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Steel, Tubular Products and Steel Wire

December 2007



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Statistics Canada

Manufacturing, Construction and Energy Division

Steel, Tubular Products and Steel Wire

December 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

December 2007

- Monthly production of primary steel and pig iron rose 2.6% in December 2007 to 1,255,949 metric tonnes.
- In the same month, the total disposition of shipments of rolled steel products fell 17.4% to 1,071,610 metric tonnes.
- Between November 2007 and December 2007, production of steel pipe and tubing fell 17.9% to 192,875 metric tonnes.
- Total shipments of steel wire and specified wire products dropped 29.9% to 33,167 metric tonnes in December 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 shipments ¹ 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			
December								
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 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	200000000000000000000000000000000000000	1,679 459 659 0 0	5,038 1,318 0 220 0 0 0	5,224 	3,764 	14,758 7,736 0 15,366 0 305 1,189 9,058 82 231 0 0 1,487	538 0 0 0 0 20,202	
Total domestic shipments	2	2,797	6,576	7,952	44,795	50,801	20,813	
Total domestic alloy shipments	0	2,131	0,570	7,332	44,733	15,006	20,013	v
Exports ² (for final sale)	•		·	·		10,000		·
81 Exports to the United States 82 Exports to other countries (excluding United States)	59,769 15,427	1,821 0	10,814 24	5,746	0	19,986 1,672	45,578 2,559	0
Total disposition	75,198	4,618	17,414	13,698	44,795	72,459	68,950	0
Total alloy shipments	0					17,531	0	
Producers interchange, for sale	x		0			x	0	
Exports for conversion and return 2						0		
Imports by producers (including conversion)	5,008		·	•	•		0	٠

See footnotes at the end of the table.

Table 1-1 – continued

Steel primary forms and pig iron — Disposition of net shipments ¹ of rolled steel products, by product, monthly 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			
December							
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	1,848 1,403	24,838 0 0 313	127,403 36,545 0	31,990 8,817	1,255 0	32,609 40,699	250,946 95,200 0 772 0 64,357
32 Metal building systems			0			2,157	2,157
33 Contractors'products 34 Miscellaneous stamping and coating 41 Natural resources and extractive industries 51 Agricultural equipment 52 Non electrical machinery	46 136 60 90 0	171 0 0 330 83	3,614 3,018 0 0 102	1,955 4,366 0 41		24,231 9,343 0	30,395 18,458 10,494 543 416
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	26 266 266 0	63 0	392 162,932 1,993 395	1,734 5,852 1,068 14 168 4,119	6,815	283 0 1,353 19	2,017 6,244 165,379 23,981 7,378 5,719
Total domestic shipments	4,054	26,635	339,914	60,143	8,070	112,645	685,197
Total domestic alloy shipments	110	0		0			15,116
Exports ² (for final sale)							
81 Exports to the United States 82 Exports to other countries (excluding United States)	4,921	19,576 2,736	124,733 6,990	20,136 1,009	8,628 622	24,822 8,844	346,530 39,883
Total disposition	8,975	48,947	471,637	81,288	17,320	146,311	1,071,610
Total alloy shipments	110	0		0			17,641
Producers interchange, for sale	0		1,288	х			53,309
Exports for conversion and return ²			0	0		0	0
Imports by producers (including conversion)		2,133	7,157	125		0	14,423

^{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 shipments ¹ 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	2,607 2,304 	40,607 5,264	93,386	79,933	45,434	226,216 174,033 0	14,460 1,004 	
24 Shipbuilding 31 Steel fabrication 32 Metal building systems	0 63	11,567	18,576	46,070	413,397 0	182,979 0	ó	
33 Contractors'products 34 Miscellaneous stamping and coating 41 Natural resources and extractive industries	0	39 320	5,246 89	4,464 50	1,395 13,770	4,156 19,029 123,972	1,469 0	· ·
51 Agricultural equipment 52 Non electrical machinery 53 Electrical machinery		20 64	24 0	97 0	20	2,655 4,057 0	0	
54 Industrial packaging material 61 Pipes and tubes 62 Wire and wire products	4,063				0	0 0 33,326	295,054	
63 Containers and closures 64 Appliances and utensils industries 70 Miscellaneous industries	•	92			0	5,469		
Total domestic shipments	9,037	57,973	117,321	130,614	474,016	775,892	311,987	0
Total domestic alloy shipments	63					249,281	0	
Exports ² (for final sale)								
81 Exports to the United States 82 Exports to other countries (excluding United States)	x x	29,072 798	139,953 1,627	98,338	13,092 0	410,765 195,540	457,278 15,428	0
Total disposition	x	87,843	258,901	228,952	487,108	1,382,197	784,693	0
Total alloy shipments	63					387,448	0	
Producers interchange, for sale	х		0			х	251	
Exports for conversion and return ²						0		
Imports by producers (including conversion)	47,419						0	

See footnotes at the end of the table.

Table 1-2 – continued

Steel primary forms and pig iron — Disposition of net shipments ¹ 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
			ı	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	31,328 23,883	384,848 75 0 9,026	1,814,466 771,414 -19	428,915 161,134	23,832 13	465,326 656,950	3,651,358 1,790,810 0 14,271
24 Shipbuilding 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	1,025 1,123 2,919 632 1,232 321	60,093 818 4,138 12 3,799 2,796	59,815 0 53,895 60,808 28 4,553 3,110 14,599 1,967,342 12,074 9,494	385 26,655 57,809 0 807 0 38,206 108,526 30,055 1,138 2,271 66,853	262	9,5045 35,045 386,558 200,804 1 1,410 14,875 0 39,549 316	0 803,476 35,045 476,108 355,537 138,554 13,207 11,758 53,081 123,387
Total domestic shipments	71,103	465,605	4,771,622	922,754	134,191	1,841,777	10,083,892
Total domestic alloy shipments	2,503	0		0			251,847
Exports ² (for final sale)							
81 Exports to the United States 82 Exports to other countries (excluding United States)	81,853	234,193 23,930	1,096,995 148,069	x x	138,057 14,063	X X	
Total disposition	152,956	723,728	6,016,686	x	286,311	2,409,645	14,747,902
Total alloy shipments	1,582	0		0			389,093
Producers interchange, for sale	83		47,123	х			879,591
Exports for conversion and return ²			0	0		0	0
Imports by producers (including conversion)		40,390	115,021	67,596		0	270,426

^{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

	December		Year-to-date				
	2006	2007	2006	2007			
		metric tonnes					
Production of pig iron	638,813	742,857	8,305,254	8,579,122			

^{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

	December		Year-to-date	;			
	2006	2007	2006	2007			
	metric tonnes						
Pig iron including pre-reduced iron	646,079	740,864	8,725,622	8,928,370			
Scrap Own make Purchased	163,205 461,865	160,560 483,825	2,034,350 6,117,413	1,899,209 6,300,329			
Total, pig iron and scrap products	1,271,149	1,385,249	16,877,385	17,127,908			

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			
December					
Steel, primary forms (carbon and alloy including continuous cast steel)					
Electric furnace Basic oxygen furnace	470,882 684,444	506,067 749,882	62,261 	X X	
Steel, primary forms - Total	1,155,326	1,255,949	62,261	215,618	
Included in "Steel primary forms total" above Continuous cast steel	1,142,543	1,249,649	59,097	211,207	

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	6,371,708 9,027,664	6,404,038 9,167,514	X X	x x
Steel, primary forms - Total	15,399,372	15,571,552	x	1,843,688
Included in "Steel primary forms total" above Continuous cast steel	15,207,230	15,396,278	x	1,758,124

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

	Production	Ship	ments for sale	
		Domestic shipments ¹	Exports ²	Total shipments
		metric tonn	es	
December				
Total, pipe and tubing	192,875	105,419	103,174	208,593
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	2,366 5,594 46,508	1,578 8,486 5,788	20 0 36,349	1,598 8,486 42,137
Hollow structural sections up to and including 16" (40.64 cm) periphery over 16" (40.64 cm) periphery	17,131 43,914	8,474 13,440	10,082 29,039	18,556 42,479
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	3,344 878	1,357 462	3,490 1,143	4,847 1,605
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	1,397 832 862	174 1,218 1,017	834 26 330	1,008 1,244 1,347
Mechanical tubing Mechanical tubing, welded, produced from hot rolled Mechanical tubing, welded, produced from cold rolled	15,036 8,142	11,511 3,222	4,911 2,147	16,422 5,369
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)	38,703 7,968	42,305 5,358	10,707 3,470	53,012 8,828
Other tubular products	200	1,029	626	1,655

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 shipments ¹	Exports ²	Total shipments
_	metric tonnes			
Year-to-date				
Total, pipe and tubing	2,614,659	1,442,974	1,329,153	2,772,127
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	x 44,431 560,955	36,982 58,970 132,006	1,212 7,063 458,262	38,194 66,033 590,268
Hollow structural sections up to and including 16" (40.64 cm) periphery over 16" (40.64 cm) periphery	244,315 588,615	129,224 189,886	124,114 388,866	253,338 578,752
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	50,462 15,593	23,857 18,717	35,382 9,789	59,239 28,506
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	25,400 21,420 24,230	8,031 14,063 X	4,511 259 x	12,542 14,322 14,230
Mechanical tubing Mechanical tubing, welded, produced from hot rolled Mechanical tubing, welded, produced from cold rolled	310,211 166,899	214,020 62,781	91,488 36,855	305,508 99,636
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)	449,111 72,837	X X	X X	x x
Other tubular products	х	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 shipments 1, monthly

	Shipments			Production	
_	2006	2007			
		Total shipments	Domestic shipments	Exports ²	
<u> </u>	metric tonnes				
December					
Barbed wire	x	x	х	x	
Uncoated steel wire	11,235	12,302	6,055	6,247	
Galvanized steel wire	9,066	9,691	3,890	5,801	
Other coated steel wire	X	X	Х	Х	:
Farm fencing and wire chain link fabric	464	480	Х	Х	576
Wire mesh, bright or uncoated and galvanized	3,628	4,027	Х	Х	3,933
Wire rope	1,880	Х	1,937	Х	2,235
Nails and staples	Х	Х	Х	X	Х
Wire roofing nails of a length of 25 mm or more, iron or steel	2,405	1,149	547	602	2,131
Staples of iron or steel	Х	X	Х	X	Х
All other wire products	Х	Х	X	1	496
Grand total	30,682	33,167	17,768	15,399	

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

Table 3-2
Steel and specified wire products — Factory shipments ¹, year-to-date

	Shipments			Production	
_	2006 2007				
		Total shipments	Domestic shipments	Exports ²	
_			metric tonnes		
Barbed wire Uncoated steel wire Galvanized steel wire	x 212,808 152,089	x 206,189 154,341	x 115,859 64,443	x 90,330 89,898	
Other coated steel wire Farm fencing and wire chain link fabric Wire mesh, bright or uncoated and galvanized	x 11,287 54,997	x x 55,958	x x	x x	x 57,703
Wire rope Nails and staples	54,997 X X	X	х х х	X X X	37,703 X X
Wire roofing nails of a length of 25 mm or more, iron or steel Staples of iron or steel All other wire products	х х х	49,367 x x	x x x	х х х	x x x
Grand total	555,925	544,460	313,177	231,283	

^{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
	percent	
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).