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Steel, tubular products and steel wire



February 2006



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Manufacturing, Construction and Energy Division

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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

February 2006

- Total production of primary steel and pig iron declined 4.1% to 1,241,395 metric tonnes between January 2006 and February 2006. Over the same period, shipments jumped 44.2% to 72,730 metric tonnes the highest level since June 2005.
- Total monthly dispositions of rolled steel products fell 8.8% to 1,163,318 metric tonnes in February 2006.
- In February 2006 monthly production of steel pipe and tubing decreased 4.4% to 239,836 metric tonnes. The
 decline was led by line pipe production. Total shipments of steel pipe and tubing also fell 1.6% to 275,607 metric
 tonnes.
- February 2006 shipments of steel wire and specified products grew by 4.2% to reach 48,090 metric tonnes.

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 tonnes								
February									
Domestic shipments									
11 Steel service centres and other wholesalers and warehouses 21 Motor vehicles and parts 22 Railway operating	0 21	2,765	6,928	7,584	1,829	25,317 23,860 0	0 151		
23 Railroad cars and locomotives		317		-				-	
24 Shipbuilding 31 Steel fabrication 32 Metal building systems 33 Contractors'products 34 Miscellaneous stamping and coating	0 0	203 0	2,253 0 142	3,586	25,227 0 36	15,335 0 491 1,417	243		
41 Natural resources and extractive industries 51 Agricultural equipment 52 Non electrical machinery 53 Electrical machinery		0 0	0 15 0	15 0	732	12,082 278 630 0	0 0		
54 Industrial packaging material 61 Pipes and tubes 62 Wire and wire products 63 Containers and closures 64 Appliances and utensils industries 70 Miscellaneous industries	0				0	3,563	20,339		
Total domestic shipments	21	3,285	9,338	11,508	27,824	82,973	20,733		
Total domestic alloy shipments	21	3,203	3,330	11,300		26,357	20,733	·	
Exports ² (for final sale)	•	•	•	•	•	20,337	Ū		
81 Exports to the United States	х	2,104	12,746	9,623	5,037	44,033	37,186		
82 Exports to other countries (excluding United States)	0	83	116		0	10,380	1,031		
Total disposition	x	5,472	22,200	21,131	32,861	137,386	58,950	0	
Total alloy shipments						37,687	0		
Producers interchange, for sale	х		5			3,318	80		
Exports for conversion and return 2									
Imports by producers (including conversion)	43,420	-			٠		0		

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			
February							
Domestic shipments							
11 Steel service centres and other wholesalers							
and warehouses 21 Motor vehicles and parts	3,646 2,086	32,347 0	141,487 86,268	34,727 17,206	3,181	32,338 58,899	292,149 188,491
22 Railway operating	2,000	0	00,200	17,200	•	56,699	100,491
23 Railroad cars and locomotives		1,389	0			•	1,706
24 Shipbuilding							0
31 Steel fabrication	150	5,231	3,228	33		700	55,946
32 Metal building systems 33 Contractors'products	52	18	0 2,944	1,465	•	2,206 25,809	2,206 31.058
34 Miscellaneous stamping and coating	257	18	5,557	4,719	•	16,582	29,015
41 Natural resources and extractive industries	172		0,007	0	:	0	12,986
51 Agricultural equipment	165	0	281				754
52 Non electrical machinery	78	479	•	0			1,187
53 Electrical machinery 54 Industrial packaging material	•	•	174	8,145 12.331	0	1,383 0	9,528 12,505
61 Pipes and tubes	0	0	154,821	2,358	U	1,619	158,798
62 Wire and wire products	719		0	111	:	48	24,780
63 Containers and closures			42	94	12,078		12,214
64 Appliances and utensils industries				6,033		3,163	9,196
70 Miscellaneous industries	103	•	•	•	•	•	103
Total domestic shipments	7,428	39,482	394,802	87,222	15,259	142,747	842,622
Total domestic alloy shipments	127	0		0			26,484
Exports ² (for final sale)							
81 Exports to the United States 82 Exports to other countries (excluding United	Х	16,013	58,181	18,096	9,009	42,153	288,697
States)		1,177	4,465	1,002	1,493	12,252	31,999
Total disposition	x	56,672	457,448	106,320	25,761	197,152	1,163,318
Total alloy shipments	127	0		0			37,814
Producers interchange, for sale	•		2,977	x			68,467
Exports for conversion and return 2			0				0
Imports by producers (including conversion)		1,426	23,291	40,321			108,458

^{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 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	15	5,866	14,641	16,146	3,459	45,196	0	
21 Motor vehicles and parts	274					48,494	225	-
22 Railway operating 23 Railroad cars and locomotives	•	569		•	•	0	•	
24 Shipbuilding	0	309	•	•	•	•	•	•
31 Steel fabrication	0	2,228	2.887	9,294	71.121	30.929	0	•
32 Metal building systems		2,220	2,007	0,201	0	48		
33 Contractors'products			0		499	2,734	503	
34 Miscellaneous stamping and coating	0	0	643	896		2,250		
41 Natural resources and extractive						ŕ		
industries			0		2,608	24,728	0	
51 Agricultural equipment		0	15	15		599		
52 Non electrical machinery		0	0	0		2,085	0	
53 Electrical machinery						0		
54 Industrial packaging material								
61 Pipes and tubes	:			•	:	0		
62 Wire and wire products	0				0	9,216	40,265	
63 Containers and closures		•	•	•	•	•	•	
64 Appliances and utensils industries 70 Miscellaneous industries	•			•	0	•	•	
70 Miscellaneous industries		•		-	U	•		
Total domestic shipments	289	8,663	18,186	26,351	77,687	166,279	40,993	0
Total domestic alloy shipments	•	•	-			44,646	0	
Exports ² (for final sale)								
81 Exports to the United States	х	4,239	24,774	22,006	7,406	86,709	68,105	
82 Exports to other countries (excluding United States)	0	165	210		0	38,043	1,053	
Total disposition	x	13,067	43,170	48,357	85,093	291,031	110,151	0
Total alloy shipments			-			83,611	0	
Producers interchange, for sale	х					5,657	117	
Exports for conversion and return ²								
Imports by producers (including conversion)	43,420						0	

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	6,906	64,991	311,870	68,965	6,736	71,272	616,063
21 Motor vehicles and parts	4,573	0	183,591	37,651		123,225	398,033
22 Railway operating	•	0					0
23 Railroad cars and locomotives		2,671	1,033	•		•	4,273 0
24 Shipbuilding 31 Steel fabrication	330	12,001	8,444	140		1,638	139,012
32 Metal building systems	330	12,001	0, 444 0	140		1,036 4,470	4,518
33 Contractors' products	67	147	5,285	3.024	•	50,104	62,363
34 Miscellaneous stamping and coating	576	1,433	10,374	10,938		33,417	60,527
41 Natural resources and extractive industries	306	1,100	0	0	•	1	27.643
51 Agricultural equipment	395	22	420				1,466
52 Non electrical machinery	151	1,408		0			3,644
53 Electrical machinery				13,836		2,920	16,756
54 Industrial packaging material			544	26,588	13	0	27,145
61 Pipes and tubes	24	0	308,879	4,972		3,031	316,906
62 Wire and wire products	1,416		0	310		78	51,285
63 Containers and closures			133	388	22,813		23,334
64 Appliances and utensils industries				12,160		6,255	18,415
70 Miscellaneous industries	212						212
Total domestic shipments	14,956	82,673	830,573	178,972	29,562	296,411	1,771,595
Total domestic alloy shipments	276	0		0			44,922
Exports ² (for final sale)							
81 Exports to the United States 82 Exports to other countries (excluding United	Х	31,460	119,552	35,159	20,027	88,222	588,770
States)		2,795	7,607	2,298	3,130	23,549	78,850
Total disposition	x	116,928	957,732	216,429	52,719	408,182	2,439,215
Total alloy shipments	276	0		0			83,887
Producers interchange, for sale			5,310	х			145,038
Exports for conversion and return ²			7,124				7,124
Imports by producers (including conversion)		3,974	36,968	40,321			124,683

^{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

	February		Year-to-date	
	2005	2006	2005	2006
		metric tonne	S	
Production of pig iron	680,423	695,792	1,394,646	1,402,199

^{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

	February		Year-to-date	
	2005	2006	2005	2006
		metric tonnes		
Pig iron including pre-reduced iron	731,269	715,016	1,499,976	1,440,537
Scrap Own make Purchased	181,715 516,450	153,700 486,095	386,996 1,036,975	336,673 1,001,304
Total, pig iron and scrap products	1,429,434	1,354,811	2,923,947	2,778,514

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		
February				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace Basic oxygen furnace	537,778 757,027	507,682 733,713	79,811 1,823	X X
Steel, primary forms - Total	1,294,805	1,241,395	81,634	72,730
Included in "Steel primary forms total" above Continuous cast steel	1,279,412	1,226,498	77,788	68,409

Table 1-6 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	1,107,844 1,523,320	1,040,613 1,494,906	143,811 17,118	X X			
Steel, primary forms - Total	2,631,164	2,535,519	160,929	×			
•	2,001,104	2,333,313	100,323	^			
Included in "Steel primary forms total" above Continuous cast steel	2,600,726	2,504,282	152,744	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 tonn	es	
February				
Total, pipe and tubing	239,836	191,750	83,857	275,607
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	16,522 5,129 24,806	7,948 14,866 18,091	21 0 11,744	7,969 14,866 29,835
Hollow structural sections up to and including 16" (40.64 cm) periphery over 16" (40.64 cm) periphery	21,566 46,115	10,031 14,339	11,442 31,420	21,473 45,759
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	4,657 1,921	1,283 396	2,558 1,756	3,841 2,152
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	1,642 2,297 2,422	2,620 x x	133 x x	2,753 4,180 2,529
Mechanical tubing Mechanical tubing, welded, produced from hot rolled Mechanical tubing, welded, produced from cold rolled	29,513 13,881	20,333 6,048	8,233 2,761	28,566 8,809
Dil country tubular goods Dil country tubular goods, welded and seamless, casing (including coupling) Dil country tubular goods, welded and seamless, oilwell tubing (including coupling)	55,879 11,763	x x	x x	81,931 16,412
Other tubular products	1,723	2,719	1,813	4,532

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	Tota shipments
	metric tonnes			
Year-to-date				
Fotal, pipe and tubing	490,611	386,381	169,426	555,807
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	35,164 12,320 55,326	22,993 32,415 25,959	42 0 31,673	23,035 32,415 57,632
Hollow structural sections up to and including 16" (40.64 cm) periphery over 16" (40.64 cm) periphery	40,661 89,628	21,603 28,049	20,978 61,161	42,581 89,210
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	10,056 2,233	3,130 834	5,650 1,964	8,780 2,798
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	3,756 4,057 5,739	3,193 x x	395 x x	3,588 6,755 4,342
Mechanical tubing Mechanical tubing, welded, produced from hot rolled Mechanical tubing, welded, produced from cold rolled	61,867 26,369	40,744 12,370	16,630 5,182	57,374 17,552
Dil country tubular goods Dil country tubular goods, welded and seamless, casing (including coupling) Dil country tubular goods, welded and seamless, oilwell tubing (including coupling)	119,098 21,138	x x	x x	164,197 35,690
Other tubular products	3,199	x	x	9,858

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				
February					
Barbed wire	x	х	X	x	
Uncoated steel wire	21,514	19,271	10,920	8,351	
Galvanized steel wire	13,069	12,551	4,966	7,585	
Other coated steel wire	Х	X	x	Х	
Farm fencing and wire chain link fabric	846	815	X	x	1,141
Wire mesh, bright or uncoated and galvanized	3,341	3,506	X	x	3,417
Wire rope	3,118	3,482	x	X	3,566
Nails and staples	5,152	X	x	X	X
Wire roofing nails of a length of 25 mm or more,					
iron or steel	Х	5,092	x	Х	х
Staples of iron or steel	X	×	x	0	х
All other wire products	х	X	X	X	x
Grand total	51,608	48,090	27,538	20,552	

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

Table 3-2

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

	Shipments				Production
_	2005		2006		
		Total shipments	Domestic shipments	Exports ²	
			metric tonnes		
Barbed wire	x	x	x	x	
Uncoated steel wire	44,049	39,333	22,343	16,990	
Galvanized steel wire	25,976	25,173	10,911	14,262	
Other coated steel wire	X	Х	X	Х	
Farm fencing and wire chain link fabric	1,536	1,656	X	Х	2,007
Wire mesh, bright or uncoated and galvanized	5,820	6,495	X	Х	6,907
Wire rope	5,881	X	X	Х	х
Nails and staples	10,559	X	X	Х	х
Wire roofing nails of a length of 25 mm or more,					
iron or steel	x	9,974	x	Х	х
Staples of iron or steel	x	X	x	0	х
All other wire products	Х	Х	X	Х	х
Grand total	100,398	94,258	53,260	40,998	

^{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 Ingots 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).