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Steel, Tubular Products and Steel Wire



March 2006



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Steel, Tubular Products and Steel Wire

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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
- 0^s 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

March 2006

- Total production of primary steel and pig iron climbed 10.8% to 1,375,949 metric tonnes in March 2006, it's highest level since April 2005.
- Total monthly disposition of rolled steel products jumped 23.3% to 1,434,888 metric tonnes in March 2006.
- Between February 2006 and March 2006, total production of steel pipe and tubing rose 19.4% to 286,393 metric tonnes, largely fuelled by increased production of line pipe, mechanical tubing and hollow structural sections.
- Between February 2006 and March 2006, total shipments of steel wire and specified wire products increased 16.1% to 55,853 metric tonnes, its highest level since June 2005.

Related products

Selected CANSIM tables from Statistics Canada

303-0046	Production and shipments of steel pipe and tubing
303-0047	Production and shipments of steel wire and specified wire products
303-0048	Production and shipments of pig iron
303-0049	Pig iron and scrap products charged to furnace, by the primary metal industry
303-0050	Production and shipments of steel casting and primary forms steel products
303-0051	Destination of net shipments of rolled steel products to consuming industries

Selected surveys from Statistics Canada

2105	Steel Pipe and Tubing
2106	Steel Wire and Specified Wire Products
2116	Steel Primary Forms, Steel Castings and Pig Iron
2184	Disposition of Shipments of Ingots and Rolled Steel Products

Statistical tables

Table 1-1

Steel primary forms and pig iron — Disposition of net shipments¹ of rolled steel products, by product, monthly 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								
March								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	5	2,475	12,078	7,240	4,010	26,577	..	.
21 Motor vehicles and parts	..	.	.	.	.	26,247	175	.
22 Railway operating	.	.	.	.	.	..	.	.
23 Railroad cars and locomotives	.	360	.	.	.	.	.	.
24 Shipbuilding	..	.	.	.	.	.	.	.
31 Steel fabrication	..	571	3,198	2,531	23,646	17,484	..	.
32 Metal building systems	.	.	.	.	..	..	.	.
33 Contractors' products	.	.	..	.	62	554	259	.
34 Miscellaneous stamping and coating	..	..	797	561	.	2,220	.	.
41 Natural resources and extractive industries	.	.	38	.	926	12,578	..	.
51 Agricultural equipment	.	..	12	8	.	591	.	.
52 Non electrical machinery	.	..	80	..	.	396	..	.
53 Electrical machinery	.	.	.	.	.	..	.	.
54 Industrial packaging material	.	.	.	.	.	..	.	.
61 Pipes and tubes	.	.	.	.	.	..	.	.
62 Wire and wire products	..	.	.	.	..	2,882	20,352	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	..	.	.	.
Total domestic shipments	5	3,406	16,203	10,340	28,644	89,529	20,786	..
Total domestic alloy shipments	.	.	.	.	.	29,769	..	.
Exports² (for final sale)								
81 Exports to the United States	x	1,743	15,256	10,990	3,973	54,709	36,409	.
82 Exports to other countries (excluding United States)	..	..	95	.	..	16,394	310	21
Total disposition	x	5,149	31,554	21,330	32,617	160,632	57,505	21
Total alloy shipments	.	.	.	.	.	42,822	..	.
Producers interchange, for sale	x	.	..	.	.	1,810	42	.
Exports for conversion and return ²	.	.	.	.	.	.	.	.
Imports by producers (including conversion)	2,957	.	.	.	.	.	..	.

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							
March							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	3,602	37,485	180,681	37,397	2,294	42,978	356,822
21 Motor vehicles and parts	2,332	..	147,735	20,938	.	75,577	273,004
22 Railway operating	.	..	.	.	.	.	..
23 Railroad cars and locomotives	.	2,335	416	.	.	.	3,111
24 Shipbuilding	.	.	.	.	.	.	..
31 Steel fabrication	195	5,573	6,328	..	.	1,043	60,569
32 Metal building systems	.	.	..	.	.	3,038	3,038
33 Contractors' products	37	43	4,023	1,988	.	38,365	45,331
34 Miscellaneous stamping and coating	292	2,258	8,415	5,484	.	22,898	42,925
41 Natural resources and extractive industries	100	.	4	..	.	..	13,646
51 Agricultural equipment	231	335	1,026	.	.	.	2,203
52 Non electrical machinery	91	422	.	..	.	.	989
53 Electrical machinery	.	.	.	3,386	.	1,382	4,768
54 Industrial packaging material	.	.	819	13,873	199	..	14,891
61 Pipes and tubes	16	..	201,196	2,348	.	2,080	205,640
62 Wire and wire products	869	..	..	170	.	20	24,293
63 Containers and closures	.	.	57	254	15,637	.	15,948
64 Appliances and utensils industries	.	.	.	6,811	.	3,082	9,893
70 Miscellaneous industries	157	.	.	.	.	.	157
Total domestic shipments	7,922	48,451	550,700	92,649	18,130	190,463	1,077,228
Total domestic alloy shipments	150	..	.	..	.	.	29,919
Exports ² (for final sale)							
81 Exports to the United States	x	18,134	66,928	16,941	12,119	48,344	318,329
82 Exports to other countries (excluding United States)	.	1,262	5,737	563	1,738	13,211	39,331
Total disposition	x	67,847	623,365	110,153	31,987	252,018	1,434,888
Total alloy shipments	150	..	.	..	.	.	42,972
Producers interchange, for sale	.	.	2,867	x	.	.	72,564
Exports for conversion and return ²	.	.	688	.	.	.	688
Imports by producers (including conversion)	.	1,741	10,359	18,122	.	.	33,179

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 tonnes								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	20	8,341	26,719	23,386	7,469	71,773	..	.
21 Motor vehicles and parts	..	.	.	.	.	74,741	400	.
22 Railway operating	.	.	.	.	.	..	.	.
23 Railroad cars and locomotives	.	929	.	.	.	.	.	.
24 Shipbuilding	..	.	.	.	.	.	.	.
31 Steel fabrication	..	2,799	6,085	11,825	94,767	48,413	..	.
32 Metal building systems	.	.	.	.	..	..	.	.
33 Contractors' products	.	.	..	.	561	3,288	762	.
34 Miscellaneous stamping and coating	..	..	1,440	1,457	.	4,470	.	.
41 Natural resources and extractive industries	.	.	38	.	3,534	37,306	..	.
51 Agricultural equipment	.	..	27	23	.	1,190	..	.
52 Non electrical machinery	.	..	80	..	.	2,481	..	.
53 Electrical machinery	.	.	.	.	.	..	.	.
54 Industrial packaging material	.	.	.	.	.	..	.	.
61 Pipes and tubes	.	.	.	.	.	..	.	.
62 Wire and wire products	..	.	.	.	..	12,098	60,617	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	..	.	.	.
Total domestic shipments	294	12,069	34,389	36,691	106,331	255,808	61,779	..
Total domestic alloy shipments	.	.	.	.	.	74,415	..	.
Exports ² (for final sale)								
81 Exports to the United States	x	5,982	40,030	32,996	11,379	141,418	104,514	.
82 Exports to other countries (excluding United States)	..	..	305	.	..	54,437	1,363	..
Total disposition	x	18,216	74,724	69,687	117,710	451,663	167,656	21
Total alloy shipments	.	.	.	.	.	126,433	..	.
Producers interchange, for sale	x	.	..	.	.	7,467	159	.
Exports for conversion and return ²	.	.	.	.	.	.	.	.
Imports by producers (including conversion)	46,377	.	.	.	.	.	..	.

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	10,508	102,476	492,551	106,362	9,030	114,250	972,885
21 Motor vehicles and parts	6,905	..	331,326	58,589	.	198,802	671,037
22 Railway operating	.	..	.	.	.	.	..
23 Railroad cars and locomotives	.	5,006	1,449	.	.	.	7,384
24 Shipbuilding	.	.	.	.	.	.	..
31 Steel fabrication	525	17,574	14,772	..	.	2,681	199,581
32 Metal building systems	.	.	.	.	.	7,508	7,556
33 Contractors' products	104	190	9,308	5,012	.	88,469	107,694
34 Miscellaneous stamping and coating	868	3,691	18,789	16,422	.	56,315	103,452
41 Natural resources and extractive industries	406	.	4	..	.	..	41,289
51 Agricultural equipment	626	357	1,446	.	.	.	3,669
52 Non electrical machinery	242	1,830	.	..	.	.	4,633
53 Electrical machinery	.	.	.	17,222	.	4,302	21,524
54 Industrial packaging material	.	.	1,363	40,461	212	.	42,036
61 Pipes and tubes	40	..	510,075	7,320	.	5,111	522,546
62 Wire and wire products	2,285	.	..	480	.	98	75,578
63 Containers and closures	.	.	190	642	38,450	.	39,282
64 Appliances and utensils industries	.	.	.	18,971	.	9,337	28,308
70 Miscellaneous industries	369	.	.	.	.	.	369
Total domestic shipments	22,878	131,124	1,381,273	271,621	47,692	486,874	2,848,823
Total domestic alloy shipments	426	..	.	..	.	.	74,841
Exports² (for final sale)							
81 Exports to the United States	x	49,594	186,480	52,100	32,146	136,566	907,099
82 Exports to other countries (excluding United States)	.	4,057	13,344	2,861	4,868	36,760	118,181
Total disposition	x	184,775	1,581,097	326,582	84,706	660,200	3,874,103
Total alloy shipments	426	..	.	..	.	.	126,859
Producers interchange, for sale	.	.	8,177	x	.	.	217,602
Exports for conversion and return ²	.	.	7,812	.	.	.	7,812
Imports by producers (including conversion)	.	5,715	47,327	58,443	.	.	157,862

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 1-3

Steel primary forms and pig iron — Production of pig iron

	March		Year-to-date	
	2005	2006	2005	2006
metric tonnes				
Production of pig iron	716,125	731,776	2,110,771	2,133,975

Table 1-4

Steel primary forms and pig iron — Pig iron and scrap charged to steel furnaces

	March		Year-to-date	
	2005	2006	2005	2006
	metric tonnes			
Pig iron including pre-reduced iron	769,553	781,048	2,269,529	2,221,585
Scrap				
Own make	217,300	172,577	604,296	509,250
Purchased	536,797	532,811	1,573,772	1,534,115
Total, pig iron and scrap products	1,523,650	1,486,436	4,447,597	4,264,950

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			
March				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	581,413	571,322	99,952	53,668
Basic oxygen furnace	788,085	804,627	9,286	15,605
Steel, primary forms - Total	1,369,498	1,375,949	109,238	69,273
Included in "Steel primary forms total" above				
Continuous cast steel	1,352,591	1,358,567	104,721	64,922

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	1,689,257	1,611,935	243,763	x
Basic oxygen furnace	2,311,405	2,299,533	26,404	x
Steel, primary forms - Total	4,000,662	3,911,468	270,167	x
Included in "Steel primary forms total" above				
Continuous cast steel	3,953,317	3,862,849	257,465	x

Table 2-1

Steel pipe and tubing — Production and shipments, monthly 2006

	Production	Shipments for sale		Total shipments
		Domestic shipments ¹	Exports ²	
metric tonnes				
March				
Total, pipe and tubing	286,393	182,431	113,748	296,179
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	15,060	14,256	82	14,338
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	3,923	16,031	..	16,031
over 16" (40.64 cm) outside diameter	46,272	9,515	30,780	40,295
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	26,255	12,273	15,342	27,615
over 16" (40.64 cm) periphery	56,895	16,990	37,252	54,242
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	6,095	1,174	4,251	5,425
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	558	60	640	700
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	1,695	935	315	1,250
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	729	x	x	2,153
over 16" (40.64 cm) outside diameter	2,499	x	x	2,291
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	37,476	23,928	10,209	34,137
Mechanical tubing, welded, produced from cold rolled	13,656	6,493	2,746	9,239
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	64,614	x	x	69,712
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	9,627	12,501	1,269	13,770
Other tubular products	1,039	x	x	4,981

1. Including for own use by the steel pipe and tubing industries.

2. 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		Total shipments
		Domestic shipments ¹	Exports ²	
metric tonnes				
Year-to-date				
Total, pipe and tubing	777,004	568,812	283,174	851,986
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	50,224	37,249	124	37,373
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	16,243	48,446	..	48,446
over 16" (40.64 cm) outside diameter	101,598	35,474	62,453	97,927
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	66,916	33,876	36,320	70,196
over 16" (40.64 cm) periphery	146,523	45,039	98,413	143,452
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	16,151	4,304	9,901	14,205
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	2,791	894	2,604	3,498
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	5,451	4,128	710	4,838
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	4,786	x	x	8,908
over 16" (40.64 cm) outside diameter	8,238	x	x	6,633
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	99,343	64,672	26,839	91,511
Mechanical tubing, welded, produced from cold rolled	40,025	18,863	7,928	26,791
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	183,712	x	x	233,909
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	30,765	x	x	49,460
Other tubular products	4,238	x	x	14,839

1. Including for own use by the steel pipe and tubing industries.

2. 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					
March					
Barbed wire	x	x	x	x	.
Uncoated steel wire	22,700	21,876	12,551	9,325	.
Galvanized steel wire	12,077	14,600	6,042	8,558	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	1,256	1,286	x	x	1,573
Wire mesh, bright or uncoated and galvanized	3,933	3,736	x	x	3,866
Wire rope	3,825	4,088	x	x	3,997
Nails and staples	6,440	x	x	x	x
Wire roofing nails of a length of 25 mm or more,					
iron or steel	6,227	5,424	x	x	x
Staples of iron or steel	x	x	x	..	x
All other wire products	x	x	x	x	x
Grand total	55,824	55,853	32,608	23,245	.

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.

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	66,749	61,209	34,894	26,315	.
Galvanized steel wire	38,053	39,773	16,953	22,820	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	2,792	2,942	x	x	3,580
Wire mesh, bright or uncoated and galvanized	9,753	10,231	x	x	10,773
Wire rope	9,706	x	x	x	x
Nails and staples	16,999	x	x	x	x
Wire roofing nails of a length of 25 mm or more,					
iron or steel	x	15,398	x	x	x
Staples of iron or steel	x	x	x	..	x
All other wire products	x	x	x	x	x
Grand total	156,222	150,111	85,868	64,243	.

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.

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	91	11
Ingots and Rolled steel products	98	18
Steel pipe and tubing	82	2
Steel wire	92	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 0T6 (Telephone: 1-866-873-8789 or 613-951-9497; Fax line: 613-951-9499; Internet: *manufact@statcan.ca*) .