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Steel, Tubular Products and Steel Wire

May 2007



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Statistics Canada

Manufacturing, Construction and Energy Division

Steel, Tubular Products and Steel Wire

May 2007

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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

May 2007

- Monthly production of primary steel and pig iron decreased 1.4% in May 2007 to 1,315,310 metric tonnes.
- In the same month, the total disposition of shipments of rolled steel products grew 4.5% to 1,318,812 metric tonnes.
- Between April 2007 and May 2007, production of steel pipe and tubing slipped 0.2% to 224,639 metric tonnes.
- Total shipments of steel wire and specified wire products edged up 0.6% to 49,554 metric tonnes in May 2007.

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 2007

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			
May								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses 21 Motor vehicles and parts 22 Railway operating 23 Railroad cars and locomotives 24 Shipbuilding 31 Steel fabrication 32 Metal building systems 33 Contractors'products 34 Miscellaneous stamping and coating	0 255 0 0	5,775 370 2,537	7,930 1,103 0 107	5,435	4,125 	16,919 17,736 0 16,269 0 582 1,900	36 97 0	
41 Natural resources and extractive industries 51 Agricultural equipment 52 Non electrical machinery 53 Electrical machinery 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	339	. 0 0	0 5 0	3 0	1,048 20	10,569 414 253 0 0 3,038	0 0 30,313	
Total domestic shipments	594	8,816	9,145	9,010	53,262	67,680	30,666	0
Total domestic alloy shipments	0				•	24,051	0	
Exports ² (for final sale)								
81 Exports to the United States 82 Exports to other countries (excluding United States)	x x	3,598 78	12,567 171	7,947	903 0	42,696 20,943	36,745 1,497	
Total disposition	x	12,492	21,883	16,957	54,165	131,319	68,908	0
Total alloy shipments	0				•	36,772	0	•
Producers interchange, for sale	х	ė	0	·	ė	895	25	ē
Exports for conversion and return ²						0		
Imports by producers (including conversion)	7,527						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 2007

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
			n	netric tonnes			
May							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses 21 Motor vehicles and parts 22 Railway operating 23 Railroad cars and locomotives 24 Shipbuilding	2,803 2,314	35,016 0 0 233	149,589 76,886 -19	38,577 15,612	1,971	48,421 64,799	316,597 177,699 0 584 0
31 Steel fabrication 32 Metal building systems	88	7,761	6,842	307		1,334 3,662	87,547 3.662
33 Contractors'products 34 Miscellaneous stamping and coating 41 Natural resources and extractive industries 51 Agricultural equipment	89 254 29 139	65 1,288 0 249	5,639 8,704 0 524	2,250 6,374 0 115		37,533 23,184 0	46,465 42,193 11,646 1,469
52 Non electrical machinery 53 Electrical machinery 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	28 52 528 528	353 	3,252 175,548 541 750	0 2,396 11,217 2,700 74 309 6,959	54	1,767 0 2,654 70 3,293	924 4,163 14,523 180,954 34,903 13,714 10,252 299
Total domestic shipments	6,623	44,965	428,546	86,890	14,680	186,717	947,594
Total domestic alloy shipments	348	0		0			24,399
Exports ² (for final sale)							
81 Exports to the United States 82 Exports to other countries (excluding United States)	7,183	19,818 2,051	94,514 8,416	X X	13,168 1,114	34,953 11,361	323,148 48,070
Total disposition	13,806	66,834	531,476	x	28,962	233,031	1,318,812
Total alloy shipments	348	0		0			37,120
Producers interchange, for sale	-		20,994	х			112,894
Exports for conversion and return ²	•		0	0		0	0
Imports by producers (including conversion)		1,662	19,192	9,145		0	37,526

^{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 2007

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 21 Motor vehicles and parts 22 Railway operating 23 Railroad cars and locomotives	713 878	18,592 2,449	47,554	34,759	20,956	102,271 92,507 0	5,173 932	
24 Shipbuilding 31 Steel fabrication 32 Metal building systems	0 63	6,057	9,045	18,614	166,851 0	82,119 0	0	
33 Contractors' products 34 Miscellaneous stamping and coating 41 Natural resources and extractive industries 51 Agricultural equipment 52 Non electrical machinery	0	134 0 36	2,386 0 5	1,571 85 0	544 5,755 20	1,849 10,302 55,666 1,708 2,586	576 0	
53 Electrical machinery 54 Industrial packaging material 61 Pipes and tubes 62 Wire and wire products 63 Containers and closures 64 Appliances and utensils industries	1,035				0	0 0	118,595	
70 Miscellaneous industries					Ö			
Total domestic shipments	2,689	27,268	58,990	55,029	194,126	361,328	125,276	0
Total domestic alloy shipments	63					121,243	0	
Exports ² (for final sale)								
81 Exports to the United States 82 Exports to other countries (excluding United States)	X X	13,151 78	66,167 740	42,413	12,590 0	206,728 87,283	191,072 4,159	. 0
Total disposition	x	40,497	125,897	97,442	206,716	655,339	320,507	0
Total alloy shipments	63					191,440	0	
Producers interchange, for sale	x		0			9,314	203	
Exports for conversion and return ²						0		
Imports by producers (including conversion)	13,464						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 2007

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 21 Motor vehicles and parts 22 Railway operating 23 Railroad cars and locomotives 24 Shipbuilding	14,785 10,989	172,260 0 0 5,170	842,410 369,362 -19	224,043 76,006	12,135	237,281 277,931	1,732,932 828,605 0 7,600
24 Stipbulling 31 Steel fabrication 32 Metal building systems 33 Contractors products 34 Miscellaneous stamping and coating 41 Natural resources and extractive industries 51 Agricultural equipment 52 Non electrical machinery 53 Electrical machinery 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	434 386 1,254 302 593 180 212 2,442 1,356	29,083 212 2,660 12 1,471 891 0	23,401 0 23,996 39,395 23,709 3,249 1,682 10,915 795,961 4,258 3,426	339 12,189 23,204 347 527 0 17,582 53,683 13,882 484 1,093 30,528	189	2,999 13,958 157,201 90,777 2,260 7,955 0 8,678 105 14,175	339,005 13,958 196,953 171,683 88,051 7,658 5,375 25,537 64,787 818,733 139,239 46,142 44,703 1,356
Total domestic shipments	32,933	211,759	2,141,745	453,907	53,947	813,320	4,532,317
Total domestic alloy shipments	975	0		0			122,281
Exports ² (for final sale)							
81 Exports to the United States 82 Exports to other countries (excluding United States)	38,472	104,600 7,817	496,916 30,737	x x	60,354 6,562	X X	1,612,538 258,894
Total disposition	71,405	324,176	2,669,398	x	120,863	1,042,227	6,403,749
Total alloy shipments	975	0		0			192,478
Producers interchange, for sale			28,858	х			394,608
Exports for conversion and return ²			0	0		0	0
Imports by producers (including conversion)	-	10,393	46,349	20,175		0	90,381

^{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

	May		Year-to-date				
	2006	2007	2006	2007			
_	metric tonnes						
Production of pig iron	749,003	732,726	3,623,937	3,662,522			

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

	May		Year-to-date			
	2006	2007	2006	2007		
	metric tonnes					
Pig iron including pre-reduced iron	765,596	733,002	3,773,231	3,798,442		
Scrap Own make Purchased	178,926 554,153	172,352 534,931	860,103 2,584,810	827,212 2,775,265		
Total, pig iron and scrap products	1,498,675	1,440,285	7,218,144	7,400,919		

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

	Production		Shipments	
	2006	2007	2006	2007
		metric tonnes		
Мау				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace Basic oxygen furnace	577,688 783,110	568,711 746,599	85,989 19,724	83,674 44,880
Steel, primary forms - Total	1,360,798	1,315,310	105,713	128,554
Included in "Steel primary forms total" above Continuous cast steel	1,342,885	1,296,926	101,546	124,116

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

	Production		Shipments	
	2006	2007	2006	2007
		metric tonnes		
Steel, primary forms (carbon and alloy including continuous cast steel) Electric furnace Basic oxygen furnace	2,716,933 3,901,975	2,801,167 3,941,252	x x	439,640 147,873
Steel, primary forms - Total	6,618,908	6,742,419	x	587,513
Included in "Steel primary forms total" above Continuous cast steel	6,534,446	6,665,665	x	565,326

Table 2-1 Steel pipe and tubing — Production and shipments, monthly 2007

	Production	Ship	ments for sale	
	_	Domestic ¹ shipments	Exports ²	Total shipments
_		metric tonn	es	
May				
Total, pipe and tubing	224,639	85,477	140,847	226,324
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	240 2,262 52,252	1,466 1,675 2,755	40 672 62,989	1,506 2,347 65,744
Hollow structural sections up to and including 16" (40.64 cm) periphery over 16" (40.64 cm) periphery	24,543 49,282	11,421 14,932	11,949 35,693	23,370 50,625
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	6,088 2,821	2,088 1,983	2,869 486	4,957 2,469
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	10,747 12,214 3,678	864 1,019 1,639	98 31 97	962 1,050 1,736
Mechanical tubing Mechanical tubing, welded, produced from hot rolled Mechanical tubing, welded, produced from cold rolled	31,242 15,805	21,404 7,109	8,918 3,655	30,322 10,764
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)	10,023 2,278	x 3,604	x 1,900	x 5,504
Other tubular products	1,164	x	х	х

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 2007

	Production	Shipments for sale		
		Domestic ¹ shipments	Exports ²	Total shipments
_	metric tonnes			
Year-to-date				
Total, pipe and tubing	1,151,624	749,374	564,750	1,314,124
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	13,989 18,216 257,841	15,707 22,364 116,090	123 3,399 202,122	15,830 25,763 318,212
Hollow structural sections up to and including 16" (40.64 cm) periphery over 16" (40.64 cm) periphery	107,654 247,140	61,766 80,965	52,276 165,717	114,042 246,682
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	23,826 7,795	15,803 15,796	14,245 5,102	30,048 20,898
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	15,190 15,614 12,738	4,085 8,514 7,169	576 152 1,210	4,661 8,666 8,379
Mechanical tubing Mechanical tubing, welded, produced from hot rolled Mechanical tubing, welded, produced from cold rolled	143,171 76,331	95,983 31,338	41,587 17,632	137,570 48,970
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)	184,413 23,114	x 40,851	x x	x x
Other tubular products	4,592	x	x	х

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
	2006	2007			
		Total shipments	Domestic shipments	Exports ²	
<u> </u>			metric tonnes		
May					
Barbed wire	х	х	х	x	
Uncoated steel wire	20,203	19,084	11,260	7,824	
Galvanized steel wire	16,044	13,267	5,578	7,689	
Other coated steel wire Farm fencing and wire chain link fabric	x 1,331	x 1,491	X	X	1,447
Wire mesh, bright or uncoated and galvanized	5,068	1,491 4,927	X X	X X	5,036
Wire rope	4,141	3,240	X	X	3,310
Nails and staples	4,141 X	5,130	2,395	2,735	4,208
Wire roofing nails of a length of 25 mm or more, iron or steel	5,350	5,034	2,595 X	2,733 X	4,099
Staples of iron or steel	X	3,004 X	X	X	109
All other wire products	2,256	x	x	4	X
Grand total	55,340	49,554	29,046	20,508	

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

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

_	Shipments				Production
_	2006	2007			
		Total shipments	Domestic shipments	Exports ²	
_			metric tonnes		
Barbed wire	x	x	х	x	
Uncoated steel wire	99,926	88,424	49,938	38,486	
Galvanized steel wire	68,814	65,567	27,303	38,264	
Other coated steel wire	X	Х	Х	Х	
Farm fencing and wire chain link fabric	5,401	Х	Х	Х	>
Wire mesh, bright or uncoated and galvanized	19,544	22,792	Х	Х	23,230
Vire rope	X	16,853	Х	Х	15,977
Nails and staples	X	Х	Х	Х	Х
Wire roofing nails of a length of 25 mm or more, iron or steel	24,584	21,783	Х	Х	Х
Staples of iron or steel	X	Х	Х	Х	Х
All other wire products	x	х	X	х	>
Grand total	251,962	235,522	136,365	99,157	

^{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).