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Steel, tubular products and steel wire



October 2005



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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

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Highlights

October 2005

- Total shipments of rolled-steel products declined 5.3% to 1 238 928 metric tonnes between September and October 2005. The decrease was led by a month-over-month drop of 36 thousand metric tonnes in shipments of hot-rolled sheets and coils. Plant shutdowns played a role in the drop.
- Although shipments of rolled steel products to the United States edged up 1% in October 2005, they were more than offset by the combined slump of 7% (72 385 metric tonnes) in domestic shipments and foreign exports (other than to the United States).
- Compared with the same month last year, rolled steel shipments in October 2005 increased 3%.
- Between September and October 2005, total production of steel primary forms rose slightly (1%) to reach 1 312 452 tonnes, the highest level in last 5 months.
- Steel pipe and tube production continued to grow, reaching 261 936 metric tonnes in October 2005. This rise of 4.9% compared with September was largely attributable to an increase in the production of line pipe.
- Domestic shipments of steel pipe and tube were flat in October while exports went up. This resulted in an overall increase of 2.2% in total shipments.

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 2005

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								
October								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	234	2,101	6,224	8,399	3,379	24,749	..	.
21 Motor vehicles and parts	.	.	.	.	.	25,488	151	.
22 Railway operating	.	.	.	.	.	..	.	.
23 Railroad cars and locomotives	.	541	.	.	.	.	.	.
24 Shipbuilding	..	.	.	.	.	.	.	.
31 Steel fabrication	..	268	1,539	5,366	29,612	16,423	..	.
32 Metal building systems	.	.	.	.	.	..	.	.
33 Contractors' products	.	.	.	.	499	444	111	.
34 Miscellaneous stamping and coating	..	..	378	273	.	2,242	.	.
41 Natural resources and extractive industries	.	.	..	.	457	9,130	..	.
51 Agricultural equipment	.	..	..	3	.	124	.	.
52 Non electrical machinery	.	.	..	..	.	852	..	.
53 Electrical machinery	.	.	.	.	.	18	.	.
54 Industrial packaging material	.	.	.	.	.	.	.	.
61 Pipes and tubes	.	.	.	.	.	..	.	.
62 Wire and wire products	..	.	.	.	..	3,861	x	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	..	.	.	.
Total domestic shipments	234	2,910	8,141	14,041	33,947	83,331	x	..
Total domestic alloy shipments	.	.	.	.	.	18,452	..	.
Exports ² (for final sale)								
81 Exports to the United States	x	1,931	10,507	9,942	4,513	39,432	x	.
82 Exports to other countries (excluding United States)	x	..	194	.	..	16,736	x	.
Total disposition	x	4,841	18,842	23,983	38,460	139,499	x	..
Total alloy shipments	.	.	.	.	.	34,692	..	.
Producers interchange, for sale	x	.	.	.	.	1,883	142	.
Exports for conversion and return ²	.	.	.	.	.	.	.	.
Imports by producers (including conversion)	37,379	.	.	.	.	.	..	.

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 2005

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							
October							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	2,369	28,606	144,633	38,153	2,305	41,358	302,510
21 Motor vehicles and parts	2,561	..	99,439	22,060	.	71,094	220,793
22 Railway operating	.	..	.	.	.	.	..
23 Railroad cars and locomotives	.	6,132	1,539	.	.	.	8,212
24 Shipbuilding	.	.	.	.	.	.	..
31 Steel fabrication	156	3,114	7,484	482	.	667	65,111
32 Metal building systems	.	.	..	.	.	2,228	2,228
33 Contractors' products	59	264	3,616	1,540	.	30,628	37,161
34 Miscellaneous stamping and coating	309	1,124	3,411	5,460	.	20,156	33,353
41 Natural resources and extractive industries	59	.	..	.	.	8	9,654
51 Agricultural equipment	122	19	131	.	.	.	399
52 Non electrical machinery	76	730	.	..	.	.	1,658
53 Electrical machinery	.	.	.	3,216	.	1,563	4,797
54 Industrial packaging material	.	.	3,706	11,047	..	..	14,753
61 Pipes and tubes	42	..	148,226	4,971	.	1,600	154,839
62 Wire and wire products	552	.	..	x	.	44	24,098
63 Containers and closures	.	.	..	320	17,262	.	17,582
64 Appliances and utensils industries	.	.	.	6,374	.	3,199	9,573
70 Miscellaneous industries	192	.	.	.	.	.	192
Total domestic shipments	6,497	39,989	412,185	x	19,567	172,545	906,913
Total domestic alloy shipments	148	..	.	..	.	.	18,600
Exports ² (for final sale)							
81 Exports to the United States	8,027	19,010	42,172	15,415	7,163	43,448	284,095
82 Exports to other countries (excluding United States)	.	2,144	6,298	1,384	1,988	10,423	47,920
Total disposition	14,524	61,143	460,655	110,539	28,718	226,416	1,238,928
Total alloy shipments	148	..	.	..	.	.	34,840
Producers interchange, for sale	.	.	738	x	.	.	48,223
Exports for conversion and return ²	.	.	..	.	.	.	..
Imports by producers (including conversion)	.	3,829	8,165	175	.	.	49,548

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 2005

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	..	26,869	72,857	73,294	36,576	223,434	..	.
21 Motor vehicles and parts	.	.	.	.	.	258,893	1,822	.
22 Railway operating	.	.	.	.	.	..	.	.
23 Railroad cars and locomotives	.	4,482	.	.	.	.	.	.
24 Shipbuilding	..	.	.	.	.	.	.	.
31 Steel fabrication	..	3,414	12,126	37,129	265,716	138,655	..	.
32 Metal building systems	.	.	.	.	.	..	.	.
33 Contractors' products	.	.	..	.	6,547	5,823	1,903	.
34 Miscellaneous stamping and coating	..	..	3,685	2,759	.	17,158	.	.
41 Natural resources and extractive industries	.	.	..	.	22,199	124,687	..	.
51 Agricultural equipment	.	..	..	..	.	3,665	.	.
52 Non electrical machinery	.	..	..	..	.	8,788	..	.
53 Electrical machinery	.	.	.	.	.	..	.	.
54 Industrial packaging material	.	.	.	.	.	.	.	.
61 Pipes and tubes	.	.	.	.	.	..	.	.
62 Wire and wire products	..	.	.	.	..	46,364	x	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	..	.	.	.
Total domestic shipments	6,901	34,799	88,819	113,227	331,253	827,884	x	..
Total domestic alloy shipments	.	.	.	.	.	186,538	..	.
Exports ² (for final sale)								
81 Exports to the United States	x	18,949	113,835	94,598	15,403	427,675	x	.
82 Exports to other countries (excluding United States)	x	..	1,169	.	..	186,018	x	.
Total disposition	x	53,792	203,823	207,825	353,670	1,441,577	x	..
Total alloy shipments	.	.	.	.	.	441,252	..	.
Producers interchange, for sale	x	.	.	.	.	22,096	..	.
Exports for conversion and return ²	.	.	.	.	.	.	.	.
Imports by producers (including conversion)	521,152	.	.	.	.	.	..	.

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 2005

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	28,988	260,868	1,379,698	373,710	24,623	380,442	2,881,958
21 Motor vehicles and parts	24,660	..	913,675	199,919	.	663,254	2,062,223
22 Railway operating	.	..	.	.	.	.	..
23 Railroad cars and locomotives	.	31,362	2,901	.	.	.	38,745
24 Shipbuilding	.	.	.	.	.	.	..
31 Steel fabrication	1,410	41,411	54,804	3,194	.	8,068	565,984
32 Metal building systems	.	.	.	.	.	33,594	35,665
33 Contractors' products	359	..	36,659	14,833	.	291,772	358,666
34 Miscellaneous stamping and coating	2,896	9,479	61,613	63,831	.	183,081	350,093
41 Natural resources and extractive industries	1,115	.	.	.	.	144	148,247
51 Agricultural equipment	1,641	2,674	3,194	.	.	.	11,244
52 Non electrical machinery	734	5,443	.	..	.	.	15,036
53 Electrical machinery	.	.	.	43,107	.	12,483	55,780
54 Industrial packaging material	.	.	19,261	118,494	..	.	138,155
61 Pipes and tubes	737	..	1,390,921	35,330	.	24,273	1,451,261
62 Wire and wire products	5,113	..	..	x	.	290	279,825
63 Containers and closures	.	..	..	2,045	157,511	.	159,698
64 Appliances and utensils industries	.	.	.	57,208	.	28,279	85,487
70 Miscellaneous industries	2,135	.	.	.	.	.	2,209
Total domestic shipments	69,788	351,971	3,864,717	x	182,519	1,625,695	8,640,487
Total domestic alloy shipments	1,306	..	.	..	.	.	187,844
Exports² (for final sale)							
81 Exports to the United States	x	167,975	535,104	126,780	90,376	416,297	2,702,039
82 Exports to other countries (excluding United States)	.	17,610	49,043	x	15,686	100,916	542,293
Total disposition	x	537,556	4,448,864	1,057,042	288,581	2,142,908	11,884,819
Total alloy shipments	1,306	..	.	..	.	.	442,558
Producers interchange, for sale	.	.	10,088	x	.	.	521,678
Exports for conversion and return ²	.	.	..	.	.	.	..
Imports by producers (including conversion)	.	17,735	67,892	..	.	.	666,261

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

	October		Year-to-date	
	2004	2005	2004	2005
metric tonnes				
Production of pig iron	751,538	698,664	7,378,866	6,927,284

Table 1-4

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

	October		Year-to-date	
	2004	2005	2004	2005
	metric tonnes			
Pig iron including pre-reduced iron	804,968	744,963	7,797,034	7,223,410
Scrap				
Own make	194,193	180,524	1,941,715	1,800,522
Purchased	534,703	529,477	5,271,807	5,227,112
Total, pig iron and scrap products	1,533,857	1,454,964	15,010,548	14,251,044

Table 1-5

Steel primary forms and pig iron — Production and shipments of steel, primary forms, monthly

	Production		Shipments	
	2004	2005	2004	2005
	metric tonnes			
October				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	569,995	529,966	x	45,065
Basic oxygen furnace	825,044	782,486	..	10,213
Steel, primary forms - Total	1,395,039	1,312,452	x	55,278
Included in "Steel primary forms total" above				
Continuous cast steel	1,380,261	1,295,675	x	51,435

Table 1-6

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

	Production		Shipments	
	2004	2005	2004	2005
	metric tonnes			
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	5,499,165	5,365,949	x	x
Basic oxygen furnace	8,077,678	7,521,110	x	..
Steel, primary forms - Total	13,576,843	12,887,059	x	x
Included in "Steel primary forms total" above				
Continuous cast steel	13,460,805	12,741,637	x	x

Table 2-1

Steel pipe and tubing — Production and shipments, monthly 2005

	Production	Shipments for sale		Total shipments
		Domestic shipments ¹	Exports ²	
metric tonnes				
October				
Total, pipe and tubing	261,936	169,007	92,091	261,098
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	9,520	x	x	9,642
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	10,540	13,254	..	13,254
over 16" (40.64 cm) outside diameter	24,517	3,627	18,209	21,836
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	20,855	10,959	12,100	23,059
over 16" (40.64 cm) periphery	51,650	18,648	32,899	51,547
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	4,572	1,846	3,800	5,646
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	649	531	627	1,158
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	2,349	1,218	375	1,593
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	3,353	3,048	569	3,617
over 16" (40.64 cm) outside diameter	2,977	x	x	2,025
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	40,667	26,507	9,177	35,684
Mechanical tubing, welded, produced from cold rolled	13,949	7,291	2,895	10,186
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	61,488	56,977	8,246	65,223
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	13,616	10,881	411	11,292
Other tubular products	1,234	x	x	5,336

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 2005

	Production	Shipments for sale		Total shipments
		Domestic shipments ¹	Exports ²	
metric tonnes				
Year-to-date				
Total, pipe and tubing	2,351,463	1,443,970	871,345	2,315,315
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	64,180	x	x	67,750
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	96,397	108,034	..	108,291
over 16" (40.64 cm) outside diameter	164,672	..	119,634	124,815
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	269,323	145,089	142,129	287,218
over 16" (40.64 cm) periphery	449,774	158,176	289,644	447,820
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	45,392	20,858	33,950	54,808
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	9,924	7,091	8,020	15,111
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	21,373	x	1,819	x
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	32,827	x	x	x
over 16" (40.64 cm) outside diameter	25,235	x	x	x
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	344,952	221,712	101,707	323,419
Mechanical tubing, welded, produced from cold rolled	142,504	75,047	28,973	104,020
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	541,548	480,844	x	x
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	121,876	78,549	x	x
Other tubular products	21,486	x	x	45,439

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
	2004	2005		
		Total shipments	Domestic shipments		Exports ^{2}
metric tonnes				
October				
Barbed wire	x	288	x	x
Uncoated steel wire	22,474	21,750	12,963	8,787
Galvanized steel wire	13,108	12,943	5,271	7,672
Other coated steel wire	x	x	x	x
Farm fencing and wire chain link fabric	737	879	x	x
Wire mesh, bright or uncoated and galvanized	3,560	4,922	x	x
Wire rope	3,599	3,669	x	x
Nails and staples	4,507	x	x	2,852
Wire roofing nails of a length of 25 mm or more, iron or steel	4,401	4,668	1,816	2,852
Staples of iron or steel	x	x	x	..
All other wire products	x	x	x	x
Grand total	52,198	51,733	29,926	21,807

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
	2004	2005		
		Total shipments	Domestic shipments		Exports ^{2}
metric tonnes				
Barbed wire	x	x	x	x
Uncoated steel wire	262,820	210,791	119,495	91,296
Galvanized steel wire	157,537	130,807	53,199	77,608
Other coated steel wire	x	x	x	x
Farm fencing and wire chain link fabric	10,499	9,498	x	x
Wire mesh, bright or uncoated and galvanized	40,703	x	x	x
Wire rope	38,544	34,328	x	x
Nails and staples	x	x	x	x
Wire roofing nails of a length of 25 mm or more, iron or steel	70,995	x	x	x
Staples of iron or steel	x	x	x	x
All other wire products	x	x	x	x
Grand total	623,436	x	x	x

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) .