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Steel, Tubular Products and Steel Wire

May 2011



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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
- 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

May 2011

- Monthly production of primary steel and pig iron increased 4.2% in May 2011 to 1,217,089 metric tonnes.
- In the same month, the total disposition of shipments of rolled steel products increased 3.9% to 1,028,313 metric tonnes.
- Between April 2011 and May 2011, production of steel pipe and tubing increased 3.2% to 176,363 metric tonnes.
- Total shipments of steel wire and specified wire products increased 1.0% to 51,301 metric tonnes in May 2011.

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 shipments¹ of rolled steel products, by product, monthly 2011

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								
May								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	2	1,895	6,021	5,921	4,051	x	0	.
21 Motor vehicles and parts	177	0	233	14	.	9,860	0	.
22 Railway operating	0	.	.	.	0	54	0	.
23 Railroad cars and locomotives	.	0	.	.	.	.	.	.
24 Shipbuilding	0	.	.	.	.	.	.	.
31 Steel fabrication	0	31	1,508	2,702	31,402	x	0	.
32 Metal building systems	.	0	0	0	80	0	.	.
33 Contractors' products	.	0	0	.	558	320	133	.
34 Miscellaneous stamping and coating	0	0	415	409	.	2,486	.	.
41 Natural resources and extractive industries	.	209	0	0	1,559	10,001	0	.
51 Agricultural equipment	.	0	0	3	0	188	.	0
52 Non electrical machinery	.	0	1,030	0	.	5,769	0	.
53 Electrical machinery	.	.	.	.	.	0	.	.
54 Industrial packaging material	.	.	.	.	.	0	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	0	.	.	.	0	532	x	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	0	0	.	.	0	0	.	.
Total domestic shipments	179	2,135	9,207	9,049	37,650	38,007	x	0
Total domestic alloy shipments	0	.	.	.	.	4,062	x	.
81 Exports to the United States	x	810	3,366	4,471	0	24,762	x	.
82 Exports to other countries (excluding United States)	x	0	104	0	0	33,910	x	0
Total disposition	86,076	2,945	12,677	13,520	37,650	96,679	x	0
Total alloy shipments	0	.	.	.	.	8,234	0	.
Producers interchange, for sale	x	.	0	.	.	826	93	.
Exports for conversion and return	.	.	.	.	.	0	.	.
Imports by producers (including conversion)	x	.	.	.	.	.	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 2011

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							
May							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	x	16,334	194,044	21,447	1,126	24,752	285,197
21 Motor vehicles and parts	715	0	32,290	7,684	0	40,065	91,038
22 Railway operating	.	0	0	.	.	0	54
23 Railroad cars and locomotives	.	418	0	.	.	.	418
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	x	4,078	1,419	0	.	1,408	x
32 Metal building systems	.	.	0	.	.	3,161	3,241
33 Contractors' products	0	0	7,158	1,594	.	20,510	30,273
34 Miscellaneous stamping and coating	28	0	4,800	4,073	.	17,482	29,693
41 Natural resources and extractive industries	48	0	0	0	.	0	11,817
51 Agricultural equipment	78	30	0	0	.	0	299
52 Non electrical machinery	0	264	1,207	0	.	0	8,270
53 Electrical machinery	.	.	154	1,765	.	2,020	3,939
54 Industrial packaging material	.	.	0	3,454	0	0	3,454
61 Pipes and tubes	0	0	86,205	639	.	858	87,702
62 Wire and wire products	x	.	96	64	.	83	x
63 Containers and closures	0	.	68	962	0	.	1,030
64 Appliances and utensils industries	.	.	0	1,730	.	980	2,710
70 Miscellaneous industries	286	0	0	.	.	.	286
Total domestic shipments	x	21,124	327,441	43,412	1,126	111,319	623,426
Total domestic alloy shipments	290	0	.	0	.	.	x
81 Exports to the United States	1,286	13,540	x	12,835	18,008	35,396	344,657
82 Exports to other countries (excluding United States)	0	1,825	x	1,013	664	7,513	60,230
Total disposition	x	36,489	448,012	57,260	19,798	154,228	1,028,313
Total alloy shipments	590	0	.	0	.	.	8,824
Producers interchange, for sale	0	.	0	0	.	0	x
Exports for conversion and return	.	.	0	0	.	0	0
Imports by producers (including conversion)	.	3,551	970	267	.	0	x

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 2011

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	8	7,963	29,502	27,090	21,726	x	0	.
21 Motor vehicles and parts	827	0	915	95	.	29,486	0	.
22 Railway operating	0	.	.	.	0	167	0	.
23 Railroad cars and locomotives	.	0	.	.	.	.	.	.
24 Shipbuilding	0	.	.	.	.	.	.	.
31 Steel fabrication	0	232	5,328	10,489	147,898	x	0	.
32 Metal building systems	.	0	0	0	249	0	.	.
33 Contractors' products	.	0	0	.	6,050	988	332	.
34 Miscellaneous stamping and coating	0	0	1,210	1,373	.	5,873	.	.
41 Natural resources and extractive industries	.	859	38	14	6,997	58,905	0	.
51 Agricultural equipment	.	0	0	8	0	996	.	59
52 Non electrical machinery	.	0	6,589	31	.	41,175	0	.
53 Electrical machinery	.	.	.	.	.	0	.	.
54 Industrial packaging material	.	.	.	.	.	0	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	106	.	.	.	0	2,964	x	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	0	0	.	.	0	0	.	.
Total domestic shipments	941	9,054	43,582	39,100	182,920	186,339	x	59
Total domestic alloy shipments	0	.	.	.	.	28,413	x	.
81 Exports to the United States	x	5,501	20,848	23,022	0	118,283	x	.
82 Exports to other countries (excluding United States)	x	0	280	11	0	119,560	x	0
Total disposition	387,856	14,555	64,710	62,133	182,920	424,182	x	59
Total alloy shipments	0	.	.	.	.	49,507	0	.
Producers interchange, for sale	x	.	0	.	.	3,136	275	.
Exports for conversion and return	.	.	.	.	.	0	.	.
Imports by producers (including conversion)	x	.	.	.	.	.	0	.

See notes at the end of the table.

Table 1-2 – continued

Steel primary forms and pig iron — Disposition of net shipments¹ of rolled steel products, by product, year-to-date 2011

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	81,544	1,089,534	102,524	6,803	141,949	1,560,898
21 Motor vehicles and parts	3,494	0	151,670	37,825	0	196,497	420,809
22 Railway operating	.	0	0	.	.	0	167
23 Railroad cars and locomotives	.	1,955	0	.	.	.	1,955
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	x	16,415	11,456	0	.	8,150	x
32 Metal building systems	.	.	0	.	.	11,846	12,095
33 Contractors' products	0	277	27,170	10,542	.	99,201	144,560
34 Miscellaneous stamping and coating	133	0	26,621	20,558	.	74,375	130,143
41 Natural resources and extractive industries	284	0	1	0	.	2	67,100
51 Agricultural equipment	277	2,391	0	0	.	0	3,731
52 Non electrical machinery	0	544	4,945	0	.	0	53,284
53 Electrical machinery	.	.	1,093	8,942	.	8,249	18,284
54 Industrial packaging material	.	.	83	25,423	0	0	25,506
61 Pipes and tubes	0	0	450,200	3,090	.	7,591	460,881
62 Wire and wire products	x	.	696	265	.	237	x
63 Containers and closures	0	.	237	3,292	880	.	4,409
64 Appliances and utensils industries	.	.	0	9,063	.	7,365	16,428
70 Miscellaneous industries	804	0	0	.	.	.	804
Total domestic shipments	x	103,126	1,763,706	221,524	7,683	555,462	3,223,690
Total domestic alloy shipments	1,516	0	.	0	.	.	x
Exports² (for final sale)							
81 Exports to the United States	6,208	61,984	x	75,955	78,265	172,471	1,539,009
82 Exports to other countries (excluding United States)	0	15,347	x	6,271	3,301	41,907	279,056
Total disposition	x	180,457	2,258,980	303,750	89,249	769,840	5,041,755
Total alloy shipments	2,896	0	.	0	.	.	52,403
Producers interchange, for sale	0	.	244	0	.	0	x
Exports for conversion and return ²	.	.	0	0	.	45	45
Imports by producers (including conversion)	.	3,575	17,120	4,475	.	0	x

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

	May		Year-to-date	
	2010	2011	2010	2011
metric tonnes				
Production of pig iron	583,857	687,782	3,101,888	3,049,638

Table 1-4

Steel primary forms and pig iron — Pig iron and scrap charged to steel furnaces

	May		Year-to-date	
	2010	2011	2010	2011
	metric tonnes			
Pig iron including pre-reduced iron	567,419	725,167	3,050,885	3,226,231
Scrap				
Own make	108,784	120,922	573,625	571,300
Purchased	492,099	518,705	2,325,563	2,408,501
Total, pig iron and scrap products	1,168,302	1,364,794	5,950,073	6,206,032

Table 1-5

Steel primary forms and pig iron — Production and shipments of steel, primary forms, monthly

	Production		Shipments	
	2010	2011	2010	2011
	metric tonnes			
May				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	472,151	512,414	x	x
Basic oxygen furnace	582,356	704,675	x	x
Steel, primary forms - Total	1,054,507	1,217,089	322,980	173,619
Included in "Steel primary forms total" above				
Continuous cast steel	1,038,525	1,199,806	318,811	159,735

Table 1-6

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

	Production		Shipments	
	2010	2011	2010	2011
	metric tonnes			
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	2,268,524	2,418,174	x	x
Basic oxygen furnace	3,055,045	3,123,992	x	x
Steel, primary forms - Total	5,323,569	5,542,166	1,443,378	886,981
Included in "Steel primary forms total" above				
Continuous cast steel	5,287,079	5,465,700	1,398,744	830,351

Table 2-1
Steel pipe and tubing — Production and shipments, monthly 2011

	Production	Shipments for sale		Total shipments
		Domestic shipments ¹	Exports	
	metric tonnes			
May				
Total, pipe and tubing	176,363	92,520	96,921	189,441
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	1,585	0	1,585
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	13,349	x	x	13,630
over 16" (40.64 cm) outside diameter	18,037	x	22,008	x
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	4,527	5,499	4,240	9,739
over 16" (40.64 cm) periphery	x	x	x	x
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	1,986	x	606	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	467	x	x	1,204
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	1,454	1,977	155	2,132
over 16" (40.64 cm) outside diameter	1,293	x	0	x
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	15,577	11,998	6,730	18,728
Mechanical tubing, welded, produced from cold rolled	9,467	4,694	1,367	6,061
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	42,908	24,801	x	x
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	19,948	6,767	x	x
Other tubular products	785	987	809	1,796

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 2011

	Production	Shipments for sale		
		Domestic shipments ¹	Exports	Total shipments
	metric tonnes			
Year-to-date				
Total, pipe and tubing	943,648	645,888	419,463	1,065,351
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	x	x	13,550
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	58,509	x	x	80,835
over 16" (40.64 cm) outside diameter	x	x	x	x
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	x	x	x	55,623
over 16" (40.64 cm) periphery	x	x	x	x
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	16,178	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	4,189
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	7,920	x	x	x
over 16" (40.64 cm) outside diameter	5,634	x	x	x
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	74,886	72,328	30,557	102,885
Mechanical tubing, welded, produced from cold rolled	46,224	23,537	8,222	31,759
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	x	181,544	x	x
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	x	44,885	x	x
Other tubular products	x	7,206	3,644	10,850

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
	2010	2011			
		Total	Domestic	Exports	
		shipments	shipments		
metric tonnes					
May					
Barbed wire	675	226	x	x	.
Uncoated steel wire	18,412	18,523	7,811	10,712	.
Galvanized steel wire	5,749	12,872	6,610	6,262	.
Other coated steel wire	x	x	x	0	.
Farm fencing and wire chain link fabric	362	x	x	x	3,310
Wire mesh, bright or uncoated and galvanized	3,328	3,957	x	x	4,407
Wire rope	x	x	x	x	x
Nails and staples	x	x	1,413	x	x
Wire roofing nails of a length of 25 mm or more, iron or steel	3,702	2,459	x	x	3,468
Staples of iron or steel	x	x	x	x	x
All other wire products	x	x	x	2	x
Grand total	35,629	51,301	27,861	23,440	.

1. Totals may not add due to rounding.

Table 3-2
Steel and specified wire products — Factory shipments¹, year-to-date

	Shipments				Production
	2010	2011			
		Total shipments	Domestic shipments	Exports	
	metric tonnes				
Barbed wire	x	x	x	x	.
Uncoated steel wire	93,592	96,583	41,222	55,361	.
Galvanized steel wire	35,919	72,356	37,843	34,513	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	x	x	x	x	x
Wire mesh, bright or uncoated and galvanized	16,270	21,386	x	x	22,361
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	15,290	12,026	x	x	18,149
Staples of iron or steel	x	x	x	x	x
All other wire products	x	x	x	x	x
Grand total	187,600	282,597	158,869	123,728	.

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).