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Steel, tubular products and steel wire



November 2005



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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 2005	7
1-2 Disposition of net shipments of rolled steel products, by product, year-to-date 2005	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 2005	12
2-2 Production and shipments, year-to-date 2005	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

November 2005

- The total disposition of rolled steel products rose 3.8% between October and November 2005 to reach 1,286,361 metric tonnes, reflecting increased shipments to customers both in Canada and abroad.
- Production of Steel primary forms fell 7.7% to 1,210,963 metric tonnes in November 2005. The drop was concentrated in production from basic oxygen furnaces.
- Total production of Steel pipe and tubing increased 2.3% to reach 267,963 metric tonnes in November 2005 fuelled by strong demand for line pipe.
- Total shipments of steel pipe and tube received a boost from domestic shipments of line pipe that led the increase of 9.4% in November

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								
November								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	5	1,308	9,552	6,803	6,155	14,234	..	.
21 Motor vehicles and parts	.	.	.	.	.	25,965	190	.
22 Railway operating	.	.	.	.	.	..	.	.
23 Railroad cars and locomotives	.	418	.	.	.	.	.	.
24 Shipbuilding	..	.	.	.	.	.	.	.
31 Steel fabrication	..	197	2,101	4,499	48,255	15,466	..	.
32 Metal building systems	.	.	.	.	.	..	.	.
33 Contractors' products	.	.	.	.	945	510	114	.
34 Miscellaneous stamping and coating	..	..	202	322	.	2,578	.	.
41 Natural resources and extractive industries	.	.	37	.	685	6,713	..	.
51 Agricultural equipment	.	..	..	42	.	432	..	.
52 Non electrical machinery	.	.	..	..	.	1,039	..	.
53 Electrical machinery	.	.	.	.	.	36	.	.
54 Industrial packaging material	.	.	.	.	.	.	.	.
61 Pipes and tubes	.	.	.	.	.	..	.	.
62 Wire and wire products	..	.	.	.	..	x	x	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	..	.	.	.
Total domestic shipments	5	1,923	11,892	11,666	56,040	x	x	..
Total domestic alloy shipments	.	.	.	.	.	21,161	..	.
Exports ² (for final sale)								
81 Exports to the United States	x	1,259	13,230	9,273	3,227	41,662	x	.
82 Exports to other countries (excluding United States)	x	..	66	.	..	19,743	x	.
Total disposition	x	3,182	25,188	20,939	59,267	x	x	..
Total alloy shipments	.	.	.	.	.	44,033	..	.
Producers interchange, for sale	x	.	.	.	.	2,295	203	.
Exports for conversion and return ²	.	.	.	.	.	.	.	.
Imports by producers (including conversion)	60,534	.	.	.	.	.	..	.

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							
November							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	3,600	29,152	145,936	48,711	2,494	43,948	311,898
21 Motor vehicles and parts	2,948	..	95,057	20,214	.	72,963	217,337
22 Railway operating	.	..	.	.	.	.	..
23 Railroad cars and locomotives	.	4,475	59	.	.	.	4,952
24 Shipbuilding	.	.	.	.	.	.	..
31 Steel fabrication	181	3,294	6,456	364	.	957	81,770
32 Metal building systems	.	.	..	.	.	3,123	3,123
33 Contractors' products	55	80	4,877	1,220	.	27,875	35,676
34 Miscellaneous stamping and coating	304	530	4,157	7,031	.	19,710	34,834
41 Natural resources and extractive industries	108	.	1	.	.	2	7,546
51 Agricultural equipment	108	488	78	.	.	.	1,148
52 Non electrical machinery	74	413	.	..	.	.	1,526
53 Electrical machinery	.	.	.	8,003	.	1,610	9,649
54 Industrial packaging material	.	.	1,456	12,166	51	..	13,673
61 Pipes and tubes	70	..	149,742	4,054	.	1,924	155,790
62 Wire and wire products	614	..	..	112	.	8	26,938
63 Containers and closures	.	.	84	241	13,763	.	14,088
64 Appliances and utensils industries	.	.	.	6,533	.	3,476	10,009
70 Miscellaneous industries	201	.	.	.	.	.	201
Total domestic shipments	8,263	38,432	407,903	108,649	16,308	175,596	930,158
Total domestic alloy shipments	164	..	.	..	.	.	21,325
Exports ² (for final sale)							
81 Exports to the United States	8,098	19,939	50,470	14,129	9,081	41,937	304,178
82 Exports to other countries (excluding United States)	.	1,841	4,886	1,697	901	14,374	52,025
Total disposition	16,361	60,212	463,259	124,475	26,290	231,907	1,286,361
Total alloy shipments	164	..	.	..	.	.	44,197
Producers interchange, for sale	.	.	1,648	x	.	.	44,638
Exports for conversion and return ²	.	.	10,192	.	.	.	10,192
Imports by producers (including conversion)	.	2,849	10,345	64,647	.	.	138,375

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	..	28,177	82,409	80,097	42,731	237,668	..	.
21 Motor vehicles and parts	.	.	.	.	.	284,858	2,012	.
22 Railway operating	.	.	.	.	.	..	.	.
23 Railroad cars and locomotives	.	4,900	.	.	.	.	.	.
24 Shipbuilding	..	.	.	.	.	.	.	.
31 Steel fabrication	..	3,611	14,227	41,628	313,971	154,121	..	.
32 Metal building systems	.	.	.	.	.	..	.	.
33 Contractors' products	.	.	..	.	7,492	6,333	2,017	.
34 Miscellaneous stamping and coating	..	..	3,887	3,081	.	19,736	.	.
41 Natural resources and extractive industries	.	.	..	.	22,884	131,400	..	.
51 Agricultural equipment	.	..	..	..	.	4,097	..	.
52 Non electrical machinery	.	..	..	..	.	9,827	..	.
53 Electrical machinery	.	.	.	.	.	..	.	.
54 Industrial packaging material	.	.	.	.	.	.	.	.
61 Pipes and tubes	.	.	.	.	.	..	.	.
62 Wire and wire products	..	.	.	.	..	x	x	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	..	.	.	.
Total domestic shipments	6,906	36,722	100,711	124,893	387,293	x	x	..
Total domestic alloy shipments	.	.	.	.	.	207,699	..	.
Exports ² (for final sale)								
81 Exports to the United States	x	20,208	127,065	103,871	18,630	469,337	x	.
82 Exports to other countries (excluding United States)	x	..	1,235	.	..	205,761	x	.
Total disposition	x	56,974	229,011	228,764	412,937	x	x	..
Total alloy shipments	.	.	.	.	.	485,285	..	.
Producers interchange, for sale	x	.	.	.	.	24,391	..	.
Exports for conversion and return ²	.	.	.	.	.	.	.	.
Imports by producers (including conversion)	581,686	.	.	.	.	.	..	.

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	32,588	290,020	1,525,634	422,421	27,117	424,390	3,193,856
21 Motor vehicles and parts	27,608	..	1,008,732	220,133	.	736,217	2,279,560
22 Railway operating	.	..	.	.	.	.	..
23 Railroad cars and locomotives	.	35,837	2,960	.	.	.	43,697
24 Shipbuilding	.	.	.	.	.	.	..
31 Steel fabrication	1,591	44,705	61,260	3,558	.	9,025	647,754
32 Metal building systems	.	.	..	.	.	36,717	38,788
33 Contractors' products	414	..	41,536	16,053	.	319,647	394,342
34 Miscellaneous stamping and coating	3,200	10,009	65,770	70,862	.	202,791	384,927
41 Natural resources and extractive industries	1,223	.	.	.	.	146	155,793
51 Agricultural equipment	1,749	3,162	3,272	.	.	.	12,392
52 Non electrical machinery	808	5,856	.	..	.	.	16,562
53 Electrical machinery	.	.	.	51,110	.	14,093	65,429
54 Industrial packaging material	.	.	20,717	130,660	..	..	151,828
61 Pipes and tubes	807	..	1,540,663	39,384	.	26,197	1,607,051
62 Wire and wire products	5,727	..	..	x	.	298	306,763
63 Containers and closures	.	..	..	2,286	171,274	.	173,786
64 Appliances and utensils industries	.	.	.	63,741	.	31,755	95,496
70 Miscellaneous industries	2,336	.	.	.	.	.	2,410
Total domestic shipments	78,051	390,403	4,272,620	x	198,827	1,801,291	9,570,645
Total domestic alloy shipments	1,470	..	.	..	.	.	209,169
Exports² (for final sale)							
81 Exports to the United States	x	187,914	585,574	140,909	99,457	458,234	3,006,217
82 Exports to other countries (excluding United States)	.	19,451	53,929	x	16,587	115,290	594,318
Total disposition	x	597,768	4,912,123	1,181,517	314,871	2,374,815	13,171,180
Total alloy shipments	1,470	..	.	..	.	.	486,755
Producers interchange, for sale	.	.	11,736	x	.	.	566,316
Exports for conversion and return ²	.	.	..	.	.	.	..
Imports by producers (including conversion)	.	20,584	78,237	..	.	.	804,636

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

	November		Year-to-date	
	2004	2005	2004	2005
metric tonnes				
Production of pig iron	713,781	650,184	8,092,647	7,577,468

Table 1-4

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

	November		Year-to-date	
	2004	2005	2004	2005
	metric tonnes			
Pig iron including pre-reduced iron	777,366	645,749	8,574,400	7,869,159
Scrap				
Own make	185,864	159,152	2,127,579	1,959,674
Purchased	536,757	543,902	5,808,564	5,771,014
Total, pig iron and scrap products	1,499,987	1,348,803	16,510,535	15,599,847

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			
November				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	579,092	529,172	72,053	x
Basic oxygen furnace	761,957	681,791	7,680	x
Steel, primary forms - Total	1,341,049	1,210,963	79,733	52,875
Included in "Steel primary forms total" above				
Continuous cast steel	1,326,850	1,194,385	76,071	48,790

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	6,078,257	5,895,121	x	x
Basic oxygen furnace	8,839,635	8,202,901	x	x
Steel, primary forms - Total	14,917,892	14,098,022	x	x
Included in "Steel primary forms total" above				
Continuous cast steel	14,787,655	13,936,022	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				
November				
Total, pipe and tubing	267,963	185,403	100,275	285,678
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	4,959	x	x	10,021
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	15,582	24,359	..	24,359
over 16" (40.64 cm) outside diameter	32,781	7,565	22,365	29,930
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	22,181	12,361	12,446	24,807
over 16" (40.64 cm) periphery	52,021	16,615	35,913	52,528
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	6,130	2,449	2,975	5,424
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	1,702	755	1,552	2,307
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	1,605	701	16	717
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	2,850	x	x	3,384
over 16" (40.64 cm) outside diameter	2,330	x	x	1,648
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	39,692	24,925	8,831	33,756
Mechanical tubing, welded, produced from cold rolled	12,943	6,755	2,545	9,300
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	55,416	60,073	9,653	69,726
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	16,244	11,239	1,697	12,936
Other tubular products	1,527	3,129	1,706	4,835

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	2,619,426	1,629,373	971,620	2,600,993
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	69,139	x	x	77,771
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	111,979	132,393	..	132,650
over 16" (40.64 cm) outside diameter	197,453	..	141,999	154,745
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	291,504	157,450	154,575	312,025
over 16" (40.64 cm) periphery	501,795	174,791	325,557	500,348
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	51,522	23,307	36,925	60,232
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	11,626	7,846	9,572	17,418
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	22,978	x	1,835	x
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	35,677	x	x	x
over 16" (40.64 cm) outside diameter	27,565	x	x	x
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	384,644	246,637	110,538	357,175
Mechanical tubing, welded, produced from cold rolled	155,447	81,802	31,518	113,320
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	596,964	540,917	x	x
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	138,120	89,788	x	x
Other tubular products	23,013	x	x	50,274

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					
November					
Barbed wire	x	198	x	x	.
Uncoated steel wire	22,090	20,658	12,186	8,472	.
Galvanized steel wire	12,465	13,085	5,877	7,208	.
Other coated steel wire	x	x	x	81	.
Farm fencing and wire chain link fabric	684	852	x	x	873
Wire mesh, bright or uncoated and galvanized	3,287	4,226	x	x	5,063
Wire rope	3,514	4,152	x	x	4,085
Nails and staples	3,993	x	x	x	x
Wire roofing nails of a length of 25 mm or more, iron or steel	3,907	4,163	1,445	2,718	4,442
Staples of iron or steel	x	x	x	x	x
All other wire products	x	x	x	x	x
Grand total	49,846	49,895	28,847	21,048	.

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	284,910	231,449	131,681	99,768	.
Galvanized steel wire	170,002	143,892	59,076	84,816	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	11,183	10,350	x	x	9,256
Wire mesh, bright or uncoated and galvanized	43,990	x	x	x	x
Wire rope	42,058	38,480	x	x	37,882
Nails and staples	x	x	x	x	x
Wire roofing nails of a length of 25 mm or more, iron or steel	74,902	x	x	x	x
Staples of iron or steel	x	x	x	x	x
All other wire products	x	x	x	x	x
Grand total	673,282	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) .