169
\$2.00 Series 2	1,930,114	1,930,114	48,253	48,253
\$2.25 Series 3	1,200,000	1,200,000	30,000	30,000
			124,422	124,422
Exchangeable second preferred shares				
\$2.72 Series 4 (Note 3)	3,000,000	3,000,000	96,000	96,000
Class A shares	11,299,750	11,296,116	146,532	146,510
Class B shares	7,060,358	7,062,658	18,763	18,771
			165,295	165,281
Total capital stock			\$ 432,817	\$ 433,719

*Preferred Shares*

The preferred shares are non-voting and each series of preferred shares ranks equally with all other series of preferred shares and ahead of the second preferred shares, subordinated non-voting preferred shares and Class A and Class B shares.

*Series C*

The \$4.425 Series C cumulative redeemable preferred shares may be purchased by the Company on the open market at prices not exceeding the applicable redemption price. The Company may redeem Series C preferred shares at \$50.76 per share to July 1, 1989, and thereafter at \$50.38 per share to July 1, 1990, and thereafter at \$50 per share. The Company will make all reasonable efforts to purchase 3,000



9. **Capital stock** shares for cancellation on the open market in each calendar quarter at prices not exceeding \$50 per share. During the year, 12,000 such shares were purchased and cancelled.  
(Continued)

*Series D*

The \$2.50 Series D cumulative redeemable preferred shares may be purchased by the Company on the open market at prices not exceeding the applicable redemption price. The Company may redeem Series D preferred shares at \$26.00 per share to October 1, 1989, decreasing by \$0.25 each year commencing thereafter up to and including October 1, 1992 and thereafter at \$25 per share. On October 1, 1992 the Company will purchase for redemption at \$25 per share, all shares tendered at the option of each holder. The Company will make all reasonable efforts to purchase 7,200 shares for cancellation on the open market in each calendar quarter at prices not exceeding \$25 per share. During the year, 6,700 such shares were purchased and cancelled.

*Series E*

The \$2.40 Series E cumulative redeemable preferred shares may be purchased by the Company on the open market at prices not exceeding \$26.50 per share prior to October 1, 1991 and thereafter at prices not exceeding the applicable redemption price. The Company may redeem Series E preferred shares on or after October 1, 1991 at \$26.50 per share in the first year, decreasing by \$0.25 each year commencing thereafter up to and including September 30, 1997, and thereafter at \$25 per share. On October 1, 1991 the Company will purchase for redemption at \$25 per share, at the option of each holder, 425,000 shares less the number of shares previously redeemed or purchased. On October 1, 1997 the Company will purchase for redemption all shares tendered at \$25 per share. The Company will make all reasonable efforts to purchase 4,250 shares for cancellation on the open market in each calendar quarter to September 30, 1991 and 8,500 shares for each quarter thereafter at prices not exceeding \$25 per share. During the year, 5,900 such shares were purchased and cancelled.

*Convertible Second Preferred Shares*

The second preferred shares are non-voting and each series of second preferred shares ranks equally with all other series of second preferred shares and after the preferred shares and ahead of the subordinated non-voting preferred shares and the Class A and Class B shares.

*Series 1*

The \$2.00 Series 1 cumulative redeemable second preferred shares are convertible at the option of the holder on or before August 15, 1990 into  $1\frac{1}{3}$  Class A shares for each Series 1 second preferred share. The Company may redeem Series 1 second preferred shares prior to August 15, 1989 at \$26.00 per share, reducing by \$0.25 for each year thereafter until August 15, 1992, and thereafter at \$25 per share, provided the market price of the Class A shares is greater than \$23.43 at that time. The Company will make all reasonable efforts to purchase 18,467 shares for cancellation on the open market in each calendar quarter, commencing with the quarter beginning October 1, 1990 at prices not exceeding \$25 per share.



9. **Capital stock**  
(Continued)

*Series 2*

The \$2.00 Series 2 cumulative redeemable second preferred shares are convertible at the option of the holder on or before December 18, 1990 into  $1\frac{1}{2}$  Class A shares for each Series 2 second preferred share. The Company may redeem Series 2 second preferred shares prior to December 18, 1989 at \$26.00 per share, reducing by \$0.25 each year thereafter until December 18, 1992 and thereafter at \$25 per share, provided the market price of the Class A shares is greater than \$23.43 at that time. The Company will make all reasonable efforts to purchase 19,301 shares for cancellation on the open market in each calendar quarter, commencing with the quarter beginning January 1, 1991 at prices not exceeding \$25 per share.

*Series 3*

The \$2.25 Series 3 cumulative redeemable second preferred shares are convertible at the option of the holder on or before August 15, 1990 into 1.39 Class A shares for each Series 3 second preferred share. The Company may redeem Series 3 second preferred shares prior to August 15, 1989 at \$26.25 per share, reducing by \$0.25 for each year thereafter until August 15, 1993 and thereafter at \$25 per share, provided the market price of the Class A shares is greater than \$22.47 at that time. The Company will make all reasonable efforts to purchase 12,000 shares for cancellation on the open market in each calendar quarter, commencing with the quarter beginning January 1, 1991 at prices not exceeding \$25 per share.

*Exchangeable Second Preferred Shares, Series 4*

The \$2.72 Series 4 cumulative redeemable exchangeable second preferred shares are exchangeable, at the option of the holder, into one common share of Dofasco Inc. for each Series 4 exchangeable second preferred share. Dividends after April 15, 1990 will be determined by applying to \$32.00 a quarterly rate equal to the sum of (i) the cash dividends paid by Dofasco per common share of Dofasco during the three calendar months immediately preceding the dividend payment date divided by \$32.00 expressed as a percentage, and (ii) 1%. The Company may redeem Series 4 exchangeable second preferred shares after April 14, 1990 at \$33.50 per share and after April 14, 1995 at \$32.00 per share, provided the market price of Dofasco common shares is greater than \$40.00 at that time.

*Class A Subordinate Voting and Class B Voting Shares*

The Class A subordinate voting shares (Class A shares) carry one vote per share and the Class B voting shares (Class B shares) carry ten votes per share. The Class A shares have a dividend rate equal to 120% of any dividend declared on the Class B shares.

The Class A shares and the Class B shares are treated equally in the event of liquidation or in any subdivision or consolidation of either class. In the event an acquisition offer is made to holders of Class B shares and at least 50% of the Class B shares are tendered in acceptance of the offer and a similar offer is not made to holders of Class A shares then each Class A share will for purposes of the offer be deemed to have been converted into a Class B share in order that the Class A shares will be treated equally with the Class B shares.

The Class B shares may be converted into an equal number of Class A shares at any time.



- 9. Capital stock** During the year, the following transactions occurred in the Class A shares and the  
(Continued) Class B shares:

	Number of shares		Thousands of dollars	
	Class A	Class B	Class A	Class B
Balance at December 31, 1987	11,296,116	7,062,658	\$ 146,510	\$ 18,771
Conversion from Class B to Class A	2,300	(2,300)	8	(8)
Issued for cash under Employees' Stock Option Plan	1,334	—	14	—
Balance at December 31, 1988	11,299,750	7,060,358	\$ 146,532	\$ 18,763

*Stock options*

At December 31, 1988, options for 734,400 Class A shares granted under the employees' stock option plan were outstanding at \$10.00 per share.

- 10. Prior years' adjustment** During the year Canron Inc., a subsidiary company, settled lawsuits pertaining to activities of prior periods. The settlements aggregating \$919,000 (net of income taxes and minority interest) have been accounted for as a prior period adjustment and charged to the year attributable to each claim. Accordingly certain items in the consolidated statement of financial position have been adjusted.

**11. Income taxes**

	1988	1987
Combined basic federal and provincial income tax rate	44.1%	48.9%
Income tax adjustments resulting from:		
Canadian manufacturing and processing credits	(2.1)	(5.6)
Differences between Canadian and foreign tax rates	(3.1)	(1.7)
Losses not currently deductible	0.3	4.6
Items not subject to tax and other items	(0.6)	0.8
Effective income tax rate	38.6%	47.0%

Certain U.S. subsidiaries of Canron Inc. have unused income tax losses pertaining to prior years of approximately \$30.6 million (U.S. \$25.6 million) which may be applied against future years' taxable income. These losses, for which no benefits have been recognized in the accounts, expire from 1997 to 2003.

**12. Loss from discontinued operations**

The businesses of Sivaco Ontario, Lundy Steel and Virginia Wire & Fabric divisions, together with Canron's ingot mould foundry, St. Thomas foundry and Leominster plant have been classified as discontinued operations. Accordingly the operating results, net of applicable income taxes and minority interest, for 1988 and 1987 have been segregated and stated separately in the consolidated statements of earnings and changes in financial position.



**13. Extra-ordinary items**

	Thousands of dollars	
	1988	1987
Provision for costs associated with the discontinuance and relocation of operations after deducting income taxes of \$6,545 (1987 — \$5,107) and minority interest of \$1,644 (1987 — Nil)	\$(12,258)	\$(5,014)
Gain on sale of assets, previously segregated as discontinued operations, after deducting income taxes of \$4,189 and minority interest of \$2,759	10,381	—
<b>Net extraordinary items</b>	<b>\$ (1,877)</b>	<b>\$(5,014)</b>

**14. Business acquisitions**

The Company has a 79% ownership interest in Canron Inc. If warrants expiring May 31, 1989 entitling holders to purchase 750,000 Class A and 75,000 Class B shares of Canron Inc. are exercised, the Company's investment in Canron would be reduced to 70%.

During the year Canron Inc. acquired the structural steel and joist assets and operations of Great West Steel for a total cash consideration of \$10.7 million allocated as follows: \$4.7 million to working capital and \$6.0 million to fixed assets.

During the year the Company acquired a masonry products company in Birmingham, Alabama for a total cash consideration of \$1.4 million.

**15. Transactions with related parties**

From time to time the Company borrows short-term funds from directors who are senior officers of the Company and makes drawings available to them, all at prime interest rates. At no time during the year have drawings by these persons exceeded the short-term funds loaned by them to the Company.

**16. Comparative figures**

The 1987 figures have been reclassified to conform with the presentation adopted in 1988.

**17. Segmented information**

The Company operates principally in Canada and the United States in two industry segments. The Company operates in its principal line of business and dominant segment as a steel producer and manufacturer of a wide variety of steel products and fabricator and erector of structural steel. It also operates as a manufacturer of plastics, iron and Hyprescon® pipe.

Transfers between geographic segments are made at fair market value. Canadian sales to outside customers include export sales in 1988 of \$400 million (1987 — \$337 million) primarily to customers in the United States. Highlighted on the following page is the breakdown of net sales, earnings from operations and identifiable assets by industry and geographic segments.



### 17. Segmented information (Continued)

Industry segment (Note 12)	1988		Thousands of dollars				1987	
	Steel	Plastics, iron and Hypres- con® pipe	Consolidated		Steel	Plastics, iron and Hypres- con® pipe	Consolidated	
Net sales	\$1,959,093	\$279,253	\$2,238,346		\$1,860,635	\$267,192	\$2,127,827	
Earnings from operations	\$ 149,317	\$ 17,052	\$ 166,369		\$ 113,268	\$ 31,206	\$ 144,474	
Interest expense			(69,856)				(58,972)	
Investment income			6,335				5,976	
Earnings from continuing operations before income taxes and other items			102,848				91,478	
Income taxes			(39,734)				(42,986)	
Earnings from continuing operations before other items			63,114				48,492	
Minority interest			(11,601)				(6,968)	
Earnings from continuing operations			51,513				41,524	
Loss from discontinued operations			(7,720)				(3,173)	
Earnings before extraordinary items			43,793				38,351	
Extraordinary items			(1,877)				(5,014)	
Net earnings			\$ 41,916				\$ 33,337	
Assets identifiable by segment	\$1,658,634	\$197,817	\$1,856,451		\$1,585,224	\$181,955	\$1,767,179	
Net additions to fixed assets	\$ 68,189	\$ 21,583	\$ 89,772		\$ 70,021	\$ 18,456	\$ 88,477	
Depreciation and amortization	\$ 50,311	\$ 9,741	\$ 60,052		\$ 46,871	\$ 9,853	\$ 56,724	

Geographic segment (Note 12)	1988		Thousands of dollars				1987	
	Canada	U.S.A.	Elimina- tions	Consoli- dated	Canada	U.S.A.	Elimina- tions	Consoli- dated
Net sales								
Outside customers	\$1,168,130	\$1,070,216	\$ —	\$2,238,346	\$1,073,499	\$1,054,328	\$ —	\$2,127,827
Intersegment exports	31,436	2,251	(33,687)	—	47,428	4,062	(51,490)	—
Total net sales	\$1,199,566	\$1,072,467	\$(33,687)	\$2,238,346	\$1,120,927	\$1,058,390	\$(51,490)	\$2,127,827
Earnings from operations								
Outside customers	\$ 99,677	\$ 65,185		\$ 164,862	\$ 118,994	\$ 22,837		\$ 141,831
Intersegment exports	1,370	137		1,507	2,634	9		2,643
Total earnings from operations	\$ 101,047	\$ 65,322		166,369	\$ 121,628	\$ 22,846		144,474
Interest expense				(69,856)				(58,972)
Investment income				6,335				5,976
Earnings from continuing operations before income taxes and other items				102,848				91,478
Income taxes				(39,734)				(42,986)
Earnings from continuing operations before other items				63,114				48,492
Minority interest				(11,601)				(6,968)
Earnings from continuing operations				51,513				41,524
Loss from discontinued operations				(7,720)				(3,173)
Earnings before extraordinary items				43,793				38,351
Extraordinary items				(1,877)				(5,014)
Net earnings				\$ 41,916				\$ 33,337
Assets identifiable by segment	\$1,198,893	\$ 663,912	\$ (6,354)	\$1,856,451	\$1,127,166	\$ 650,388	\$(10,375)	\$1,767,179



## FINANCIAL SUMMARY

MILLIONS OF DOLLARS EXCEPT PER SHARE AMOUNTS

<b>Operating Results</b>	<b>1988</b>	<b>1987*</b>	<b>1986</b>	<b>1985</b>	<b>1984</b>	<b>1983</b>	<b>1982</b>
Net sales	\$ 2,238.3	2,127.8	1,944.8	1,342.7	1,193.9	754.7	681.7
Depreciation and amortization	\$ 60.1	56.7	56.3	39.5	34.5	27.0	23.9
Earnings from operations	\$ 166.4	144.5	131.6	99.4	94.8	40.7	28.7
Earnings (loss) from continuing operations before income taxes and other items	\$ 102.8	91.5	81.7	57.6	54.4	(0.3)	(25.7)
Provision for income taxes	\$ 39.7	43.0	32.7	18.3	15.8	(5.9)	(15.3)
Earnings (loss) before other items	\$ 63.1	48.5	49.0	39.3	38.6	5.6	(10.4)
Earnings (loss) from continuing operations	\$ 51.5	41.5	43.1	35.1	32.3	2.9	(9.9)
Earnings (loss) before extraordinary items	\$ 43.8	38.4	43.1	35.1	32.3	0.8	(9.9)
Net earnings (loss)	\$ 41.9	33.3	44.1	35.1	33.8	0.8	(9.9)
Earnings (loss) per share							
From continuing operations	\$ 1.55	1.00	1.05	1.04	1.53	(0.17)	(1.20)
Before extraordinary items	\$ 1.13	0.83	1.05	1.04	1.53	(0.34)	(1.20)
After extraordinary items	\$ 1.03	0.55	1.11	1.04	1.64	(0.34)	(1.20)
Return on sales	% 1.9	1.6	2.3	2.6	2.8	0.1	(1.5)

<b>Financial Position</b>	<b>1988</b>	<b>1987</b>	<b>1986</b>	<b>1985</b>	<b>1984</b>	<b>1983</b>	<b>1982</b>
Current assets	\$ 972.7	915.9	861.0	623.1	536.0	461.8	347.6
Current liabilities	\$ 464.3	441.8	374.2	228.1	263.2	191.0	204.7
Working capital	\$ 508.4	474.1	486.8	395.0	272.8	270.8	142.9
Net additions to fixed assets	\$ 89.8	88.5	84.4	46.3	39.5	16.6	42.6
Total assets	\$ 1,856.5	1,767.2	1,698.4	1,281.4	1,117.3	890.0	740.4
Long-term liabilities	\$ 508.2	449.8	436.0	300.5	350.8	263.4	273.4
Exchangeable debentures	\$ 95.2	95.2	95.2	95.3	—	—	—
Shareholders' equity	\$ 578.9	584.2	604.1	520.6	366.9	303.3	194.9
Dividends	\$ 34.1	34.2	33.7	28.4	19.4	10.3	7.0
Book value per share	\$ 17.00	16.57	16.64	15.01	14.29	13.22	14.25

\*1987 results have been restated to reflect discontinued operations.



1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969
718.3	621.9	495.4	265.9	166.8	136.0	103.0	150.7	90.2	53.9	43.2	27.6	11.0
19.6	14.9	11.4	8.0	6.8	6.1	3.6	3.3	2.4	1.5	1.2	0.7	0.3
79.5	67.1	85.3	49.0	21.6	14.4	10.5	40.4	15.3	9.6	7.9	6.5	2.3
33.9	41.1	69.0	41.1	14.6	7.2	6.4	37.6	14.2	8.9	7.5	4.6	2.2
8.6	12.4	25.4	16.7	4.6	1.6	1.7	16.5	5.8	4.1	3.7	2.3	1.1
25.3	28.7	43.6	24.4	10.0	5.6	4.7	21.1	8.4	4.8	3.8	2.3	1.1
25.2	28.3	42.7	24.0	9.8	5.4	4.5	20.4	8.1	4.6	3.7	2.2	1.0
25.2	28.3	42.7	24.0	9.8	5.4	4.5	20.4	8.1	4.6	3.7	2.2	1.0
28.4	28.3	42.7	24.0	9.8	5.4	5.4	20.4	8.1	4.6	3.7	2.1	1.0
2.08	2.47	3.98	2.20	0.89	0.52	0.43	2.12	0.87	0.54	0.45	0.34	0.20
2.08	2.47	3.98	2.20	0.89	0.52	0.43	2.12	0.87	0.54	0.45	0.34	0.20
2.37	2.47	3.98	2.20	0.89	0.52	0.52	2.12	0.87	0.54	0.45	0.33	0.20
3.9	4.6	8.6	9.0	5.9	4.0	5.2	13.5	9.0	8.5	8.6	7.6	9.1
1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969
335.5	273.7	257.3	131.2	105.9	100.6	88.6	76.8	44.0	35.3	28.1	12.1	4.3
223.3	143.8	147.0	74.1	69.5	69.6	59.5	45.9	25.6	22.2	18.4	7.4	3.0
112.2	129.9	110.3	57.1	36.4	31.0	29.1	30.9	18.4	13.1	9.7	4.7	1.3
60.8	64.2	34.3	27.6	19.7	7.4	16.0	32.4	14.6	6.9	8.3	2.5	0.9
706.3	572.7	483.7	278.5	224.9	203.5	188.0	160.4	102.9	70.2	52.9	24.5	9.3
207.3	187.5	143.2	58.4	30.8	32.2	33.5	29.8	18.6	14.7	7.2	2.2	2.1
—	—	—	—	—	—	—	—	—	—	—	—	—
206.3	187.8	151.7	116.8	95.6	74.2	70.8	67.3	48.1	26.5	21.8	8.9	2.6
9.3	8.4	7.9	5.3	2.6	1.9	1.9	1.7	0.4	0.2	0.2	—	—
16.23	14.46	12.61	9.49	7.68	7.04	6.68	6.34	4.37	2.76	2.25	1.40	0.52



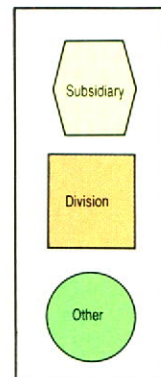
# IVACO

## ORGANIZATION CHART

ALL SUBSIDIARIES ARE 100% OWNED UNLESS NOTED OTHERWISE



### LEGEND





## DIRECTORY OF OPERATIONS

### Amercord Inc.

Industrial Park  
P.O. Box 458  
Lumber City, Georgia 31549  
912/363-4371  
FAX: 912/363-4991  
Steel tire cord and  
tire bead wire

### Amerstrand Division

200 County Road South  
P.O. Box 38  
Oakland City, Indiana 47660  
812/749-4102  
FAX: 812/749-4764  
Guy strand

### ArrowHead Metals Ltd.

260 Eighth Street  
Toronto, Ontario M8V 3E1  
416/259-6611  
FAX: 416/253-2812  
Copper and copper alloy products

### Atlantic Steel Company

1300 Mecaslin St. N.W.  
Atlanta, Georgia 30318  
P.O. Box 1714  
Atlanta, Georgia 30301  
404/897-4500  
FAX: 404/897-4623  
Billets; hot rolled bars,  
reinforcing bars and wire rods;  
bright, galvanized and  
annealed wire

### Atlantic Steel Company

384 Old Grassdale Road, N.E.  
P.O. Box 1069  
Cartersville, Georgia 30120  
404/382-8420  
FAX: 404/382-8420  
Billets, hot rolled bars  
and reinforcing bars

### Ayers Felt Inc.

346, rue Hamford  
Lachute, Québec J8H 3X8  
514/562-2411  
FAX: 514/562-1202  
Wet felts, dryer fabrics  
and dryer rope

### Bakermet Inc.

2555 Sheffield Road  
Ottawa, Ontario K1B 3V6  
613/745-7006  
FAX: 613/745-0692  
Processing of scrap metal

### Bel-Air Fence Division

400, rue Deslauriers  
St. Laurent, Québec H4N 1V8  
514/335-4455  
FAX: 514/335-4495

2400, rue Chappe  
Ancienne Lorette  
Québec, Québec G2E 4W6  
418/871-1155  
FAX: 418/871-2945  
Distribution and installation of  
fencing products and accessories

### Canron Construction Corporation

Eastern Division  
P.O. Box A, Shaw Road  
Conklin, New York 13748  
607/723-4862  
FAX: 607/723-4882

Western Division  
4600 N.E. 138th Avenue  
Portland, Oregon 97230  
503/255-8634  
FAX: 503/255-8634  
Structural steel fabrication and  
erection and construction services

### Canron Eastern Structural Division

100 Disco Road  
Rexdale, Ontario M9W 1M1  
416/675-6400  
FAX: 416/675-6522  
Structural steel fabrication and  
erection and construction services

### Canron International Group

Hyprescon Division  
10350, Boulevard Ray Lawson  
Anjou, Québec H1J 1M2  
514/352-6600  
FAX: 514/352-3070  
Concrete pressure pipe (Hyprescon®),  
fittings and joint rings

### Canron Mechanical Division

227, rue Saint-Maurice  
P.O. Box 68  
Trois-Rivières, Québec G9A 5E5  
819/371-8207  
FAX: 819/378-0535  
Pulp and paper machinery, logging  
equipment, cranes and hoists, gear  
drives and custom fabrication

### Canron Pipe Corp.

7614 Industrial Highway  
Macon, Georgia 31297  
912/788-3300  
FAX: 912/781-4693  
PVC DWV pipe, PVC sewer pipe,  
electrical conduit and electrical duct

### Canron Pipe Division

1st Floor, Wing 3  
Port of Montréal Building  
Cité du Havre  
Montréal, Québec H3C 3R5  
514/861-7221  
FAX: 514/876-8747  
Plants: St. John's, Newfoundland;  
Saint John East, New Brunswick;  
Berthierville, Brossard, Montréal and  
St. Jacques, Québec; Hamilton, North  
York, Rexdale and Toronto, Ontario;  
Langley, British Columbia; Wey-  
burn, Saskatchewan; and Fort Sas-  
katchewan, Alberta  
Plastic and Ductile iron pipe and  
fittings

### Canron Tamper Division

435 Horner Avenue  
Toronto, Ontario M8W 4W3  
416/253-1233  
FAX: 416/253-0821  
Railway maintenance equipment

### Canron Great West Steel/ Western Bridge Division

145 West First Avenue  
Vancouver, British Columbia  
V5Y 1A2  
604/874-2311  
FAX: 604/872-2229  
Plants: Vancouver and New West-  
minster, British Columbia; and Cal-  
gary, Alberta  
Structural steel fabrication and  
erection and construction services

### Capitol Wire & Fence Company, Inc.

1205 — 68th Street  
Baltimore, Maryland 21237  
301/866-6770  
FAX: 301/866-6770  
Wire and chain link fencing

### Colorguard Fence Products Division

1205 — 68th St.  
Baltimore, Maryland 21237  
301/866-6770  
FAX: 301/866-6770  
Manufacture of bonded fencing  
products



**Docap (1985) Corporation**

21 Fasken Drive  
Etobicoke, Ontario M9W 5M2  
416/675-7571  
FAX: 416/675-6787  
Distributors of automotive  
and industrial products

**Flo-Mach, Inc.**

825 North Lane Avenue  
P.O. Box 6835  
Jacksonville, Florida 32205  
904/781-9224  
FAX: 904/781-9224  
Wire processing equipment

**Florida Wire and Cable Company**

825 North Lane Avenue  
P.O. Box 6835  
Jacksonville, Florida 32205  
904/781-9224  
FAX: 904/781-9224 or 783-3084  
High carbon wire and  
stranded products

**Florida Wire & Nail Division**

P.O. Box 816  
Quincy, Florida 32351  
904/875-1150  
FAX: 904/627-7183  
Wire and nails

**Galvano Division**

2620, rue Bernard-Pilon  
Beloeil, Québec J3G 4S5  
514/464-0547  
FAX: 514/464-8553  
Electro-galvanizing and hot dip  
galvanizing of fasteners and nails

**IFC (Bolt) Inc.**

390 Thomas St.  
P.O. Box 40  
Ingersoll, Ontario N5C 3K3  
519/485-4610  
FAX: 519/485-2435  
Bolts and nuts

**IFC (Fasteners) Inc.**

700, rue Ouellette  
P.O. Box 970  
Marieville, Québec J0L 1J0  
514/658-8741  
FAX: 514/460-4427  
Bolts and nuts

**Infasco Division**

700, rue Ouellette  
P.O. Box 970  
Marieville, Québec J0L 1J0  
514/658-8741  
FAX: 514/460-4427  
Bolts, nuts and fastener products

**Infasco Nut Division**

7283 Torbram Road  
Mississauga, Ontario L4T 1G8  
416/677-8920  
FAX: 416/677-6295  
Nuts

**Infatool Limited**

Ingersoll Street  
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519/485-4531  
FAX: 519/485-2435  
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390 Thomas Street  
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FAX: 519/485-2163  
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613/675-4671  
FAX: 613/675-2714  
Hot rolled wire rods  
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**Laclede Chain Manufacturing  
Company**

2500 East First Street  
P.O. Box 249  
Maryville, Missouri 64468  
816/562-2160  
FAX: 816/562-2743  
Chain manufacturing

**Laclede Mid America Inc.**

Feather Valley Road  
P.O. Box 629  
Fremont, Indiana 46737  
219/495-5360  
FAX: 219/495-2666  
Oil tempered wire

**Laclede Steel Company**

Equitable Building  
St. Louis, Missouri 63102  
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FAX: 314/425-1533  
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416/671-4694  
FAX: 416/671-1648  
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**National Wire of Georgia Division**

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404/253-6333  
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832 North Lallendorf Road  
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Wire and welded wire fabric



**National Wire Products Industries, Inc.**

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301/477-1700  
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**Niagara Lockport Industries Inc.**  
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High Bridge Road  
P.O. Box 979  
Quincy, Florida 32351  
904/627-7141  
FAX: 904/627-7184  
Paper machine clothing —  
forming fabrics

**Niagara Lockport Québec Industries Inc.**

(Niagara Québec Division)  
2106, rue Bellefeuille  
P.O. Box 939  
Trois-Rivières, Québec G9A 5K2  
819/379-5555  
FAX: 819/379-0644  
Paper machine clothing —  
forming fabrics

**Niagara Lockport Québec Industries Inc.**

(Lockport Felt Division)  
1, boulevard Lee  
P.O. Box 420  
Warwick, Québec J0A 1M0  
819/358-5566  
FAX: 819/358-5146  
Paper machine clothing —  
wet felts and dryer fabrics

**P.C. Drop Forgings Limited**

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416/834-7211  
FAX: 416/834-5094  
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FAX: 901/774-8610  
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FAX: 902/465-3180  
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**Sivaco New York Division**

3937 River Road  
P.O. Box 646  
Tonawanda, New York 14151-0646  
716/874-5681  
FAX: 716/874-4440  
Wire and wire rod processing

**Sivaco Ontario Division**

330 Thomas Street  
P.O. Box 220  
Ingersoll, Ontario N5C 3K5  
519/485-4150  
FAX: 519/485-3039  
Wire and wire rod processing

**Sivaco Québec Division**

800, rue Ouellette  
P.O. Box 940  
Marieville, Québec J0L 1J0  
514/658-8741  
FAX: 514/460-2744  
Wire, welded wire fabric,  
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4 Strathwyn Street  
P.O. Box 287  
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FAX: 61-7-205-7369  
Railway maintenance equipment

**Tamper Corp.**

2401 Edmund Road  
Box 20, Cayce-West  
Columbia, South Carolina  
29171-0020  
803/794-9160  
FAX: 803/794-9176  
Railway maintenance equipment

**Wiremil Inc.**

1 Wiremil Road  
Sanderson, Florida 32087  
904/781-9224  
FAX: 904/275-2100  
High carbon wire and  
stranded products

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V6V 1P3  
604/273-4941  
FAX: 604/273-3803  
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