



Catalogue no. 41-019-XIE

Steel, tubular products and steel wire



April 2005



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Statistics Canada
Manufacturing, Construction and Energy Division

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Published by authority of the Minister responsible for Statistics Canada

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June 2005

Catalogue no. 41-019-XIE, Vol. 1, No. 4

ISSN 1712-980X

Frequency: Monthly

Ottawa

La version française de cette publication est disponible sur demande (n° 41-019-XIF au catalogue).

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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

April 2005

- Shipments of rolled steel products dropped 10% from 1,306,500 metric tonnes in March to 1,175,810 metric tonnes in April. The decline was driven by 9.8 % reduction in shipments to automobile and light truck manufacturers, who experienced shutdowns, and by a 50% decrease in rolled steel shipments exports to non-US markets.
- While production of steel pipe and tubing rose 1% to 244,049 metric tonnes, shipments decreased 16.5% to 196,902 metric tonnes. However, shipments in April were 7.5% higher than the 183,237 metric tonnes shipped during the same month one year ago.
- Total shipments of steel wire and specified wire products were virtually unchanged in April at 55,316 metric tonnes while shipments to export markets rose 6.3% to 23,707 metric tonnes in April, they were more than offset by a 5.7% decline in domestic 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								
April								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	0	1,947	7,530	6,343	4,824	23,890	0	.
21 Motor vehicles and parts	.	.	.	.	.	24,403	195	.
22 Railway operating	.	.	.	.	.	0	.	.
23 Railroad cars and locomotives	.	391	.	.	.	.	.	.
24 Shipbuilding	.	.	.	.	.	.	.	.
31 Steel fabrication	0	129	1,399	2,343	24,434	14,523	0	.
32 Metal building systems	.	.	.	.	.	3	.	.
33 Contractors' products	.	.	.	.	484	662	60	.
34 Miscellaneous stamping and coating	.	0	609	247	.	843	.	.
41 Natural resources and extractive industries	.	.	74	.	847	10,755	.	.
51 Agricultural equipment	.	0	0	9	.	394	.	.
52 Non electrical machinery	.	0	0	0	.	630	0	.
53 Electrical machinery	.	.	.	.	.	0	.	.
54 Industrial packaging material	.	.	.	.	.	.	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	485	.	.	.	0	5,068	20,708	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	.	.	.	.
Total domestic shipments	485	2,467	9,612	8,942	30,589	81,171	20,963	0
Total domestic alloy shipments	.	.	.	.	.	19,232	0	.
Exports² (for final sale)								
81 Exports to the United States	x	1,917	13,187	11,723	330	48,913	46,666	.
82 Exports to other countries (excluding United States)	8,342	0	73	.	.	17,243	1,509	.
Total disposition	x	4,384	22,872	20,665	30,919	147,327	69,138	0
Total alloy shipments	.	.	.	.	.	45,076	0	.
Producers interchange, for sale	x	.	.	.	.	2,841	83	.
Exports for conversion and return ²	.	.	.	.	.	.	.	.
Imports by producers (including conversion)	109,973	.	.	.	.	.	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 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							
April							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	2,849	24,011	133,982	37,586	2,730	42,880	288,572
21 Motor vehicles and parts	2,509	0	88,430	18,986	.	63,409	197,932
22 Railway operating	.	0	.	.	.	.	0
23 Railroad cars and locomotives	.	1,854	0	.	.	.	2,245
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	105	4,898	4,622	339	.	550	53,342
32 Metal building systems	.	.	0	.	.	2,659	2,662
33 Contractors' products	53	0	3,901	1,475	.	29,056	35,691
34 Miscellaneous stamping and coating	335	1,675	6,084	6,414	.	14,837	31,044
41 Natural resources and extractive industries	144	.	1	.	.	4	11,825
51 Agricultural equipment	210	643	269	.	.	.	1,525
52 Non electrical machinery	55	847	.	.	.	.	1,532
53 Electrical machinery	.	.	.	6,803	.	1,164	7,967
54 Industrial packaging material	.	.	2,053	9,259	0	0	11,312
61 Pipes and tubes	103	0	128,304	2,907	.	2,592	133,906
62 Wire and wire products	449	.	0	106	.	0	26,816
63 Containers and closures	.	.	43	182	14,908	.	15,133
64 Appliances and utensils industries	.	.	.	5,941	.	2,934	8,875
70 Miscellaneous industries	331	.	.	.	.	.	331
Total domestic shipments	7,143	33,928	367,689	89,998	17,638	160,085	830,710
Total domestic alloy shipments	127	0	.	0	.	.	19,359
Exports² (for final sale)							
81 Exports to the United States	x	16,592	58,284	10,695	10,954	44,822	298,111
82 Exports to other countries (excluding United States)	.	1,341	5,069	3,801	1,244	8,367	46,989
Total disposition	x	51,861	431,042	104,494	29,836	213,274	1,175,810
Total alloy shipments	127	0	.	0	.	.	45,203
Producers interchange, for sale	.	.	466	x	.	.	59,971
Exports for conversion and return ²	.	.	36	.	.	.	36
Imports by producers (including conversion)	.	132	1,514	13,911	.	.	125,530

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	3	10,174	27,225	28,887	15,270	94,572	73	.
21 Motor vehicles and parts	.	.	.	.	.	98,687	416	.
22 Railway operating	.	.	.	.	.	0	.	.
23 Railroad cars and locomotives	.	1,464	.	.	.	.	.	.
24 Shipbuilding	.	.	.	.	.	.	.	.
31 Steel fabrication	0	1,344	4,210	10,868	74,523	56,908	0	.
32 Metal building systems	.	.	.	.	.	80	.	.
33 Contractors' products	.	.	.	.	1,259	2,811	458	.
34 Miscellaneous stamping and coating	.	0	1,707	962	.	7,330	.	.
41 Natural resources and extractive industries	.	.	74	.	2,899	56,008	.	.
51 Agricultural equipment	.	12	13	32	.	1,780	.	.
52 Non electrical machinery	.	17	9	0	.	3,304	0	.
53 Electrical machinery	.	.	.	.	.	172	.	.
54 Industrial packaging material	.	.	.	.	.	.	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	485	.	.	.	0	20,477	101,915	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	.	.	.	.
Total domestic shipments	488	13,011	33,238	40,749	93,951	342,129	102,862	..
Total domestic alloy shipments	.	.	.	.	.	74,193	0	.
Exports ² (for final sale)								
81 Exports to the United States	x	6,729	44,685	38,879	330	188,271	140,558	.
82 Exports to other countries (excluding United States)	76,127	..	375	.	.	73,136	2,286	.
Total disposition	x	19,784	78,298	79,628	94,281	603,536	245,706	..
Total alloy shipments	.	.	.	.	.	182,038	0	.
Producers interchange, for sale	x	.	.	.	.	9,099	149	.
Exports for conversion and return ²	.	.	.	.	.	.	.	.
Imports by producers (including conversion)	164,266	.	.	.	.	.	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 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	11,048	102,588	562,416	141,746	9,707	165,135	1,168,844
21 Motor vehicles and parts	10,144	0	373,393	81,516	.	265,961	830,117
22 Railway operating	.	0	.	.	.	.	0
23 Railroad cars and locomotives	.	9,890	0	.	.	.	11,354
24 Shipbuilding	.	.	.	.	.	.	.
31 Steel fabrication	461	21,032	18,789	1,378	.	2,217	191,730
32 Metal building systems	.	.	.	.	.	13,821	15,745
33 Contractors' products	164	253	15,213	7,362	.	103,220	130,740
34 Miscellaneous stamping and coating	1,345	3,497	29,740	27,854	.	61,097	133,532
41 Natural resources and extractive industries	576	.	.	.	.	90	59,648
51 Agricultural equipment	850	1,414	1,551	.	.	.	5,652
52 Non electrical machinery	259	1,827	.	.	.	.	5,416
53 Electrical machinery	.	.	.	13,897	.	3,825	17,894
54 Industrial packaging material	.	.	8,835	50,048	231	15	59,129
61 Pipes and tubes	325	0	521,001	12,535	.	10,308	544,169
62 Wire and wire products	2,136	.	0	514	.	119	125,646
63 Containers and closures	.	.	43	928	59,401	.	60,372
64 Appliances and utensils industries	.	.	.	21,307	.	10,064	31,371
70 Miscellaneous industries	1,091	.	.	.	.	.	1,091
Total domestic shipments	28,399	140,501	1,532,826	359,085	69,339	635,872	3,392,450
Total domestic alloy shipments	579	0	.	0	.	.	74,772
Exports² (for final sale)							
81 Exports to the United States	x	67,080	241,463	43,361	38,650	167,882	1,118,682
82 Exports to other countries (excluding United States)	.	4,674	20,857	9,964	5,118	34,027	226,608
Total disposition	x	212,255	1,795,146	412,410	113,107	837,781	4,737,740
Total alloy shipments	579	0	.	0	.	.	182,617
Producers interchange, for sale	.	.	4,445	x	.	.	235,594
Exports for conversion and return ²	.	.	2,095	.	.	.	2,095
Imports by producers (including conversion)	.	3,084	40,103	14,284	.	.	221,737

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

	April		Year-to-date	
	2004	2005	2004	2005
metric tonnes				
Production of pig iron	722,478	724,992	2,919,558	2,835,763

Table 1-4

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

	April		Year-to-date	
	2004	2005	2004	2005
	metric tonnes			
Pig iron including pre-reduced iron	778,656	778,660	3,089,538	3,048,189
Scrap				
Own make	177,968	184,123	779,933	788,419
Purchased	532,403	560,964	2,163,929	2,134,736
Total, pig iron and scrap products	1,489,027	1,523,747	6,033,400	5,971,344

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			
April				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	542,449	571,084	41,348	x
Basic oxygen furnace	792,069	805,074	1,976	4,397
Steel, primary forms - Total	1,334,518	1,376,158	43,324	x
Included in "Steel primary forms total" above				
Continuous cast steel	1,325,865	1,359,206	43,324	x

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	2,206,741	2,260,341	x	x
Basic oxygen furnace	3,224,429	3,116,479	x	30,801
Steel, primary forms - Total	5,431,170	5,376,820	x	x
Included in "Steel primary forms total" above				
Continuous cast steel	5,387,496	5,312,523	x	x

Table 2-1

Steel pipe and tubing — Production and shipments, monthly 2005

	Production	Shipments for sale		Total shipments
		Domestic ¹ shipments	Exports ²	
metric tonnes				
April				
Total, pipe and tubing	244,049	100,944	95,958	196,902
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	3,866	1,832	145	1,977
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	3,930	961	0	961
over 16" (40.64 cm) outside diameter	21,221	6	17,070	17,076
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	29,355	13,378	15,312	28,690
over 16" (40.64 cm) periphery	43,797	15,800	29,248	45,048
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	6,293	1,857	3,418	5,275
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	469	659	767	1,426
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	2,000	1,689	75	1,764
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	4,029	2,689	241	2,930
over 16" (40.64 cm) outside diameter	2,238	858	495	1,353
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	34,049	21,480	9,332	30,812
Mechanical tubing, welded, produced from cold rolled	13,711	7,493	2,828	10,321
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	68,379	26,242	13,605	39,847
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	9,868	3,046	1,652	4,698
Other tubular products	844	2,954	1,770	4,724

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 ¹ shipments	Exports ²	
metric tonnes				
Year-to-date				
Total, pipe and tubing	943,544	537,841	334,499	872,340
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	31,891	26,383	495	26,878
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	49,024	42,181	0	42,181
over 16" (40.64 cm) outside diameter	50,520	117	44,746	44,863
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	111,295	56,831	56,483	113,314
over 16" (40.64 cm) periphery	177,309	60,870	112,202	173,072
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	20,055	7,054	13,233	20,287
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	4,215	2,205	1,924	4,129
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	10,447	x	531	x
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	11,546	10,196	x	x
over 16" (40.64 cm) outside diameter	9,853	x	x	x
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	129,417	83,498	39,953	123,451
Mechanical tubing, welded, produced from cold rolled	59,263	29,026	10,900	39,926
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	225,219	171,954	x	x
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	45,685	27,744	x	x
Other tubular products	7,805	11,427	8,007	19,434

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					
April					
Barbed wire	x	x	824	x	.
Uncoated steel wire	28,610	22,448	12,713	9,735	.
Galvanized steel wire	17,758	14,369	5,641	8,728	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	1,495	1,245	x	x	878
Wire mesh, bright or uncoated and galvanized	3,942	4,736	x	x	4,554
Wire rope	4,136	3,652	x	x	3,871
Nails and staples	x	5,581	x	x	5,897
Wire roofing nails of a length of 25 mm or more, iron or steel	8,823	5,452	x	x	5,768
Staples of iron or steel	x	x	x	0	x
All other wire products	x	x	x	x	x
Grand total	70,156	55,316	31,609	23,707	.

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	110,719	89,197	49,489	39,708	.
Galvanized steel wire	66,925	52,422	21,165	31,257	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	4,375	4,037	x	x	3,141
Wire mesh, bright or uncoated and galvanized	16,227	14,489	x	x	15,955
Wire rope	15,781	13,358	x	x	13,130
Nails and staples	x	22,580	x	x	23,886
Wire roofing nails of a length of 25 mm or more, iron or steel	33,538	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	266,015	211,538	119,832	91,706	.

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) .