

Catalogue no. 41-019-XIE

Steel, Tubular Products and Steel Wire



September 2006



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Statistics Canada

Manufacturing, Construction and Energy Division

Steel, Tubular Products and Steel Wire

September 2006

Published by authority of the Minister responsible for Statistics Canada

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November 2006

Catalogue no. 41-019-XIE, Vol. 2, No. 9

ISSN 1712-980X

Frequency: Monthly

Ottawa

La version française de cette publication est disponible sur demande (nº 41-019-XIF au catalogue).

Note of appreciation

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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

September 2006

- In September, monthly production of primary steel and pig iron increased by 4.6% to reach 1,310,514 metric tonnes.
- Total dispositions of rolled steel products fell 9.6% to 1,196,949 metric tonnes between August and September 2006.
- Steel pipe and tube production in September declined 2.3% to 227,758 metric tonnes.
- Monthly shipments of steel wire products dropped 10.5% to 44,894 metric tonnes in September.

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 2006

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	 592	3,925	8,198	4,553	3,371	16,930	 191	
21 Motor vehicles and parts 22 Railway operating	592	•	•	•		16,418	191	•
23 Railroad cars and locomotives		277						
24 Shipbuilding								
31 Steel fabrication	15	832	418	2,191	33,881	13,692		
32 Metal building systems				-				
33 Contractors'products 34 Miscellaneous stamping and coating	-		103	37	506	408 2,102	230	-
41 Natural resources and extractive			103	37	•	2,102	•	
industries					1,272	10,350		
51 Agricultural equipment		12	7	11		208		
52 Non electrical machinery	-					704		
53 Electrical machinery	-			-			-	
54 Industrial packaging material 61 Pipes and tubes	•	-		-	•		-	
62 Wire and wire products	1,237	•	•	•		3,873	19,148	
63 Containers and closures	.,							
64 Appliances and utensils industries							•	
70 Miscellaneous industries	-							
Total domestic shipments	1,844	5,046	8,726	6,792	39,030	64,685	19,569	
Total domestic alloy shipments				•		20,253		
Exports ² (for final sale)								
81 Exports to the United States 82 Exports to other countries (excluding	41,441	5,263	9,953	6,984	9,347	37,719	30,633	
United States)	1,070		174			18,135	3,177	
Total disposition	44,355	10,309	18,853	13,776	48,377	120,539	53,379	
Total alloy shipments	•					31,056		
Producers interchange, for sale	х					2,624	146	
Exports for conversion and return 2								
Imports by producers (including conversion)	17,485							

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 2006

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			
September							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses21 Motor vehicles and parts22 Railway operating	2,649 2,214	27,814 	150,059 71,641	25,315 15,505	1,705	40,342 51,100	284,861 157,661
23 Railroad cars and locomotives	•	887	173	•	•	•	1,337
24 Shipbuilding 31 Steel fabrication 32 Metal building systems 33 Contractors'products	152 31	7,703 16	7,848 4,920	 1,455	•	304 4,875 36,258	67,036 4,875 43,824
34 Miscellaneous stamping and coating 41 Natural resources and extractive industries	182 11	39	3,595 204	4,457 	· ·	18,977 	29,492 11,633
51 Agricultural equipment 52 Non electrical machinery 53 Electrical machinery 54 Industrial packaging material	99 62	489 144	204 187	3,754 10,093		1,336 	1,030 910 5,090 10,280
61 Pipes and tubes 62 Wire and wire products 63 Containers and closures	5 719		166,249 1,055 731	1,549 1,000 118	12,563	1,811 40	169,614 27,072 13,412
64 Appliances and utensils industries 70 Miscellaneous industries	182			6,150		3,455	9,605 182
Total domestic shipments	6,306	37,092	406,662	69,396	14,268	158,498	837,914
Total domestic alloy shipments	179						20,432
Exports ² (for final sale)							
81 Exports to the United States 82 Exports to other countries (excluding United	7,760	18,140	78,890	19,256	12,739	32,335	310,460
States)	•	1,714	5,913	3,211	1,128	14,053	48,575
Total disposition	14,066	56,946	491,465	91,863	28,135	204,886	1,196,949
Total alloy shipments	179				•		31,235
Producers interchange, for sale	•	•	1,596	х	•	•	73,508
Exports for conversion and return ²							
Imports by producers (including conversion)		1,407	25,613	14,564		3,300	62,369

^{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.

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 2006

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		27,921	74,530	63,394	27,777	194,532		
21 Motor vehicles and parts						204,230	1,592	
22 Railway operating	-			-	-		-	
23 Railroad cars and locomotives 24 Shipbuilding	•	3,225		•	•	•	•	
31 Steel fabrication		6,826	15,894	38,999	280,263	138,159	•	
32 Metal building systems		0,020	15,054	30,333	200,203	130,133		
33 Contractors'products						6,276	2,322	
34 Miscellaneous stamping and coating			3,458	2,831		13,415		
41 Natural resources and extractive								
industries					9,193	103,026		
51 Agricultural equipment						3,368		
52 Non electrical machinery	-				-	5,348		
53 Electrical machinery	•		•	•	-		•	
54 Industrial packaging material 61 Pipes and tubes	-			-	-		-	
62 Wire and wire products	•	•	•	•		35.416	163,988	
63 Containers and closures		•		•			100,000	
64 Appliances and utensils industries								
70 Miscellaneous industries								
Total domestic shipments	5,084	38,014	94,081	105,290	318,906	703,996	167,975	
Total domestic alloy shipments						221,732		
Exports ² (for final sale)								
81 Exports to the United States	х	24,856	117,421	88,427	34,298	402,328	x	-
82 Exports to other countries (excluding United States)	х		3,037			172,458	х	
Total disposition	х	63,277	214,539	193,717	353,204	1,278,782	х	
Total alloy shipments						355,588		
Producers interchange, for sale	х					20,137	550	
Exports for conversion and return ²								
Imports by producers (including conversion)	524,321							

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 2006

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	26,246	296,830	1,483,400	299,750	21,258	374,646	2,890,382
21 Motor vehicles and parts	20,023		869,510	165,994	-	543,054	1,807,996
22 Railway operating 23 Railroad cars and locomotives	•	18,330	4,796	•			26,351
24 Shipbuilding		10,000	4,750				20,001
31 Steel fabrication	1,576	58,182	51,077			6,586	597,781
32 Metal building systems	:			:		30,932	31,111
33 Contractors'products	454	1,562	44,909	18,061		311,330	386,584
34 Miscellaneous stamping and coating 41 Natural resources and extractive industries	2,184 627		62,121	47,978	•	175,568	317,829 112,949
51 Agricultural equipment	1.458	2,204					9,300
52 Non electrical machinery	588	3,272		•	•	•	9,288
53 Electrical machinery	300	0,212		42,079	•	10,970	53,049
54 Industrial packaging material			4,377	112,046			116,911
61 Pipes and tubes			1,499,148	20,473		15,117	1,534,973
62 Wire and wire products	6,326			2,154		402	211,106
63 Containers and closures			4,920	1,921	120,687		127,528
64 Appliances and utensils industries				54,555		28,476	83,031
70 Miscellaneous industries	1,388	-				•	1,388
Total domestic shipments	61,005	390,654	4,027,932	765,163	142,355	1,497,102	8,317,557
Total domestic alloy shipments	1,335				•		223,067
Exports ² (for final sale)							
81 Exports to the United States 82 Exports to other countries (excluding United	Х	158,304	587,487	171,636	95,798	350,423	2,682,382
States)	-	14,314	43,747	13,753	13,418	106,109	403,901
Total disposition	x	563,272	4,659,166	950,552	251,571	1,953,634	11,403,840
Total alloy shipments	1,335						356,923
Producers interchange, for sale			21,536	x			689,997
Exports for conversion and return ²							
Imports by producers (including conversion)		24,132	213,962	130,847			896,562

^{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			
	2005	2006	2005	2006		
	metric tonnes					
Production of pig iron	692,943	702,530	6,228,620	6,434,874		

^{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	
	2005	2006	2005	2006
		metric tonnes		
Pig iron including pre-reduced iron	714,079	746,774	6,478,447	6,842,055
Scrap Own make Purchased	159,412 551,566	182,944 518,207	1,619,998 4,697,635	1,581,182 4,642,164
Total, pig iron and scrap products	1,425,057	1,447,925	12,796,080	13,065,401

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

	Production		Shipments	
	2005	2006	2005	2006
		metric tonnes		
September				
Steel, primary forms (carbon and alloy including continuous cast steel) Electric furnace	552.860	557.911	39.834	79,926
Basic oxygen furnace	746,847	752,603		11,727
Steel, primary forms - Total	1,299,707	1,310,514	39,834	91,653
Included in "Steel primary forms total" above Continuous cast steel	1,284,673	1,292,883	35,176	88,005

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

	Production		Shipments		
	2005	2006	2005	2006	
		metric tonnes			
Steel, primary forms (carbon and alloy including continuous cast steel) Electric furnace Basic oxygen furnace	4,835,983 6,738,624	4,871,824 7,045,957	x 	x x	
Steel, primary forms - Total	11,574,607	11,917,781	x	x	
Included in "Steel primary forms total" above Continuous cast steel	11,445,962	11,772,403	x	х	

Table 2-1 Steel pipe and tubing — Production and shipments, monthly 2006

	Production	Ship	ments for sale	
	_	Domestic ¹ shipments	Exports ²	Total shipments
_		metric tonne	es	
September				
Total, pipe and tubing	227,758	136,806	91,591	228,397
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	9,842 17,210 30,313	7,120 19,860 6,088	63 0 28,097	7,183 19,860 34,185
Hollow structural sections up to and including 16" (40.64 cm) periphery over 16" (40.64 cm) periphery	18,405 46,343	8,089 14,261	9,796 29,383	17,885 43,644
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	5,760 2,056	1,662 585	3,401 959	5,063 1,544
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	1,741 x 2,501	815 1,638 1,401	239 445 924	1,054 2,083 2,325
Mechanical tubing Mechanical tubing, welded, produced from hot rolled Mechanical tubing, welded, produced from cold rolled	26,581 14,185	18,521 5,860	7,054 2,531	25,575 8,391
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)	29,375 21,395	40,681 7,778	5,436 2,135	46,117 9,913
Other tubular products	x	2,447	1,128	3,575

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 2006

	Production	Shipments for sale		
		Domestic ¹ shipments	Exports ²	Total shipments
_	metric tonnes			
Year-to-date				
Total, pipe and tubing	2,264,830	1,369,627	890,136	2,259,763
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	103,134 68,721 334,855	73,504 114,027 73,390	296 208,660	73,800 114,027 282,050
Hollow structural sections up to and including 16" (40.64 cm) periphery over 16" (40.64 cm) periphery	198,469 446,425	92,968 135,990	106,866 300,051	199,834 436,041
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	41,146 11,018	12,332 3,021	26,960 9,078	39,292 12,099
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	14,760 x 28,362	9,253 x x	2,299 x x	11,552 25,731 19,479
Mechanical tubing Mechanical tubing, welded, produced from hot rolled Mechanical tubing, welded, produced from cold rolled	281,124 120,054	183,819 50,318	82,559 23,363	266,378 73,681
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)	471,385 118,184	x x	x x	561,518 105,741
Other tubular products	x	х	х	38,540

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	
	2005 2006				
		Total shipments	Domestic shipments	Exports ²	
			metric tonnes		
September					
Barbed wire	x	347	X	x	
Uncoated steel wire	21,457	16,346	8,911	7,435	
Galvanized steel wire	13,932	12,746	5,253	7,493	
Other coated steel wire	Х	Х	x	Х	
Farm fencing and wire chain link fabric	959	947	x	Х	990
Wire mesh, bright or uncoated and galvanized	5,079	4,808	x	Х	4,897
Wire rope	3,502	3,489	x	Х	3,368
Nails and staples Wire roofing nails of a length of 25 mm or more,	Х	х	X	х	х
iron or steel	4,358	3,744	Х	X	х
Staples of iron or steel	X	X	Х	0	х
All other wire products	2,306	2,165	2,104	Х	х
Grand total	52,109	44,894	26,076	18,818	

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

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

		Shipment	S		Production
	2005		2006		
		Total shipments	Domestic shipments	Exports ²	
			metric tonnes		
Barbed wire	х	х	х	х	
Uncoated steel wire	189,041	167,740	92,826	74,914	
Galvanized steel wire	117,864	122,444	49,984	72,460	
Other coated steel wire	Х	Х	x	Х	
Farm fencing and wire chain link fabric	8,619	9,156	x	Х	9,793
Wire mesh, bright or uncoated and galvanized	Х	39,342	x	Х	41,861
Wire rope	30,659	Х	x	Х	X
Nails and staples Wire roofing nails of a length of 25 mm or more,	х	х	X	x	Х
iron or steel	Х	42,099	X	Х	х
Staples of iron or steel	Х	X	Х	Х	X
All other wire products	Х	Х	х	Х	x
Grand total	x	439,353	248,946	190,407	

^{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 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	
	percentage		
Steel primary forms steel castings and pig iron Ingots and rolled steel products Steel pipe and tubing Steel wire	0 3 0 0	6 0 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.

More detailed information is available from the Annual Survey of Manufactures and Logging, 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: (613) 951-9499; Internet: manufact@statcan.ca).