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Steel, tubular products and steel wire



January 2006



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Steel, tubular products and steel wire

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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
- 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

Table of contents

Highlights	4
Related products	5
Statistical tables	
1 Steel primary forms and pig iron	7
1-1 Disposition of net shipments of rolled steel products, by product, monthly 2006	7
1-2 Disposition of net shipments of rolled steel products, by product, year-to-date 2006	9
1-3 Production of pig iron	10
1-4 Pig iron and scrap charged to steel furnaces	11
1-5 Production and shipments of steel, primary forms, monthly	11
1-6 Production and shipments of steel, primary forms, year-to-date	11
2 Steel pipe and tubing	12
2-1 Production and shipments, monthly 2006	12
2-2 Production and shipments, year-to-date 2006	13
3 Steel and specified wire products	14
3-1 Factory shipments, monthly	14
3-2 Factory shipments, year-to-date	14
Data quality, concepts and methodology	
Concepts, methodology and data quality	15
Definitions	17

Highlights

January 2006

- Total production of primary steel and pig iron rose 5.3% to reach 1,294,124 metric tonnes between December 2005 and January 2006. Over that same time period, shipments dropped 15.8% to 50,423 metric tonnes - their lowest level in four months.
- Total monthly dispositions of rolled steel products rebounded, climbing 24.3% to 1,275,897 metric tonnes in January. The recovery was led by increased dispositions of hot-rolled sheets and coils, as well as galvanized sheets.
- Total production of steel pipe and tubing increased 15.2% to 250,775 metric tonnes in January. Shipments also grew in January, rising 21.3% to reach 280,200 metric tonnes.
- January shipments of steel wire products partially reversed a three-month decline, increasing 19.5% to 43,961 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								
January								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	15	3,101	7,713	8,562	1,630	19,879	0	.
21 Motor vehicles and parts	253	.	.	.	.	24,634	74	.
22 Railway operating	.	.	.	.	.	0	.	.
23 Railroad cars and locomotives	.	252	.	.	.	.	.	.
24 Shipbuilding	0	.	.	.	.	.	.	.
31 Steel fabrication	0	2,025	634	5,708	45,894	15,594	0	.
32 Metal building systems	.	.	.	.	0	48	.	.
33 Contractors' products	.	.	0	.	463	2,243	260	.
34 Miscellaneous stamping and coating	0	0	501	573	.	833	.	.
41 Natural resources and extractive industries	.	.	0	.	1,876	12,646	0	.
51 Agricultural equipment	.	0	0	0	.	321	.	.
52 Non electrical machinery	.	0	0	0	.	1,455	0	.
53 Electrical machinery	.	.	.	.	.	0	.	.
54 Industrial packaging material	.	.	.	.	.	.	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	0	.	.	.	0	5,653	19,926	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	0	.	.	.
Total domestic shipments	268	5,378	8,848	14,843	49,863	83,306	20,260	0
Total domestic alloy shipments	.	.	.	.	.	18,289	0	.
Exports² (for final sale)								
81 Exports to the United States	x	2,135	12,028	12,383	2,369	42,676	30,919	.
82 Exports to other countries (excluding United States)	0	82	94	.	0	27,663	22	.
Total disposition	x	7,595	20,970	27,226	52,232	153,645	51,201	0
Total alloy shipments	.	.	.	.	.	45,924	0	.
Producers interchange, for sale	x	.	.	.	.	2,339	37	.
Exports for conversion and return ²	.	.	.	.	.	.	.	.
Imports by producers (including conversion)	0	.	.	.	.	.	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							
January							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	3,260	32,644	170,383	34,238	3,555	38,934	323,914
21 Motor vehicles and parts	2,487	0	97,323	20,445	.	64,326	209,542
22 Railway operating	.	0	.	.	.	.	0
23 Railroad cars and locomotives	.	1,282	1,033	.	.	.	2,567
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	180	6,770	5,216	107	.	938	83,066
32 Metal building systems	.	.	0	.	.	2,264	2,312
33 Contractors' products	15	129	2,341	1,559	.	24,295	31,305
34 Miscellaneous stamping and coating	319	1,415	4,817	6,219	.	16,835	31,512
41 Natural resources and extractive industries	134	.	0	0	.	1	14,657
51 Agricultural equipment	230	22	139	.	.	.	712
52 Non electrical machinery	73	929	.	0	.	.	2,457
53 Electrical machinery	.	.	.	5,691	.	1,537	7,228
54 Industrial packaging material	.	.	370	14,257	13	0	14,640
61 Pipes and tubes	24	0	154,058	2,614	.	1,412	158,108
62 Wire and wire products	697	.	0	199	.	30	26,505
63 Containers and closures	.	.	91	294	10,735	.	11,120
64 Appliances and utensils industries	.	.	.	6,127	.	3,092	9,219
70 Miscellaneous industries	109	.	.	.	.	.	109
Total domestic shipments	7,528	43,191	435,771	91,750	14,303	153,664	928,973
Total domestic alloy shipments	149	0	.	0	.	.	18,438
Exports ² (for final sale)							
81 Exports to the United States	x	15,447	61,371	17,063	11,018	46,069	300,073
82 Exports to other countries (excluding United States)	.	1,618	3,142	1,296	1,637	11,297	46,851
Total disposition	x	60,256	500,284	110,109	26,958	211,030	1,275,897
Total alloy shipments	149	0	.	0	.	.	46,073
Producers interchange, for sale	.	.	2,333	x	.	.	76,571
Exports for conversion and return ²	.	.	7,124	.	.	.	7,124
Imports by producers (including conversion)	.	2,548	13,677	0	.	.	16,225

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	15	3,101	7,713	8,562	1,630	19,879	0	.
21 Motor vehicles and parts	253	.	.	.	.	24,634	74	.
22 Railway operating	.	.	.	.	.	0	.	.
23 Railroad cars and locomotives	.	252	.	.	.	.	.	.
24 Shipbuilding	0	.	.	.	.	.	.	.
31 Steel fabrication	0	2,025	634	5,708	45,894	15,594	0	.
32 Metal building systems	.	.	.	.	0	48	.	.
33 Contractors' products	.	.	0	.	463	2,243	260	.
34 Miscellaneous stamping and coating	0	0	501	573	.	833	.	.
41 Natural resources and extractive industries	.	.	0	.	1,876	12,646	0	.
51 Agricultural equipment	.	0	0	0	.	321	.	.
52 Non electrical machinery	.	0	0	0	.	1,455	0	.
53 Electrical machinery	.	.	.	.	.	0	.	.
54 Industrial packaging material	.	.	.	.	.	.	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	0	.	.	.	0	5,653	19,926	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	0	.	.	.
Total domestic shipments	268	5,378	8,848	14,843	49,863	83,306	20,260	0
Total domestic alloy shipments	.	.	.	.	.	18,289	0	.
Exports ² (for final sale)								
81 Exports to the United States	x	2,135	12,028	12,383	2,369	42,676	30,919	.
82 Exports to other countries (excluding United States)	0	82	94	.	0	27,663	22	.
Total disposition	x	7,595	20,970	27,226	52,232	153,645	51,201	0
Total alloy shipments	.	.	.	.	.	45,924	0	.
Producers interchange, for sale	x	.	.	.	.	2,339	37	.
Exports for conversion and return ²	.	.	.	.	.	.	.	.
Imports by producers (including conversion)	0	.	.	.	.	.	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	3,260	32,644	170,383	34,238	3,555	38,934	323,914
21 Motor vehicles and parts	2,487	0	97,323	20,445	.	64,326	209,542
22 Railway operating	.	0	.	.	.	.	0
23 Railroad cars and locomotives	.	1,282	1,033	.	.	.	2,567
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	180	6,770	5,216	107	.	938	83,066
32 Metal building systems	.	.	0	.	.	2,264	2,312
33 Contractors' products	15	129	2,341	1,559	.	24,295	31,305
34 Miscellaneous stamping and coating	319	1,415	4,817	6,219	.	16,835	31,512
41 Natural resources and extractive industries	134	.	0	0	.	1	14,657
51 Agricultural equipment	230	22	139	.	.	.	712
52 Non electrical machinery	73	929	.	0	.	.	2,457
53 Electrical machinery	.	.	.	5,691	.	1,537	7,228
54 Industrial packaging material	.	.	370	14,257	13	0	14,640
61 Pipes and tubes	24	0	154,058	2,614	.	1,412	158,108
62 Wire and wire products	697	.	0	199	.	30	26,505
63 Containers and closures	.	.	91	294	10,735	.	11,120
64 Appliances and utensils industries	.	.	.	6,127	.	3,092	9,219
70 Miscellaneous industries	109	.	.	.	.	.	109
Total domestic shipments	7,528	43,191	435,771	91,750	14,303	153,664	928,973
Total domestic alloy shipments	149	0	.	0	.	.	18,438
Exports² (for final sale)							
81 Exports to the United States	x	15,447	61,371	17,063	11,018	46,069	300,073
82 Exports to other countries (excluding United States)	.	1,618	3,142	1,296	1,637	11,297	46,851
Total disposition	x	60,256	500,284	110,109	26,958	211,030	1,275,897
Total alloy shipments	149	0	.	0	.	.	46,073
Producers interchange, for sale	.	.	2,333	x	.	.	76,571
Exports for conversion and return ²	.	.	7,124	.	.	.	7,124
Imports by producers (including conversion)	.	2,548	13,677	0	.	.	16,225

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

	January		Year-to-date	
	2005	2006	2005	2006
metric tonnes				
Production of pig iron	714,223	706,407	714,223	706,407

Table 1-4

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

	January		Year-to-date	
	2005	2006	2005	2006
	metric tonnes			
Pig iron including pre-reduced iron	768,707	725,521	768,707	725,521
Scrap				
Own make	205,281	182,973	205,281	182,973
Purchased	520,525	515,209	520,525	515,209
Total, pig iron and scrap products	1,494,513	1,423,703	1,494,513	1,423,703

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			
January				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	570,066	532,931	64,000	x
Basic oxygen furnace	766,293	761,193	15,295	20,243
Steel, primary forms - Total	1,336,359	1,294,124	79,295	x
Included in "Steel primary forms total" above				
Continuous cast steel	1,321,314	1,277,784	74,956	x

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	570,066	532,931	64,000	x
Basic oxygen furnace	766,293	761,193	15,295	20,243
Steel, primary forms - Total	1,336,359	1,294,124	79,295	x
Included in "Steel primary forms total" above				
Continuous cast steel	1,321,314	1,277,784	74,956	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				
January				
Total, pipe and tubing	250,775	194,631	85,569	280,200
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	18,642	15,045	21	15,066
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	7,191	17,549	0	17,549
over 16" (40.64 cm) outside diameter	30,520	7,868	19,929	27,797
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	19,095	11,572	9,536	21,108
over 16" (40.64 cm) periphery	43,513	13,710	29,741	43,451
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	5,399	1,847	3,092	4,939
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	312	438	208	646
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	2,114	573	262	835
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	1,760	x	x	2,575
over 16" (40.64 cm) outside diameter	3,317	x	x	1,813
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	32,354	20,411	8,397	28,808
Mechanical tubing, welded, produced from cold rolled	12,488	6,322	2,421	8,743
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	63,219	x	x	82,266
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	9,375	18,792	486	19,278
Other tubular products	1,476	x	x	5,326

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	250,775	194,631	85,569	280,200
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	18,642	15,045	21	15,066
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	7,191	17,549	0	17,549
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Mechanical tubing, welded, produced from cold rolled	12,488	6,322	2,421	8,743
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	63,219	x	x	82,266
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	9,375	18,792	486	19,278
Other tubular products	1,476	x	x	5,326

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					
January					
Barbed wire	x	x	62	x	.
Uncoated steel wire	22,535	20,030	11,313	8,717	.
Galvanized steel wire	12,907	12,090	5,699	6,391	.
Other coated steel wire	x	x	x	86	.
Farm fencing and wire chain link fabric	690	741	x	x	761
Wire mesh, bright or uncoated and galvanized	2,479	2,833	x	x	3,482
Wire rope	2,763	x	2,095	x	x
Nails and staples	5,407	x	x	2,152	x
Wire roofing nails of a length of 25 mm or more, iron or steel	x	3,618	1,466	2,152	3,450
Staples of iron or steel	x	x	x	0	x
All other wire products	1,632	971	x	x	x
Grand total	48,790	43,961	24,492	19,469	.

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	62	x	.
Uncoated steel wire	22,535	20,030	11,313	8,717	.
Galvanized steel wire	12,907	12,090	5,699	6,391	.
Other coated steel wire	x	x	x	86	.
Farm fencing and wire chain link fabric	690	741	x	x	761
Wire mesh, bright or uncoated and galvanized	2,479	2,833	x	x	3,482
Wire rope	2,763	x	2,095	x	x
Nails and staples	5,407	x	x	2,152	x
Wire roofing nails of a length of 25 mm or more, iron or steel	x	3,618	1,466	2,152	3,450
Staples of iron or steel	x	x	x	0	x
All other wire products	1,632	971	x	x	x
Grand total	48,790	43,961	24,492	19,469	.

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) .