

Catalogue no. 41-019-XIE

Steel, tubular products and steel wire



September 2005



Statistics Canada Statistique Canada



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Manufacturing, Construction and Energy Division

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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

Table of contents

Highlig	hts	4					
Related products							
Statisti	cal tables						
1 St	eel primary forms and pig iron	7					
1-1	Disposition of net shipments of rolled steel products, by product, monthly 2005	7					
1-2	Disposition of net shipments of rolled steel products, by product, year-to-date 2005	9					
1-3	Production of pig iron	10					
1-4	Pig iron and scrap charged to steel furnaces	11					
1-5	Production and shipments of steel, primary forms, monthly	11					
1-6	Production and shipments of steel, primary forms, year-to-date	11					
2 St	eel pipe and tubing	12					
2-1	Production and shipments, monthly 2005	12					
2-2	Production and shipments, year-to-date 2005	13					
3 St	eel and specified wire products	14					
3-1	Factory shipments, monthly	14					
3-2	Factory shipments, year-to-date	14					
Data q	uality, concepts and methodology						
Concer	ots, methodology and data quality	15					
Definition		17					

Highlights

September 2005

- Following an increase of 36.2% in August 2005, total shipments of rolled steel products moderated, increasing only 2.2% to 1,308,923 metric tonnes in September. The year-over-year increase for September was 6.9%.
- Compared to August 2005, production of primary steel forms in September advanced 8.6% to reach 1,299,707 metric tonnes. This is the highest level of production since May 2005.
- Steel pipe and tubing production in September reached 249,738 metric tones, up 5.7% from 236,362 metric tones in August. This increase was largely attributable to a surge in demand for oil country and tubular products and oil well tubing (including couplings).
- An increase in exports of steel pipe and tubing was offset by a decrease in domestic shipments leaving total shipments flat in September 2005.

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 2005

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 to	nnes			
September								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses 21 Motor vehicles and parts	213	4,174	9,846	7,786	5,078	19,774 29,824	70 265	
22 Railway operating 23 Railroad cars and locomotives 24 Shipbuilding		506						
31 Steel fabrication 32 Metal building systems 33 Contractors products 34 Miscellaneous stamping and coating 41 Natural resources and extractive	 	361	1,135 341	3,295	35,730 1,658	14,700 43 403 2,905	246	
industries 51 Agricultural equipment 52 Non electrical machinery 53 Electrical machinery					514	7,234 510 871	 	
54 Industrial packaging material 61 Pipes and tubes 62 Wire and wire products 63 Containers and closures				· · ·	27	4,606	X	
64 Appliances and utensils industries 70 Miscellaneous industries		•			36			
Total domestic shipments	213	5,041	11,322	11,290	43,043	80,870	X	
Total domestic alloy shipments						21,863		
Exports ² (for final sale)								
81 Exports to the United States 82 Exports to other countries (excluding	x	3,457	12,380	9,403	2,322	39,434	х	
United States)	Х		69			27,629	X	
Total disposition	x	8,498	23,771	20,693	45,365	147,933	x	
Total alloy shipments						58,867		
Producers interchange, for sale	х					2,369	83	
Exports for conversion and return ²								
Imports by producers (including conversion)	5,951							

See footnotes at the end of the table.

Table 1-1 - continued

Steel primary forms and pig iron — Disposition of net shipments¹ of rolled steel products, by product, monthly 2005

SDC	Cold	Plates ³	Hot rolled	Cold reduced	Tin plate	Galvanized	Total,
No.	finished bars		sheets and coils	sheets and strip and other	and tin free steel	sheets including	rolled steel
				cold rolled	(T.F.S.)	galvalume	products
				metric tonnes			
_ September				metric torrics			
Domestic shipments							
11 Steel service centres and other wholesalers							
and warehouses	3.504	27,499	158.949	47,527	2,916	45.038	332,374
21 Motor vehicles and parts	2,430	,	95,479	20,412	_,	71,276	219,686
22 Railway operating							
23 Railroad cars and locomotives		3,264	71				3,841
24 Shipbuilding							
31 Steel fabrication	171	1,966	5,279	240		830	63,707
32 Metal building systems						3,378	3,421
33 Contractors'products	10		5,276	750		38,937	47,280
34 Miscellaneous stamping and coating	267	1,271	5,623	6,685		21,809	39,110
41 Natural resources and extractive industries	135					13	7,896
51 Agricultural equipment	99	126	151				. 886
52 Non electrical machinery	109	538		15	•		1,533
53 Electrical machinery				4,504	-	1,730	6,234
54 Industrial packaging material	44		1,019	10,935		4.000	11,954
61 Pipes and tubes	41 471		171,698	3,983	•	1,988	177,710 28.526
62 Wire and wire products	4/1	•		X 300	14 222	33	14,523
63 Containers and closures 64 Appliances and utensils industries	•			6,511	14,223	3,610	10,121
70 Miscellaneous industries	111			0,311		3,610	10, 12 1
	7,348	34,664	443,545		17,139	188,642	968,949
Total domestic shipments	•	34,004	443,545	х	17,139	100,042	,
Total domestic alloy shipments	127		•		•	-	21,990
Exports ² (for final sale)							
81 Exports to the United States 82 Exports to other countries (excluding United	8,256	18,469	48,448	15,630	7,548	43,041	281,705
States)		2,378	4,178	1,138	2,176	12,529	58,269
Total disposition	15,604	55,511	496,171	118,751	26,863	244,212	1,308,923
Total alloy shipments	127		•		•		58,994
Producers interchange, for sale			1,372	x			46,255
Exports for conversion and return ²	•				•		
Imports by producers (including conversion)		2,294	5,744	16,630			30,619

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

^{2.} These data include exports reported by steel producers only and are not the same as published in the Exports by commodities, catalogue number 65-004-XPB.

^{3.} 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 2005

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 to	nnes			
Domestic shipments								
11 Steel service centres and other								
wholesalers and warehouses		24,768	66,633	64,895	33,197	198,685	:	
21 Motor vehicles and parts	-			-		233,405	1,671	
22 Railway operating 23 Railroad cars and locomotives	•	3,941	•	•				
24 Shipbuilding		3,941	•	•	•	•	•	•
31 Steel fabrication		3.146	10.587	31,763	236,104	122,232		
32 Metal building systems		-,				227		
33 Contractors'products					6,048	5,379	1,792	
34 Miscellaneous stamping and coating			3,307	2,486		14,916		
41 Natural resources and extractive					0.4.7.40	445 555		
industries	•	•		•	21,742	115,557		
51 Agricultural equipment 52 Non electrical machinery	•					3,541 7,936		
53 Electrical machinery	•	**	**		•	7,930	••	•
54 Industrial packaging material		•	•					•
61 Pipes and tubes								
62 Wire and wire products						42,503	x	
63 Containers and closures								
64 Appliances and utensils industries				•				
70 Miscellaneous industries								
Total domestic shipments	6,667	31,889	80,678	99,186	297,306	744,553	x	
Total domestic alloy shipments						168,086		
Exports ² (for final sale)								
81 Exports to the United States	х	17,018	103,328	84,656	10,890	388,243	х	
82 Exports to other countries (excluding United States)	х		975		••	169,282	x	
Total disposition	x	48,951	184,981	183,842	315,210	1,302,078	x	
Total alloy shipments						406,560		
Producers interchange, for sale	x					20,213		
Exports for conversion and return ²								
Imports by producers (including conversion)	483,773							

See footnotes 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 2005

SDC No.	Cold finished bars	Plates ³	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	26,619	232,262	1,235,065	335,557	22,318	339,084	2,579,448
21 Motor vehicles and parts	22,099		814,236	177,859		592,160	1,841,430
22 Railway operating 23 Railroad cars and locomotives	•	25,230	1,362	•			30,533
24 Shipbuilding		20,200	1,002				00,000
31 Steel fabrication	1,254	38,297	47,320	2,712		7.401	500,873
32 Metal building systems						31,366	33,437
33 Contractors'products	300		33,043	13,293		261,144	321,505
34 Miscellaneous stamping and coating	2,587	8,355	58,202	58,371		162,925	316,740
41 Natural resources and extractive industries	1,056		:			136	138,593
51 Agricultural equipment	1,519	2,655	3,063				10,845
52 Non electrical machinery	658	4,713		39,891	•	10,920	13,378 50,983
53 Electrical machinery 54 Industrial packaging material			15,555	107,447	•	10,920	123,402
61 Pipes and tubes	695		1,242,695	30,359	••	22,673	1,296,422
62 Wire and wire products	4.561		1,2 12,000	X	•	246	255,727
63 Containers and closures	.,			1,725	140,249		142,116
64 Appliances and utensils industries				50,834		25,080	75,914
70 Miscellaneous industries	1,943						2,017
Total domestic shipments	63,291	311,982	3,452,532	x	162,952	1,453,150	7,733,574
Total domestic alloy shipments	1,158						169,244
Exports ² (for final sale)							
81 Exports to the United States 82 Exports to other countries (excluding United	X	148,965	492,932	111,365	83,213	372,849	2,417,944
States)	•	15,466	42,745	x	13,698	90,493	494,373
Total disposition	x	476,413	3,988,209	946,503	259,863	1,916,492	10,645,891
Total alloy shipments	1,158						407,718
Producers interchange, for sale			9,350	x			473,455
Exports for conversion and return ²							
Imports by producers (including conversion)		13,906	59,727				616,713

^{1.} 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

	September		Year-to-date			
	2004	2005	2004	2005		
		metric tonnes				
Production of pig iron	750,538	692,943	6,627,328	6,228,620		

^{2.} These data include exports reported by steel producers only and are not the same as published in the Exports by commodities, catalogue number 65-004-XPB.

^{3.} 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 1-4 Steel primary forms and pig iron — Pig iron and scrap charged to steel furnaces

	September		Year-to-date	
	2004	2005	2004	2005
		metric tonnes		
Pig iron including pre-reduced iron	815,993	714,079	6,992,066	6,478,447
Scrap Own make Purchased	196,448 540,799	159,412 551,566	1,747,522 4,737,104	1,619,998 4,697,635
Total, pig iron and scrap products	1,553,239	1,425,057	13,476,691	12,796,080

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

	Production		Shipments	
	2004	2005	2004	2005
		metric tonnes		
September				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace Basic oxygen furnace	577,551 834,295	552,860 746,847	x 	39,834
Steel, primary forms - Total	1,411,846	1,299,707	x	39,834
Included in "Steel primary forms total" above Continuous cast steel	1,397,305	1,284,673	x	35,176

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

	Production		Shipments	<u> </u>			
	2004	2005	2004	2005			
	metric tonnes						
Steel, primary forms (carbon and alloy including continuous cast steel)							
Electric furnace	4,929,170	4,835,983	X	X			
Basic oxygen furnace	7,252,634	6,738,624	X				
Steel, primary forms - Total	12,181,804	11,574,607	x	x			
Included in "Steel primary forms total" above Continuous cast steel	12,080,544	11,445,962	х	x			

Table 2-1 Steel pipe and tubing — Production and shipments, monthly 2005

	Production	Shipi	ments for sale	
		Domestic ¹ shipments	Exports ²	Total shipments
_		metric tonne	es	
September				
Total, pipe and tubing	249,738	168,091	87,430	255,521
Pipe welded and seamless				
Line pipe up to and including 4 1/2" (11.43 cm) outside diameter over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter over 16" (40.64 cm) outside diameter	7,165 12,637 11,496	x 18,513 	x 66 8,173	6,385 18,579 8,173
Hollow structural sections up to and including 16" (40.64 cm) periphery over 16" (40.64 cm) periphery	26,715 49,390	15,898 18,795	13,289 30,566	29,187 49,361
Standard pipe up to and including 4 1/2" (11.43 cm) outside diameter over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	4,112 1,732	2,083 572	3,073 1,622	5,156 2,194
Other pipe up to and including 4 1/2" (11.43 cm) outside diameter over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter over 16" (40.64 cm) outside diameter	1,968 3,247 4,083	1,265 x 2,548	366 x 421	1,631 3,090 2,969
Mechanical tubing Mechanical tubing, welded, produced from hot rolled Mechanical tubing, welded, produced from cold rolled	37,286 13,900	27,434 7,513	10,677 2,558	38,111 10,071
Oil country tubular goods Oil country tubular goods, welded and seamless, casing (including coupling) Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	50,115 22,037	51,528 9,787	10,739 3,380	62,267 13,167
Other tubular products	3,855	3,132	2,048	5,180

Including for own use by the steel pipe and tubing industries.
 As reported by respondents to this survey. For total exports see Exports by commodity, catalogue number 65-004-XPB.

Table 2-2 Steel pipe and tubing — Production and shipments, year-to-date 2005

	Production	Shipments for sale		
		Domestic ¹ shipments	Exports ²	Total shipments
_	metric tonnes			
Year-to-date				
Total, pipe and tubing	2,089,527	1,274,963	779,254	2,054,217
Pipe welded and seamless				
Line pipe up to and including 4 1/2" (11.43 cm) outside diameter over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter over 16" (40.64 cm) outside diameter	54,660 85,857 140,155	94,780 	x 101,425	58,108 95,037 102,979
Hollow structural sections up to and including 16" (40.64 cm) periphery over 16" (40.64 cm) periphery	248,468 398,124	134,130 139,528	130,029 256,745	264,159 396,273
Standard pipe up to and including 4 1/2" (11.43 cm) outside diameter over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	40,820 9,275	19,012 6,560	30,150 7,393	49,162 13,953
Other pipe up to and including 4 1/2" (11.43 cm) outside diameter over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter over 16" (40.64 cm) outside diameter	19,024 29,474 22,258	x x x	1,444 × ×	x x x
Mechanical tubing Mechanical tubing, welded, produced from hot rolled Mechanical tubing, welded, produced from cold rolled	304,285 128,555	195,205 67,756	92,530 26,078	287,735 93,834
Oil country tubular goods Oil country tubular goods, welded and seamless, casing (including coupling) Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	480,060 108,260	423,867 67,668	x x	x x
Other tubular products	20,252	23,248	16,855	40,103

Including for own use by the steel pipe and tubing industries.
 As reported by respondents to this survey. For total exports see Exports by commodity, catalogue number 65-004-XPB.

Table 3-1

Steel and specified wire products — Factory shipments¹, monthly

	Shipments				Production
	2004 2005				
		Total shipments	Domestic shipments	Exports ²	
	metric tonnes				
September					
Barbed wire	x	x	X	x	
Uncoated steel wire	26,097	21,457	12,560	8,897	
Galvanized steel wire	14,493	13,932	5,119	8,813	
Other coated steel wire	X	X	x	X	
Farm fencing and wire chain link fabric	739	959	x	X	760
Wire mesh, bright or uncoated and galvanized	5,127	5,079	X	Х	5,511
Wire rope	4,181	3,502	X	X	3,375
Nails and staples	5,095	Х	Х	2,594	X
Wire roofing nails of a length of 25 mm or more,	4.000	4.050	4.704	0.504	4.504
iron or steel	4,902	4,358	1,764	2,594	4,584
Staples of iron or steel	X	X	X		X
All other wire products	Х	2,306	Х	X	1,829
Grand total	59,671	52,109	29,011	23,098	

^{1.} Totals may not add due to rounding.

Table 3-2

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

		Shipment	S		Production
_	2004		2005		
		Total shipments	Domestic shipments	Exports ²	
	metric tonnes				
Barbed wire	х	x	x	x	
Uncoated steel wire	240,346	189,041	106,532	82,509	
Galvanized steel wire	144,429	117,864	47,928	69,936	
Other coated steel wire	X	X	×	X	
Farm fencing and wire chain link fabric	9,762	8,619	×	X	7,483
Wire mesh, bright or uncoated and galvanized	37,143	X	X	X	X
Wire rope	34,945	30,659	x	X	29,984
Nails and staples Wire roofing nails of a length of 25 mm or more,	X	х	X	х	Х
iron or steel	66,594	X	X	X	X
Staples of iron or steel	X	X	X	X	X
All other wire products	Х	Х	Х	Х	x
Grand total	571,238	x	x	x	

^{1.} Totals may not add due to rounding.

^{2.} As reported by respondents to this survey. For total exports see Exports by commodity, catalogue number 65-004-XPB.

^{2.} As reported by respondents to this survey. For total exports see Exports by commodity, catalogue number 65-004-XPB.

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 or ASM (Survey ID 2103). This means that estimates from the monthly surveys do not cover the entire universe of steel production in Canada because the ASM does not survey all manufacturers. Instead, the ASM uses administrative data to cover the small and medium-sized manufacturers. These manufacturers are not part of the four monthly surveys.

General methodology

Data are collected monthly using a mail-out / mail-back process. Respondents are mailed a questionnaire but given the option of electronic data reporting (EDR) in a common format. Received data are subject to manual and automated editing to detect errors and inconsistencies as well as to follow-up with respondents by phone or fax if necessary. Follow-up is also carried out for missing reports after a pre-specified period of time. Data are imputed when they are missing. 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 direct or residual disclosure of identifiable data.

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 year-to-date totals in this publication.

Data accuracy

The methodology for these surveys has been designed to promote data accuracy. Since data are collected from all Canadian producers of primary steel, steel product, pig iron, steel pipe and tubing, and steel wire in the target population (see description above), 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, the data are analyzed for consistency and compared with general economic conditions and industry trends using surveys such as the Steel Primary Forms Weekly survey (Survey ID 2131) and the Monthly Survey of Manufacturing (Survey ID 2101).

Coverage errors

The list of businesses included in the four steel surveys is derived from the Annual Survey of Manufactures (ASM). This leads to some under-coverage in the sub-annual surveys since it takes 15 months to compile and publish ASM survey results. This under-coverage is however, kept at a minimum by using advance information from the ASM frame, feedback from the Monthly Survey of Manufactures (MSM) and other sources such as the Steel producers association, trade journals and newspaper articles.

Non-response

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

This error 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 because of definitional difficulties. To reduce such errors the format and wording in the questionnaire is 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 accuracy of reported information.

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. (see text table 1)

Text table 1

Coverage ratio and non-response rate by survey

	Coverage ratio	Non-response rate	
	%		
Steel, Primary forms steel castings and Pig iron ngots and Rolled steel products Steel pipe and tubing Steel wire	91 98 82 92	11 18 2 2	

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 during a reference period. These 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.

More detailed information is available from the Annual Survey of Manufactures, CANSIM Table 301-0003. Specific enquiries should be directed to: The Marketing and Dissemination Section, Manufacturing, Construction and Energy Division, Statistics Canada, Ottawa, Ontario, K1A OT6 (Telephone: 1-866-873-8789 or 613-951-9497; Fax line: 613-951-9499; Internet: manufact@statcan.ca).