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Steel, Tubular Products and Steel Wire



June 2006



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Manufacturing, Construction and Energy Division

Steel, Tubular Products and Steel Wire

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User information

Symbols

The following standard symbols are used in Statistics Canada publications:

- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0^s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- p preliminary
- r revised
- x suppressed to meet the confidentiality requirements of the *Statistics Act*
- E use with caution
- F too unreliable to be published

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Highlights

June 2006

- Total production of primary steel and pig iron increased 2.3% to 1,386,290 metric tonnes in June 2006.
- In June 2006, total monthly disposition of rolled steel products declined 5.7% to 1,301,984 metric tonnes. However, monthly dispositions climbed 12.7% compared with June 2005.
- Total production of steel pipe and tubing fell 7.1% to 267,203 metric tonnes in June 2006. However, production for June was 9.5% higher than reported for the same month one year ago
- Between May 2006 and June 2006 total shipments of steel wire and specified wire products dipped 4.4% to 52,899 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								
June								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	0	1,170	8,832	7,467	2,269	23,548	73	.
21 Motor vehicles and parts	229	.	.	.	.	20,158	190	.
22 Railway operating	.	.	.	.	.	0	.	.
23 Railroad cars and locomotives	.	526	.	.	.	.	.	.
24 Shipbuilding	0	.	.	.	.	.	.	.
31 Steel fabrication	0	1,078	3,364	5,416	30,602	16,250	0	.
32 Metal building systems	.	.	.	.	0	0	.	.
33 Contractors' products	.	.	0	.	93	179	228	.
34 Miscellaneous stamping and coating	0	0	222	334	.	1,273	.	.
41 Natural resources and extractive industries	.	.	40	.	918	13,363	0	.
51 Agricultural equipment	.	6	0	6	.	259	.	.
52 Non electrical machinery	.	0	0	0	.	473	0	.
53 Electrical machinery	.	.	.	.	.	0	.	.
54 Industrial packaging material	.	.	.	.	.	78	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	0	.	.	.	0	4,902	16,600	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	0	.	.	.
Total domestic shipments	229	2,780	12,458	13,223	33,882	80,483	17,091	0
Total domestic alloy shipments	.	.	.	.	.	27,865	0	.
Exports ² (for final sale)								
81 Exports to the United States	x	1,378	16,369	10,236	3,133	47,267	x	.
82 Exports to other countries (excluding United States)	0	161	93	.	0	12,441	527	0
Total disposition	x	4,319	28,920	23,459	37,015	140,191	x	0
Total alloy shipments	.	.	.	.	.	38,887	0	.
Producers interchange, for sale	x	.	0	.	.	2,295	39	.
Exports for conversion and return ²	.	.	.	.	.	0	.	.
Imports by producers (including conversion)	141,633	.	.	.	.	.	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							
June							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	3,056	36,352	186,490	36,534	2,143	47,996	350,126
21 Motor vehicles and parts	2,297	0	94,400	20,250	.	67,395	204,919
22 Railway operating	.	0	.	.	.	.	0
23 Railroad cars and locomotives	.	2,715	517	.	.	.	3,758
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	246	6,207	5,860	0	.	781	69,804
32 Metal building systems	.	.	131	.	.	2,427	2,558
33 Contractors' products	23	167	4,676	2,905	.	39,345	47,616
34 Miscellaneous stamping and coating	228	1,264	8,648	6,320	.	19,087	37,376
41 Natural resources and extractive industries	34	.	0	0	.	0	14,355
51 Agricultural equipment	191	858	9	.	.	.	1,329
52 Non electrical machinery	70	70	.	0	.	.	613
53 Electrical machinery	.	.	.	3,666	.	919	4,585
54 Industrial packaging material	.	.	551	12,034	35	0	12,698
61 Pipes and tubes	10	0	155,915	1,504	.	1,536	158,965
62 Wire and wire products	729	.	0	171	.	44	22,446
63 Containers and closures	.	.	350	49	14,685	.	15,084
64 Appliances and utensils industries	.	.	.	7,558	.	4,038	11,596
70 Miscellaneous industries	244	.	.	.	.	.	244
Total domestic shipments	7,121	47,633	450,397	90,991	16,863	183,568	956,752
Total domestic alloy shipments	160	0	.	0	.	.	28,025
Exports ² (for final sale)							
81 Exports to the United States	8,548	19,232	66,926	22,272	10,413	38,814	313,280
82 Exports to other countries (excluding United States)	.	2,341	3,738	1,470	1,695	9,246	31,712
Total disposition	15,676	69,235	521,060	114,733	28,971	231,628	1,301,984
Total alloy shipments	160	0	.	0	.	.	39,047
Producers interchange, for sale	.	.	2,135	x	.	.	93,915
Exports for conversion and return ²	.	.	4,223	.	.	.	4,223
Imports by producers (including conversion)	.	7,664	29,189	19,718	.	.	180,245

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	..	16,783	52,279	48,336	21,011	141,406	..	.
21 Motor vehicles and parts	..	.	.	.	.	145,923	1,060	.
22 Railway operating	.	.	.	.	.	..	.	.
23 Railroad cars and locomotives	.	2,321	.	.	.	.	.	.
24 Shipbuilding	..	.	.	.	.	.	.	.
31 Steel fabrication	..	5,148	13,462	27,350	189,231	94,866	..	.
32 Metal building systems	.	.	.	.	..	..	.	.
33 Contractors' products	.	.	..	.	..	4,531	1,673	.
34 Miscellaneous stamping and coating	..	..	3,028	2,476	.	8,719	.	.
41 Natural resources and extractive industries	.	.	..	.	6,342	70,831	..	.
51 Agricultural equipment	.	..	..	44	.	2,172	.	.
52 Non electrical machinery	.	..	..	..	.	3,993	..	.
53 Electrical machinery	.	.	.	.	.	..	.	.
54 Industrial packaging material	.	.	.	.	.	..	.	.
61 Pipes and tubes	.	.	.	.	.	..	.	.
62 Wire and wire products	..	.	.	.	..	27,023	110,754	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	..	.	.	.
Total domestic shipments	1,956	24,270	68,954	78,206	217,546	499,690	113,560	..
Total domestic alloy shipments	.	.	.	.	.	152,780	..	.
Exports ² (for final sale)								
81 Exports to the United States	x	13,759	83,773	66,022	21,533	281,690	x	.
82 Exports to other countries (excluding United States)	x	..	639	.	..	113,415	x	..
Total disposition	x	38,436	153,366	144,228	239,079	894,795	x	..
Total alloy shipments	.	.	.	.	.	253,273	..	.
Producers interchange, for sale	x	.	..	.	.	14,902	267	.
Exports for conversion and return ²	.	.	.	.	.	..	.	.
Imports by producers (including conversion)	404,810	.	.	.	.	.	..	.

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	19,260	203,710	1,015,303	214,794	15,812	244,737	1,987,725
21 Motor vehicles and parts	13,677	..	634,007	118,941	.	393,073	1,308,612
22 Railway operating	.	..	.	.	.	.	..
23 Railroad cars and locomotives	.	13,951	2,441	.	.	.	18,713
24 Shipbuilding	.	.	.	.	.	.	..
31 Steel fabrication	1,105	37,571	29,693	..	.	4,918	403,496
32 Metal building systems	.	.	..	.	.	17,115	17,294
33 Contractors' products	265	902	24,797	12,387	.	197,371	242,885
34 Miscellaneous stamping and coating	1,634	8,762	41,625	33,253	.	116,095	215,592
41 Natural resources and extractive industries	543	.	..	..	.	..	77,819
51 Agricultural equipment	1,170	1,638	..	..	.	..	6,887
52 Non electrical machinery	410	2,345	.	..	.	..	6,828
53 Electrical machinery	.	.	.	32,657	.	7,555	40,212
54 Industrial packaging material	.	.	2,701	77,948	398	..	81,125
61 Pipes and tubes	..	..	1,013,081	14,138	.	10,969	1,038,403
62 Wire and wire products	4,404	.	..	921	.	273	143,378
63 Containers and closures	.	.	2,206	1,255	79,260	.	82,721
64 Appliances and utensils industries	.	.	.	37,559	.	19,893	57,452
70 Miscellaneous industries	987	.	.	.	.	.	987
Total domestic shipments	43,563	268,879	2,760,657	544,005	95,470	1,012,020	5,728,809
Total domestic alloy shipments	831	..	.	..	.	.	153,611
Exports² (for final sale)							
81 Exports to the United States	x	106,497	372,269	111,563	62,763	250,487	1,792,432
82 Exports to other countries (excluding United States)	.	9,566	27,827	7,137	9,100	66,933	239,927
Total disposition	x	384,971	3,160,752	662,705	167,333	1,329,440	7,761,408
Total alloy shipments	831	..	.	..	.	.	254,104
Producers interchange, for sale	.	.	16,111	x	.	.	462,900
Exports for conversion and return ²	.	.	19,614	.	.	.	20,156
Imports by producers (including conversion)	.	16,010	148,310	97,598	.	.	648,769

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

	June		Year-to-date	
	2005	2006	2005	2006
metric tonnes				
Production of pig iron	677,887	765,739	4,252,569	4,389,676

Table 1-4
Steel primary forms and pig iron — Pig iron and scrap charged to steel furnaces

	June		Year-to-date	
	2005	2006	2005	2006
	metric tonnes			
Pig iron including pre-reduced iron	690,436	797,720	4,489,314	4,570,951
Scrap				
Own make	179,611	179,634	1,154,188	1,039,737
Purchased	513,064	542,911	3,198,262	3,139,850
Total, pig iron and scrap products	1,383,111	1,520,265	8,841,764	8,750,538

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			
June				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	522,534	548,974	x	86,416
Basic oxygen furnace	732,822	837,316	..	31,086
Steel, primary forms - Total	1,255,356	1,386,290	x	117,502
Included in "Steel primary forms total" above				
Continuous cast steel	1,248,351	1,367,472	x	113,671

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	3,344,550	3,263,111	x	x
Basic oxygen furnace	4,630,442	4,739,291	..	x
Steel, primary forms - Total	7,974,992	8,002,402	x	x
Included in "Steel primary forms total" above				
Continuous cast steel	7,884,605	7,899,122	x	x

Table 2-1
Steel pipe and tubing — Production and shipments, monthly 2006

	Production	Shipments for sale		Total shipments
		Domestic ¹ shipments	Exports ²	
metric tonnes				
June				
Total, pipe and tubing	267,203	139,798	98,337	238,135
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	8,448	5,011	14	5,025
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	7,115	17,223	0	17,223
over 16" (40.64 cm) outside diameter	46,686	3,526	11,569	15,095
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	22,977	10,260	11,691	21,951
over 16" (40.64 cm) periphery	50,595	14,204	34,440	48,644
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	3,336	1,204	2,622	3,826
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	1,184	355	1,334	1,689
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	1,429	1,323	311	1,634
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	1,936	3,065	534	3,599
over 16" (40.64 cm) outside diameter	6,932	2,470	842	3,312
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	38,518	21,353	10,867	32,220
Mechanical tubing, welded, produced from cold rolled	14,028	5,110	3,247	8,357
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	41,684	x	x	62,641
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	21,337	6,702	1,368	8,070
Other tubular products	998	x	x	4,849

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 ¹ shipments	Exports ²	
metric tonnes				
Year-to-date				
Total, pipe and tubing	1,592,200	949,554	588,471	1,538,025
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	76,753	53,416	193	53,609
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	38,551	79,290	..	79,290
over 16" (40.64 cm) outside diameter	235,149	48,539	108,914	157,453
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	138,692	65,609	75,204	140,813
over 16" (40.64 cm) periphery	306,221	92,496	209,800	302,296
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	27,932	8,435	18,646	27,081
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	6,459	2,090	6,216	8,306
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	10,242	7,362	1,540	8,902
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	11,664	x	x	19,646
over 16" (40.64 cm) outside diameter	20,266	x	x	13,780
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	203,408	128,859	57,179	186,038
Mechanical tubing, welded, produced from cold rolled	79,697	35,222	15,988	51,210
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	353,822	x	x	389,239
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	75,096	x	x	71,973
Other tubular products	8,248	x	x	28,389

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					
June					
Barbed wire	215	x	x	x	.
Uncoated steel wire	22,110	19,517	10,680	8,837	.
Galvanized steel wire	13,307	15,059	6,202	8,857	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	865	1,073	x	x	1,128
Wire mesh, bright or uncoated and galvanized	4,985	4,692	x	x	5,162
Wire rope	3,585	3,691	x	x	3,649
Nails and staples	x	x	x	x	5,161
Wire roofing nails of a length of 25 mm or more, iron or steel	5,803	5,443	x	x	x
Staples of iron or steel	x	x	x	0	x
All other wire products	x	x	x	x	2,141
Grand total	54,177	52,899	29,939	22,960	.

1. Totals may not add due to rounding.

2. As reported by respondents to this survey. For total exports see Exports by commodity, catalogue number 65-004-XPB.

Table 3-2
Steel and specified wire products — Factory shipments¹, year-to-date

	Shipments			Production	
	2005	2006			
		Total shipments	Domestic shipments		Exports ²
metric tonnes					
Barbed wire	x	x	x	x	.
Uncoated steel wire	133,083	119,443	66,424	53,019	.
Galvanized steel wire	79,766	83,873	34,950	48,923	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	6,037	6,474	x	x	6,959
Wire mesh, bright or uncoated and galvanized	x	24,236	x	x	25,990
Wire rope	21,065	x	x	x	x
Nails and staples	x	x	x	x	x
Wire roofing nails of a length of 25 mm or more, iron or steel	x	30,027	x	x	x
Staples of iron or steel	x	x	x	x	x
All other wire products	x	x	x	x	x
Grand total	x	304,861	172,182	132,679	.

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) .