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Steel, Tubular Products and Steel Wire

January 2010



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Steel, Tubular Products and Steel Wire

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User information

Symbols

The following standard symbols are used in Statistics Canada publications:

- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0s 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

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Highlights

January 2010

- Monthly production of primary steel and pig iron increased 10.6 % in January 2010 to 1,042,778 metric tonnes.
- In the same month, the total disposition of shipments of rolled steel products increased 16.3 % to 1,017,627 metric tonnes.
- Between December 2009 and January 2010, production of steel pipe and tubing increased 21.0 % to 151,882 metric tonnes.
- Total shipments of steel wire and specified wire products increased 46.6 % to 34,256 metric tonnes in January 2010.

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 ¹ of rolled steel products, by product, monthly 2010

SDC No.	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								
January								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	5	2,106	8,584	5,103	3,555	x	0	.
21 Motor vehicles and parts	72	0	130	25	.	6,088	0	.
22 Railway operating	0	.	.	.	0	17	0	.
23 Railroad cars and locomotives	.	106	.	.	.	.	.	.
24 Shipbuilding	0	.	.	.	.	.	.	.
31 Steel fabrication	0	806	998	2,418	37,168	x	0	.
32 Metal building systems	.	0	0	.	157	0	.	.
33 Contractors' products	.	0	0	.	164	x	225	.
34 Miscellaneous stamping and coating	0	0	181	65	.	62	.	.
41 Natural resources and extractive industries	.	55	24	0	452	14,439	0	.
51 Agricultural equipment	.	0	0	0	0	100	.	0
52 Non electrical machinery	.	0	1,609	0	.	6,094	0	.
53 Electrical machinery	.	.	.	.	.	0	.	.
54 Industrial packaging material	.	.	.	.	.	0	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	0	.	.	.	0	330	x	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	0	0	.	.	0	0	.	.
Total domestic shipments	77	3,073	11,526	7,611	41,496	33,919	x	0
Total domestic alloy shipments	0	.	.	.	.	4,051	x	.
81 Exports to the United States	104,133	1,283	2,873	3,649	0	16,284	x	.
82 Exports to other countries (excluding United States)	x	0	0	40	0	11,587	x	0
Total disposition	x	4,356	14,399	11,300	41,496	61,790	x	0
Total alloy shipments	0	.	.	.	.	5,900	0	.
Producers interchange, for sale	x	.	0	.	.	1,037	0	.
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 ¹ of rolled steel products, by product, monthly 2010

SDC No.	Cold finished bars	Plates ²	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							
January							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	x	22,933	186,028	24,914	1,707	33,466	296,931
21 Motor vehicles and parts	987	0	26,908	7,063	0	28,141	69,414
22 Railway operating	.	0	0	.	.	0	17
23 Railroad cars and locomotives	.	117	0	.	.	.	223
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	x	2,507	3,554	0	.	1,172	48,791
32 Metal building systems	.	.	0	.	.	1,371	1,528
33 Contractors' products	0	56	5,452	x	.	22,420	30,752
34 Miscellaneous stamping and coating	59	0	2,241	x	.	17,954	x
41 Natural resources and extractive industries	18	81	0	0	.	0	15,069
51 Agricultural equipment	47	0	0	0	.	.	147
52 Non electrical machinery	0	0	467	0	.	0	8,170
53 Electrical machinery	.	.	35	3,386	.	1,379	4,800
54 Industrial packaging material	.	.	81	4,431	0	0	4,512
61 Pipes and tubes	0	0	99,387	1,863	.	2,584	103,834
62 Wire and wire products	x	.	252	74	.	121	x
63 Containers and closures	0	.	0	389	2,688	.	3,077
64 Appliances and utensils industries	.	.	21	3,312	.	2,088	5,421
70 Miscellaneous industries	146	0	0	.	.	.	146
Total domestic shipments	x	25,694	324,426	51,145	4,395	110,696	637,357
Total domestic alloy shipments	235	0	.	0	.	.	x
81 Exports to the United States	1,253	10,050	x	17,795	12,753	35,934	335,105
82 Exports to other countries (excluding United States)	0	1,295	x	671	544	9,252	45,165
Total disposition	x	37,039	422,715	69,611	17,692	155,882	1,017,627
Total alloy shipments	235	0	.	0	.	.	6,135
Producers interchange, for sale	0	.	0	0	.	0	x
Exports for conversion and return	.	.	0	0	.	0	0
Imports by producers (including conversion)	.	0	0	1,621	.	0	1,621

1. Compiled by principal consuming industries, according to distribution of shipments reported by iron and steel mills.

2. 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.

Table 1-2

Steel primary forms and pig iron — Disposition of net shipments¹ of rolled steel products, by product, year-to-date 2010

SDC No.	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								
11 Steel service centres and other wholesalers and warehouses	5	2,106	8,584	5,103	3,555	x	0	.
21 Motor vehicles and parts	72	0	130	25	.	6,088	0	.
22 Railway operating	0	.	.	.	0	17	0	.
23 Railroad cars and locomotives	.	106	.	.	.	.	.	.
24 Shipbuilding	0	.	.	.	.	.	.	.
31 Steel fabrication	0	806	998	2,418	37,168	x	0	.
32 Metal building systems	.	0	0	.	157	0	.	.
33 Contractors' products	.	0	0	.	164	x	225	.
34 Miscellaneous stamping and coating	0	0	181	65	.	62	.	.
41 Natural resources and extractive industries	.	55	24	0	452	14,439	0	.
51 Agricultural equipment	.	0	0	0	0	100	.	0
52 Non electrical machinery	.	0	1,609	0	.	6,094	0	.
53 Electrical machinery	.	.	.	.	.	0	.	.
54 Industrial packaging material	.	.	.	.	.	0	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	0	.	.	.	0	330	x	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	0	0	.	.	0	0	.	.
Total domestic shipments	77	3,073	11,526	7,611	41,496	33,919	x	0
Total domestic alloy shipments	0	.	.	.	.	4,051	x	.
81 Exports to the United States	104,133	1,283	2,873	3,649	0	16,284	x	.
82 Exports to other countries (excluding United States)	x	0	0	40	0	11,587	x	0
Total disposition	x	4,356	14,399	11,300	41,496	61,790	x	0
Total alloy shipments	0	.	.	.	.	5,900	0	.
Producers interchange, for sale	x	.	0	.	.	1,037	0	.
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 ¹ of rolled steel products, by product, year-to-date 2010

SDC No.	Cold finished bars	Plates ²	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							
11 Steel service centres and other wholesalers and warehouses	x	22,933	186,028	24,914	1,707	33,466	296,931
21 Motor vehicles and parts	987	0	26,908	7,063	0	28,141	69,414
22 Railway operating	.	0	0	.	.	0	17
23 Railroad cars and locomotives	.	117	0	.	.	.	223
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	x	2,507	3,554	0	.	1,172	48,791
32 Metal building systems	.	.	0	.	.	1,371	1,528
33 Contractors' products	0	56	5,452	x	.	22,420	30,752
34 Miscellaneous stamping and coating	59	0	2,241	x	.	17,954	x
41 Natural resources and extractive industries	18	81	0	0	.	0	15,069
51 Agricultural equipment	47	0	0	0	.	.	147
52 Non electrical machinery	0	0	467	0	.	0	8,170
53 Electrical machinery	.	.	35	3,386	.	1,379	4,800
54 Industrial packaging material	.	.	81	4,431	0	0	4,512
61 Pipes and tubes	0	0	99,387	1,863	.	2,584	103,834
62 Wire and wire products	x	.	252	74	.	121	x
63 Containers and closures	0	.	0	389	2,688	.	3,077
64 Appliances and utensils industries	.	.	21	3,312	.	2,088	5,421
70 Miscellaneous industries	146	0	0	.	.	.	146
Total domestic shipments	x	25,694	324,426	51,145	4,395	110,696	637,357
Total domestic alloy shipments	235	0	.	0	.	.	x
Exports ² (for final sale)							
81 Exports to the United States	1,253	10,050	x	17,795	12,753	35,934	335,105
82 Exports to other countries (excluding United States)	0	1,295	x	671	544	9,252	45,165
Total disposition	x	37,039	422,715	69,611	17,692	155,882	1,017,627
Total alloy shipments	235	0	.	0	.	.	6,135
Producers interchange, for sale	0	.	0	0	.	0	x
Exports for conversion and return ²	.	.	0	0	.	0	0
Imports by producers (including conversion)	.	0	0	1,621	.	0	1,621

1. Compiled by principal consuming industries, according to distribution of shipments reported by iron and steel mills.

2. 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.

Table 1-3

Steel primary forms and pig iron — Production of pig iron

	January		Year-to-date	
	2009	2010	2009	2010
metric tonnes				
Production of pig iron	518,216	637,168	518,216	637,168

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

	January		Year-to-date	
	2009	2010	2009	2010
	metric tonnes			
Pig iron including pre-reduced iron	502,139	618,176	502,139	618,176
Scrap				
Own make	98,917	111,375	98,917	111,375
Purchased	299,000	424,534	299,000	424,534
Total, pig iron and scrap products	900,056	1,154,085	900,056	1,154,085

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

	Production		Shipments	
	2009	2010	2009	2010
	metric tonnes			
January				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	271,529	424,038	x	x
Basic oxygen furnace	538,430	618,740	x	x
Steel, primary forms - Total	809,959	1,042,778	84,053	269,171
Included in "Steel primary forms total" above				
Continuous cast steel	803,708	1,031,610	81,656	260,551

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

	Production		Shipments	
	2009	2010	2009	2010
	metric tonnes			
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	271,529	424,038	x	x
Basic oxygen furnace	538,430	618,740	x	x
Steel, primary forms - Total	809,959	1,042,778	84,053	269,171
Included in "Steel primary forms total" above				
Continuous cast steel	803,708	1,031,610	81,656	260,551

Table 2-1
Steel pipe and tubing — Production and shipments, monthly 2010

	Production	Shipments for sale		
		Domestic shipments ¹	Exports	Total shipments
	metric tonnes			
January				
Total, pipe and tubing	151,882	84,698	54,080	138,778
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	1,943	4	1,947
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	2,208	x	x	4,912
over 16" (40.64 cm) outside diameter	25,745	13	67	80
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	11,842	11,342	5,898	17,240
over 16" (40.64 cm) periphery	x	x	x	x
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	1,022	1,541	879	2,420
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	0	213	129	342
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	135	28	163
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	x	72	11	83
over 16" (40.64 cm) outside diameter	x	70	0	70
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	12,837	8,036	x	x
Mechanical tubing, welded, produced from cold rolled	8,803	3,915	1,359	5,274
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	42,591	33,920	15,677	49,597
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	7,704	5,052	1,982	7,034
Other tubular products	532	873	540	1,413

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 2010

	Production	Shipments for sale		
		Domestic shipments ¹	Exports	Total shipments
		metric tonnes		
Year-to-date				
Total, pipe and tubing	151,882	84,698	54,080	138,778
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	1,943	4	1,947
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	2,208	x	x	4,912
over 16" (40.64 cm) outside diameter	25,745	13	67	80
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	11,842	11,342	5,898	17,240
over 16" (40.64 cm) periphery	x	x	x	x
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	1,022	1,541	879	2,420
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	0	213	129	342
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	135	28	163
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	x	72	11	83
over 16" (40.64 cm) outside diameter	x	70	0	70
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	12,837	8,036	x	x
Mechanical tubing, welded, produced from cold rolled	8,803	3,915	1,359	5,274
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	42,591	33,920	15,677	49,597
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	7,704	5,052	1,982	7,034
Other tubular products	532	873	540	1,413

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

Table 3-1
Steel and specified wire products — Factory shipments¹, monthly

	Shipments				Production
	2009	2010			
		Total shipments	Domestic shipments	Exports	
metric tonnes					
January					
Barbed wire	x	x	x	x	.
Uncoated steel wire	12,395	17,730	9,853	7,877	.
Galvanized steel wire	9,295	6,622	2,565	4,057	.
Other coated steel wire	x	x	x	0	.
Farm fencing and wire chain link fabric	x	x	x	0	515
Wire mesh, bright or uncoated and galvanized	2,387	2,965	x	x	3,228
Wire rope	x	x	x	x	x
Nails and staples	x	x	x	x	x
Wire roofing nails of a length of 25 mm or more, iron or steel	667	2,715	862	1,853	2,462
Staples of iron or steel	x	x	x	x	x
All other wire products	682	x	x	x	x
Grand total	35,604	34,256	18,700	15,556	.

1. Totals may not add due to rounding.

Table 3-2
Steel and specified wire products — Factory shipments ¹, year-to-date

	Shipments				Production
	2009	2010			
		Total shipments	Domestic shipments	Exports	
	metric tonnes				
Barbed wire	x	x	x	x	.
Uncoated steel wire	12,395	17,730	9,853	7,877	.
Galvanized steel wire	9,295	6,622	2,565	4,057	.
Other coated steel wire	x	x	x	0	.
Farm fencing and wire chain link fabric	x	x	x	0	515
Wire mesh, bright or uncoated and galvanized	2,387	2,965	x	x	3,228
Wire rope	x	x	x	x	x
Nails and staples	x	x	x	x	x
Wire roofing nails of a length of 25 mm or more, iron or steel	667	2,715	862	1,853	2,462
Staples of iron or steel	x	x	x	x	x
All other wire products	682	x	x	x	x
Grand total	35,604	34,256	18,700	15,556	.

1. 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 or 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 or 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 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 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).