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Steel, Tubular Products and Steel Wire

February 2013



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Steel, Tubular Products and Steel Wire

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Symbols

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- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0^s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- p preliminary
- r revised
- x suppressed to meet the confidentiality requirements of the *Statistics Act*
- E use with caution
- F too unreliable to be published
- * significantly different from reference category ($p < 0.05$)

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Highlights

February 2013

- Monthly production of primary steel and pig iron decreased 4.4% in February 2013 to 1,047,968 metric tonnes.
- In the same month, the total disposition of shipments of rolled steel products decreased 14.2% to 948,540 metric tonnes.
- Between January 2013 and February 2013, production of steel pipe and tubing decreased 5.4% to 175,642 metric tonnes.
- Total shipments of steel wire and specified wire products increased 6.3% to 37,533 metric tonnes in February 2013.

Related products

Selected CANSIM tables from Statistics Canada

303-0046	Production and shipments of steel pipe and tubing
303-0047	Production and shipments of steel wire and specified wire products
303-0048	Production and shipments of pig iron
303-0049	Pig iron and scrap products charged to furnace, by the primary metal industry
303-0050	Production and shipments of steel casting and primary forms steel products
303-0051	Destination of net shipments of rolled steel products to consuming industries

Selected surveys from Statistics Canada

2105	Steel Pipe and Tubing
2106	Steel Wire and Specified Wire Products
2116	Steel Primary Forms, Steel Castings and Pig Iron
2184	Disposition of Shipments of Ingots and Rolled Steel Products

Statistical tables

Table 1-1

Steel primary forms and pig iron — Disposition of net shipments of rolled steel products, by product and industry monthly 2013

	Steel primary forms	Rails and heavy structural sections	Intermediate structural sections	Light structural sections	Concrete reinforcing bars	Other hot rolled bars	Wire rods	Railway track material
	metric tonnes							
February								
Domestic shipments								
Steel service centres and other wholesalers and warehouses	0	3,087	4,397	3,105	2,810	8,351	0	.
Motor vehicles and parts	0	0	414	36	.	4,722	0	.
Railway operating	0	.	.	.	0	27	0	.
Railroad cars and locomotives	.	0	.	.	.	.	.	.
Shipbuilding	0	.	.	.	.	.	.	.
Steel fabrication	0	153	560	x	38,998	375	0	.
Metal building systems	.	0	0	0	0	0	.	.
Contractors' products	.	0	0	.	1,222	324	184	.
Miscellaneous stamping and coating	0	3	138	481	.	439	.	.
Natural resources and extractive industries	.	0	0	0	1,902	12,009	0	.
Agricultural equipment	.	0	0	0	0	268	.	0
Non electrical machinery	.	0	1,623	0	.	7,828	0	.
Electrical machinery	.	.	.	.	.	0	.	.
Industrial packaging material	.	.	.	.	.	0	.	.
Pipes and tubes	.	.	.	.	.	0	.	.
Wire and wire products	0	.	.	.	0	1,989	x	.
Containers and closures	.	.	.	.	.	.	.	.
Appliances and utensils industries	.	.	.	.	.	.	.	.
Miscellaneous industries	0	0	.	.	0	0	.	.
Total domestic shipments	0	3,243	7,132	x	44,932	36,332	x	0
Total domestic alloy shipments	0	.	.	.	.	4,891	0	.
Exports to the United States	x	3,255	8,728	4,539	0	19,670	x	.
Exports to other countries (excluding United States)	x	0	37	0	0	18,363	x	0
Total disposition	x	6,498	15,897	x	44,932	74,365	x	0
Total alloy shipments	0	.	.	.	.	8,034	0	.
Producers interchange, for sale	x	.	0	.	.	409	19	.
Exports for conversion and return	.	.	.	.	.	0	.	.
Imports by producers (including conversion)	0	.	.	.	.	.	0	.

See notes at the end of the table.

Table 1-1 – continued

Steel primary forms and pig iron — Disposition of net shipments of rolled steel products, by product and industry monthly 2013

	Cold finished bars	Plates ¹	Hot rolled sheets and coils	Cold reduced sheets and strip and other cold rolled and coated	Tin plate and tin free steel (T.F.S.)	Galvanized sheets including galvalume	Total, rolled steel products
metric tonnes							
February							
Domestic shipments							
Steel service centres and other wholesalers and warehouses	1,288	11,231	159,832	14,885	944	29,543	239,473
Motor vehicles and parts	767	0	33,780	8,831	0	53,107	101,657
Railway operating	.	0	0	.	.	0	27
Railroad cars and locomotives	.	769	0	.	.	.	769
Shipbuilding	.	.	.	.	.	.	0
Steel fabrication	x	5,117	3,594	23	.	925	x
Metal building systems	.	.	0	.	.	1,278	1,278
Contractors' products	0	3,751	4,889	1,648	.	20,533	32,551
Miscellaneous stamping and coating	32	0	1,528	2,272	.	12,515	17,408
Natural resources and extractive industries	94	0	0	0	.	1	14,006
Agricultural equipment	30	509	0	0	.	0	807
Non electrical machinery	0	241	630	0	.	0	10,322
Electrical machinery	.	.	68	1,179	.	1,545	2,792
Industrial packaging material	.	.	0	3,519	0	0	3,519
Pipes and tubes	0	0	137,200	834	.	2,610	140,644
Wire and wire products	x	.	177	77	.	47	x
Containers and closures	0	.	74	0	1,029	.	1,103
Appliances and utensils industries	.	.	0	11	.	963	974
Miscellaneous industries	145	0	0	.	.	.	145
Total domestic shipments	x	21,618	341,772	33,279	1,973	123,067	641,688
Total domestic alloy shipments	94	0	.	0	.	.	4,985
Exports to the United States	1,434	x	76,396	16,342	15,854	65,444	262,870
Exports to other countries (excluding United States)	0	x	7,996	380	572	13,709	43,982
Total disposition	x	33,567	426,164	50,001	18,399	202,220	948,540
Total alloy shipments	534	0	.	0	.	.	8,568
Producers interchange, for sale	0	.	0	0	.	0	x
Exports for conversion and return	.	.	0	0	.	550	550
Imports by producers (including conversion)	.	0	729	158	.	0	887

1. Effective January 2000, producers have changed the way they report hot rolled products. The result is a change in definitions. Plates including plates for pipes and tubes becomes plates. Hot rolled sheet and strip becomes hot rolled sheets and coils and now includes all hot rolled flat products in coils, regardless of thickness.

Note(s): Compiled by principal consuming industries, according to distribution of shipments reported by iron and steel mills.

Table 1-2

Steel primary forms and pig iron — Disposition of net shipments of rolled steel products, by product and industry, year-to-date 2013

	Steel primary forms	Rails and heavy structural sections	Intermediate structural sections	Light structural sections	Concrete reinforcing bars	Other hot rolled bars	Wire rods	Railway track material
	metric tonnes							
Domestic shipments								
Steel service centres and other wholesalers and warehouses	0	9,302	11,510	7,290	5,414	16,390	0	.
Motor vehicles and parts	0	0	749	63	.	9,953	0	.
Railway operating	0	.	.	.	0	54	0	.
Railroad cars and locomotives	.	0	.	.	.	.	.	.
Shipbuilding	0	.	.	.	.	.	.	.
Steel fabrication	0	567	1,095	x	79,095	684	0	.
Metal building systems	.	0	0	0	0	0	.	.
Contractors' products	.	0	0	.	3,341	486	405	.
Miscellaneous stamping and coating	0	6	264	1,314	.	741	.	.
Natural resources and extractive industries	.	0	0	0	4,052	21,912	0	.
Agricultural equipment	.	0	0	0	0	584	.	0
Non electrical machinery	.	0	2,666	0	.	17,133	0	.
Electrical machinery	.	.	.	.	.	0	.	.
Industrial packaging material	.	.	.	.	.	0	.	.
Pipes and tubes	.	.	.	.	.	0	.	.
Wire and wire products	0	.	.	.	0	4,087	x	.
Containers and closures	.	.	.	.	.	.	.	.
Appliances and utensils industries	.	.	.	.	.	.	.	.
Miscellaneous industries	0	0	.	.	0	0	.	.
Total domestic shipments	0	9,875	16,284	x	91,902	72,024	x	0
Total domestic alloy shipments	0	.	.	.	.	10,893	0	.
Exports to the United States	x	5,739	15,581	11,130	0	43,645	x	.
Exports to other countries (excluding United States)	x	0	174	0	0	32,129	x	0
Total disposition	x	15,614	32,039	x	91,902	147,798	x	0
Total alloy shipments	0	.	.	.	.	19,559	0	.
Producers interchange, for sale	x	.	0	.	.	854	38	.
Exports for conversion and return	.	.	.	.	.	0	.	.
Imports by producers (including conversion)	0	.	.	.	.	.	0	.

See notes at the end of the table.

Table 1-2 – continued

Steel primary forms and pig iron — Disposition of net shipments of rolled steel products, by product and industry, year-to-date 2013

	Cold finished bars	Plates ¹	Hot rolled sheets and coils	Cold reduced sheets and strip and other cold rolled and coated	Tin plate and tin free steel (T.F.S.)	Galvanized sheets including galvalume	Total, rolled steel products
metric tonnes							
Domestic shipments							
Steel service centres and other wholesalers and warehouses	3,077	25,581	386,531	36,866	2,029	69,419	573,409
Motor vehicles and parts	1,670	14	77,553	16,508	0	107,766	214,276
Railway operating	.	0	0	.	.	0	54
Railroad cars and locomotives	.	1,611	0	.	.	.	1,611
Shipbuilding	.	.	.	.	.	.	0
Steel fabrication	x	9,558	6,429	167	.	2,248	x
Metal building systems	.	.	0	.	.	2,822	2,822
Contractors' products	0	7,872	8,686	5,008	.	42,770	68,568
Miscellaneous stamping and coating	32	0	4,530	5,231	.	25,241	37,359
Natural resources and extractive industries	196	0	0	0	.	1	26,161
Agricultural equipment	94	884	0	0	.	0	1,562
Non electrical machinery	0	261	1,462	0	.	0	21,522
Electrical machinery	.	.	140	2,654	.	2,560	5,354
Industrial packaging material	.	.	0	9,156	0	0	9,156
Pipes and tubes	0	0	293,495	1,390	.	5,662	300,547
Wire and wire products	x	.	316	121	.	81	x
Containers and closures	0	.	309	0	2,096	.	2,405
Appliances and utensils industries	.	.	0	38	.	2,658	2,696
Miscellaneous industries	250	0	0	.	.	.	250
Total domestic shipments	x	45,781	779,451	77,139	4,125	261,228	1,418,905
Total domestic alloy shipments	94	0	.	0	.	.	10,987
Exports (for final sale)							
Exports to the United States	3,121	x	169,740	35,346	36,866	131,973	550,903
Exports to other countries (excluding United States)	0	x	16,522	749	1,413	27,442	84,669
Total disposition	x	70,671	965,713	113,234	42,404	420,643	2,054,477
Total alloy shipments	1,252	0	.	0	.	.	20,811
Producers interchange, for sale	0	.	0	0	.	0	x
Exports for conversion and return	.	.	0	0	.	550	550
Imports by producers (including conversion)	.	0	935	4,001	.	0	4,936

1. Effective January 2000, producers have changed the way they report hot rolled products. The result is a change in definitions. Plates including plates for pipes and tubes becomes plates. Hot rolled sheet and strip becomes hot rolled sheets and coils and now includes all hot rolled flat products in coils, regardless of thickness.

Note(s): Compiled by principal consuming industries, according to distribution of shipments reported by iron and steel mills.

Table 1-3

Steel primary forms and pig iron — Production of pig iron

	February		Year-to-date	
	2012	2013	2012	2013
metric tonnes				
Production of pig iron	634,689	595,598	1,311,402	1,212,315

Table 1-4
Steel primary forms and pig iron — Pig iron and scrap charged to steel furnaces

	February		Year-to-date	
	2012	2013	2012	2013
	metric tonnes			
Pig iron including pre-reduced iron	658,542	456,815	1,358,934	931,026
Scrap				
Own make	134,683	305,781	278,593	633,736
Purchased	466,643	395,755	938,052	797,087
Total, pig iron and scrap products	1,259,868	1,158,351	2,575,579	2,361,849

Table 1-5
Steel primary forms and pig iron — Production and shipments of steel, primary forms, monthly

	Production		Shipments	
	2012	2013	2012	2013
	metric tonnes			
February				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	484,849	436,036	x	x
Basic oxygen furnace	660,005	611,932	x	x
Steel, primary forms - Total	1,144,854	1,047,968	182,679	172,085
Included in "Steel primary forms total" above				
Continuous cast steel	1,112,686	1,009,703	154,233	145,294

Table 1-6
Steel primary forms and pig iron — Production and shipments of steel, primary forms, year-to-date

	Production		Shipments	
	2012	2013	2012	2013
	metric tonnes			
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	974,518	878,019	x	x
Basic oxygen furnace	1,358,476	1,265,606	x	x
Steel, primary forms - Total	2,332,994	2,143,625	360,242	339,172
Included in "Steel primary forms total" above				
Continuous cast steel	2,268,231	2,074,402	305,778	283,298

Table 2-1
Steel pipe and tubing — Production and shipments, monthly 2013

	Production	Shipments for sale		
		Domestic shipments ¹	Exports	Total shipments
		metric tonnes		
February				
Total, pipe and tubing	175,642	103,234	85,752	188,988
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	1,144	0	1,144
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	11,377	x	x	8,089
over 16" (40.64 cm) outside diameter	27,042	4,805	27,328	32,132
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	x	x	x	12,200
over 16" (40.64 cm) periphery	x	x	x	x
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	x	x	x
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	0	x	x	x
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	x	x	361
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	x	x	x	x
over 16" (40.64 cm) outside diameter	x	42	37	79
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	20,411	10,009	6,418	16,426
Mechanical tubing, welded, produced from cold rolled	5,887	4,898	1,804	6,702
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	x	31,869	9,081	40,951
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	x	x	x	10,860
Other tubular products	x	1,122	375	1,498

1. Including for own use by the steel pipe and tubing industries.

Table 2-2
Steel pipe and tubing — Production and shipments, year-to-date 2013

	Production	Shipments for sale		
		Domestic shipments ¹	Exports	Total shipments
		metric tonnes		
Total, pipe and tubing	361,334	241,892	174,783	416,676
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	2,671	0	2,671
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	19,628	x	x	20,133
over 16" (40.64 cm) outside diameter	58,666	9,083	46,449	55,531
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	x	x	x	24,737
over 16" (40.64 cm) periphery	x	x	x	x
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	x	x	x
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	x	x	x	x
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	x	x	x
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	x	x	x	x
over 16" (40.64 cm) outside diameter	x	1,884	58	1,942
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	39,956	20,846	12,920	33,765
Mechanical tubing, welded, produced from cold rolled	12,465	9,626	3,777	13,403
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	x	74,448	24,206	98,655
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	x	x	x	x
Other tubular products	x	3,002	988	3,991

1. Including for own use by the steel pipe and tubing industries.

Table 3-1
Steel and specified wire products — Factory shipments, monthly

	Shipments				Production
	2012	2013			
		Total shipments	Domestic shipments	Exports	
metric tonnes					
February					
Barbed wire	x	x	x	0	.
Uncoated steel wire	18,975	17,611	7,441	10,170	.
Galvanized steel wire	7,950	7,038	2,755	4,283	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	880	559	x	x	604
Wire mesh, bright or uncoated and galvanized	x	x	3,492	x	3,584
Wire rope	x	x	x	x	x
Nails and staples	x	x	788	x	x
Wire roofing nails of a length of 25 mm or more, iron or steel	2,808	2,087	x	x	1,967
Staples of iron or steel	x	x	x	0	x
All other wire products	x	x	x	5	1,334
Grand total	40,709	37,533	19,860	17,673	.

Note(s): Data has been revised from March 2010 to November 2011. These revised data are available at: www.statcan.gc.ca/cansim, table 303-0047. Totals may not add due to rounding.

Table 3-2
Steel and specified wire products — Factory shipments, year-to-date

	Shipments				Production
	2012	2013			
		Total shipments	Domestic shipments	Exports	
	metric tonnes				
Barbed wire	x	x	x	0	.
Uncoated steel wire	37,571	35,428	15,422	20,006	.
Galvanized steel wire	16,672	14,543	5,598	8,945	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	1,284	983	x	x	1,173
Wire mesh, bright or uncoated and galvanized	x	x	5,581	x	6,027
Wire rope	x	x	x	x	x
Nails and staples	x	x	1,622	x	x
Wire roofing nails of a length of 25 mm or more, iron or steel	5,571	4,289	x	x	3,719
Staples of iron or steel	x	x	x	0	x
All other wire products	x	x	x	8	2,646
Grand total	79,129	72,836	37,758	35,078	.

Note(s): Data has been revised from March 2010 to November 2011. These revised data are available at: www.statcan.gc.ca/cansim, table 303-0047. Totals may not add due to rounding.

Concepts, methodology and data quality

This publication presents the results of four monthly surveys: Steel Primary Forms, Steel Castings and Pig Iron; Ingots and Rolled Steel Products; Steel Pipe and Tubing; and Steel Wire and Specified Wire Products. These surveys measure, on a monthly basis, the quantities of selected steel products that are produced and shipped by Canadian manufacturers. The target population for these surveys includes manufacturers in Canada of primary steel, steel products, pig iron, steel pipe and tubing as well as, steel wire as defined in the Standard Classification of Goods (SCG) that report these products to the Annual Survey of Manufactures and Logging (ASML) (Survey ID 2103). This means that estimates from the monthly surveys do not cover the entire universe of steel producers in Canada because the ASML does not survey all businesses. Instead, the ASML uses administrative data to cover the small and medium-sized establishments. These manufacturers are not part of the four monthly surveys.

General methodology

Data are collected each month, directly from survey respondents using a mail-out / mail-back process. Data capture and preliminary editing are performed simultaneously to ensure validity of the data. Businesses from whom no response has been received or whose data may contain errors are followed-up by telephone or fax.

Missing data for the current month are imputed automatically by applying to the previous month's value, the month-to-month change observed for the same period in the previous year, for the unit in question. However, an option exists for analysts to manually override this imputation with a better estimate based on pertinent knowledge about the industry or the business.

Various confidentiality rules are applied to all data before they are released to prevent the publication or disclosure of any information deemed confidential. If necessary, data are suppressed to prevent the direct or residual disclosure of identifiable data.

Direct disclosure could occur when the value in a tabulation cell is composed of a few respondents or when the cell is dominated by a few companies. Residual disclosure could occur when confidential information can be derived indirectly by piecing together information from different sources or data series.

Under normal circumstances, data are collected, captured, edited, tabulated and published within 6-8 weeks after the reference month.

Revisions

Data may be revised to include amended information or reports from respondents that are received after the end of a collection cycle. Revisions are disseminated in subsequent periods and reflected in the CANSIM series and in the tables of this publication.

Data accuracy

The methodology of these surveys has been designed to promote data accuracy. Since data are collected from all Canadian producers of primary steel, steel products, pig iron, steel pipe and tubing and steel wire within the target population, the resulting estimates are not subject to sampling error. However, the results are still subject to the non-sampling errors associated with coverage, non-response, inaccurate reporting, and processing. Errors relating to coverage and non-response can be measured and are summarized in text table 1. All attempts are made to control inaccurate reporting and processing errors.

Moreover, survey results are analyzed to ensure comparability with patterns observed in historical data series and the economic condition of the industry. Information available from other sources such as the Steel Primary Forms Weekly Survey (Survey ID 2131) and the Monthly Survey of Manufacturing (MSM) (Survey ID 2101) are also used in the validation process.

Coverage error

There is a degree of under coverage (referred to as coverage error) in the survey results as there is generally a lag between the time a new business comes into existence and when it is included in the universe of these sub-annual surveys. This occurs because the list of businesses surveyed is derived from the latest available survey results for the ASML which are not available until 15 months after the reference period.

This error is kept at a minimum by also using advance information from the ASML frame, feedback from the MSM and other sources such as the Canadian Steel Producer's Association, trade journals and newspaper articles, to identify new survey units.

Non-response error

Some respondents may be unable to provide data for numerous reasons (i.e. fire, theft, strike, economic hardship, etc.), while others may be late in responding. To minimize non-response, delinquent respondents are followed up rigorously by phone or fax. Data for non-responding units are imputed using industry trend and other related information. Data are revised at a later date, if completed questionnaires are received after the end of a collection cycle.

Inaccurate response

Inaccuracy may result from poor questionnaire design or an inability on the part of respondents to provide the requested information or from misinterpretation of the survey questions. To reduce such errors the format and wording in the questionnaire are reviewed from time to time and modified based on feedback from survey respondents and data users. Respondents are also reminded of the importance of their contribution and of the need for accurate data reporting.

Processing errors

These errors may occur at various stages in the processing of survey data such as data entry, verification, editing and tabulation. Data are examined for such errors using automated edits along with an analytical review by subject matter experts. Several checks are performed on the collected data to verify internal consistency and comparability over time.

Text table 1
Coverage and non-response errors

	Coverage error based on the Annual Survey of Manufactures and Logging (ASML) 2004	Non-response error- annual average 2005
	percent	
Steel primary forms steel castings and pig iron	0	6
Ingots and rolled steel products	3	0
Steel pipe and tubing	0	0
Steel wire	0	0

Definitions

Shipments:

Shipments refer to the quantity of manufactured goods that are shipped, during the reference period from the plant to customers in domestic or export markets.

Production:

Production refers to the quantity of goods manufactured in Canada during a reference period including intermediate products. The final goods may be shipped or retained in inventory.

Exports:

Shipments of goods destined for customers outside of Canada.

Disposition of shipments:

Disposition of shipments refers to the distribution of shipped quantities of manufactured goods by end use (market).

Coverage ratio:

The share of total Annual Survey of Manufactures (ASM) shipment values for products included in a given sub-annual survey from businesses surveyed by the same sub-annual survey.

Non-response rate:

Number of non-responses in the year, divided by the number of total expected responses in the year.

Number of non-responses in the year, divided by the number of total expected responses in the year. More detailed information is available from the Annual Survey of Manufactures and Logging, CANSIM Table 301-0006. Specific enquiries should be directed to: The Dissemination and Frame Services section, Manufacturing and Energy Division, Statistics Canada, Ottawa, Ontario, K1A 0T6 (Telephone: 1-866-873-8789 or 613-951-9497; Fax line: 613-951-3877; Internet: manufact@statcan.gc.ca).