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Steel, Tubular Products and Steel Wire



August 2006



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Statistics Canada
Manufacturing, Construction and Energy Division

Steel, Tubular Products and Steel Wire

August 2006

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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

August 2006

- Between July and August 2006, total production of primary steel and pig iron decreased by 19.0% to 1,092,704 metric tonnes.
- In August 2006 the total monthly dispositions of rolled steel products jumped 18.7% to 1,323,833 metric tonnes.
- During the month of August 2006, total production of steel pipe and tubing rose 10.1% to 233,082 metric tonnes led by an increase in the production of mechanical tubing.
- In August 2006, total shipments of steel wire products leapt 27.2% reaching 50,161 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								
August								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	..	2,266	7,256	4,813	1,591	18,892	..	.
21 Motor vehicles and parts	557	.	.	.	.	23,243	189	.
22 Railway operating	.	.	.	.	.	..	.	.
23 Railroad cars and locomotives	.	361	.	.	.	.	.	.
24 Shipbuilding	..	.	.	.	.	.	.	.
31 Steel fabrication	52	497	915	4,955	29,960	15,768	..	.
32 Metal building systems	.	.	.	.	.	..	.	.
33 Contractors' products	.	.	..	.	136	614	38	.
34 Miscellaneous stamping and coating	..	..	83	68	.	2,176	.	.
41 Natural resources and extractive industries	.	.	..	.	862	12,812	..	.
51 Agricultural equipment	.	12	7	11	.	373	.	.
52 Non electrical machinery	.	..	..	..	.	526	..	.
53 Electrical machinery	.	.	.	.	.	..	.	.
54 Industrial packaging material	.	.	.	.	.	..	.	.
61 Pipes and tubes	.	.	.	.	.	..	.	.
62 Wire and wire products	162	.	.	.	..	1,998	18,533	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	..	.	.	.
Total domestic shipments	771	3,136	8,261	9,847	32,549	76,402	18,760	..
Total domestic alloy shipments	.	.	.	.	.	27,553	..	.
Exports ² (for final sale)								
81 Exports to the United States	40,979	2,665	11,540	8,511	1,957	42,392	27,857	.
82 Exports to other countries (excluding United States)	..	..	44	.	..	23,854	16,079	..
Total disposition	41,750	5,801	19,845	18,358	34,506	142,648	62,696	..
Total alloy shipments	.	.	.	.	.	38,579	..	.
Producers interchange, for sale	x	.	..	.	.	2,179	34	.
Exports for conversion and return ²	.	.	.	.	.	..	.	.
Imports by producers (including conversion)	21,915	.	.	.	.	.	..	.

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							
August							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	2,482	35,110	167,213	27,823	2,132	49,552	319,130
21 Motor vehicles and parts	2,431	..	97,233	20,251	.	62,137	206,041
22 Railway operating	.	..	.	.	.	.	..
23 Railroad cars and locomotives	.	1,338	192	.	.	.	1,891
24 Shipbuilding	.	..	.	.	.	.	..
31 Steel fabrication	145	7,432	7,023	..	.	1,261	68,008
32 Metal building systems	.	..	.	.	.	4,760	4,760
33 Contractors' products	100	250	10,932	2,780	.	41,647	56,497
34 Miscellaneous stamping and coating	181	..	8,159	5,230	.	18,951	34,848
41 Natural resources and extractive industries	38	..	..	..	.	..	13,712
51 Agricultural equipment	101	19	61	.	.	.	584
52 Non electrical machinery	55	496	.	..	.	.	1,077
53 Electrical machinery	.	.	.	3,596	.	1,086	4,682
54 Industrial packaging material	.	.	303	12,311	12	..	12,626
61 Pipes and tubes	5	..	177,208	2,662	.	1,486	181,361
62 Wire and wire products	622	.	178	115	.	32	21,640
63 Containers and closures	.	.	592	237	13,982	.	14,811
64 Appliances and utensils industries	.	.	.	5,709	.	3,031	8,740
70 Miscellaneous industries	146	.	.	.	.	.	146
Total domestic shipments	6,306	44,645	469,094	80,714	16,126	183,943	950,554
Total domestic alloy shipments	219	..	.	..	.	.	27,772
Exports² (for final sale)							
81 Exports to the United States	8,121	16,977	74,086	23,936	11,153	38,744	308,918
82 Exports to other countries (excluding United States)	.	1,452	5,354	2,121	1,394	14,063	64,361
Total disposition	14,427	63,074	548,534	106,771	28,673	236,750	1,323,833
Total alloy shipments	219	..	.	..	.	.	38,798
Producers interchange, for sale	.	.	1,104	x	.	.	75,493
Exports for conversion and return ²	.	.	10	.	.	.	10
Imports by producers (including conversion)	.	2,707	21,008	1,442	.	.	47,072

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	..	23,996	66,332	58,841	24,406	177,602	..	.
21 Motor vehicles and parts	..	.	.	.	.	187,812	1,401	.
22 Railway operating	.	.	.	.	.	..	.	.
23 Railroad cars and locomotives	.	2,948	.	.	.	.	.	.
24 Shipbuilding	..	.	.	.	.	.	.	.
31 Steel fabrication	..	5,994	15,476	36,808	246,382	124,467	..	.
32 Metal building systems	.	.	..	.	..	..	.	.
33 Contractors' products	.	.	..	.	..	5,868	2,092	.
34 Miscellaneous stamping and coating	..	..	3,355	2,794	.	11,313	.	.
41 Natural resources and extractive industries	.	.	..	.	7,921	92,676	..	.
51 Agricultural equipment	.	..	..	..	.	3,160	.	.
52 Non electrical machinery	.	..	..	..	.	4,644	..	.
53 Electrical machinery	.	.	.	.	.	..	.	.
54 Industrial packaging material	.	.	.	.	.	..	.	.
61 Pipes and tubes	.	.	.	.	.	..	.	.
62 Wire and wire products	..	.	.	.	..	31,543	144,840	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	..	.	.	.
Total domestic shipments	3,240	32,968	85,355	98,498	279,876	639,311	148,406	..
Total domestic alloy shipments	.	.	.	.	.	201,479	..	.
Exports ² (for final sale)								
81 Exports to the United States	x	19,593	107,468	81,443	24,951	364,609	x	.
82 Exports to other countries (excluding United States)	x	..	2,863	.	..	154,323	x	..
Total disposition	x	52,968	195,686	179,941	304,827	1,158,243	x	..
Total alloy shipments	.	.	.	.	.	324,532	..	.
Producers interchange, for sale	x	.	..	.	.	17,513	404	.
Exports for conversion and return ²	.	.	.	.	.	..	.	.
Imports by producers (including conversion)	506,836	.	.	.	.	.	..	.

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	23,597	269,016	1,333,341	274,435	19,553	334,304	2,605,521
21 Motor vehicles and parts	17,809	..	797,869	150,489	.	491,954	1,650,335
22 Railway operating	.	..	.	.	.	.	..
23 Railroad cars and locomotives	.	17,443	4,623	.	.	.	25,014
24 Shipbuilding	.	..	.	.	.	.	..
31 Steel fabrication	1,424	50,479	43,229	..	.	6,282	530,745
32 Metal building systems	.	..	..	.	.	26,057	26,236
33 Contractors' products	423	1,546	39,989	16,606	.	275,072	342,760
34 Miscellaneous stamping and coating	2,002	..	58,526	43,521	.	156,591	288,337
41 Natural resources and extractive industries	616	..	..	..	.	..	101,316
51 Agricultural equipment	1,359	1,715	..	..	.	..	8,270
52 Non electrical machinery	526	3,128	.	..	.	..	8,378
53 Electrical machinery	.	..	.	38,325	.	9,634	47,959
54 Industrial packaging material	.	..	4,190	101,953	..	..	106,631
61 Pipes and tubes	..	..	1,332,899	18,924	.	13,306	1,365,359
62 Wire and wire products	5,607	..	..	1,154	.	362	184,034
63 Containers and closures	.	..	4,189	1,803	108,124	.	114,116
64 Appliances and utensils industries	.	..	.	48,405	.	25,021	73,426
70 Miscellaneous industries	1,206	..	.	.	.	.	1,206
Total domestic shipments	54,699	353,562	3,621,270	695,767	128,087	1,338,604	7,479,643
Total domestic alloy shipments	1,156	..	.	..	.	.	202,635
Exports² (for final sale)							
81 Exports to the United States	x	140,164	508,597	152,380	83,059	318,088	2,371,922
82 Exports to other countries (excluding United States)	.	12,600	37,834	10,542	12,290	92,056	355,326
Total disposition	x	506,326	4,167,701	858,689	223,436	1,748,748	10,206,891
Total alloy shipments	1,156	..	.	..	.	.	325,688
Producers interchange, for sale	.	..	19,940	x	.	.	616,489
Exports for conversion and return ²	.	..	21,536	.	.	.	22,078
Imports by producers (including conversion)	.	22,725	188,349	116,283	.	.	834,193

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

	August		Year-to-date	
	2005	2006	2005	2006
metric tonnes				
Production of pig iron	633,734	594,332	5,535,677	5,732,344

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

	August		Year-to-date	
	2005	2006	2005	2006
	metric tonnes			
Pig iron including pre-reduced iron	644,308	615,042	5,764,368	5,953,672
Scrap				
Own make	157,912	168,692	1,460,586	1,386,852
Purchased	523,894	428,841	4,146,069	4,100,170
Total, pig iron and scrap products	1,326,114	1,212,575	11,371,023	11,440,694

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			
August				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	531,818	490,784	x	62,403
Basic oxygen furnace	665,445	601,920	..	29,931
Steel, primary forms - Total	1,197,263	1,092,704	x	92,334
Included in "Steel primary forms total" above				
Continuous cast steel	1,190,600	1,084,290	x	89,571

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	4,283,123	4,313,913	x	x
Basic oxygen furnace	5,991,777	6,132,585	..	x
Steel, primary forms - Total	10,274,900	10,446,498	x	x
Included in "Steel primary forms total" above				
Continuous cast steel	10,161,289	10,318,751	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				
August				
Total, pipe and tubing	233,082	138,878	109,156	248,034
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	10,783	8,979	21	9,000
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	8,206	8,748	..	8,748
over 16" (40.64 cm) outside diameter	31,002	1,726	35,621	37,347
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	21,731	9,729	11,807	21,536
over 16" (40.64 cm) periphery	49,453	14,641	32,932	47,573
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	4,943	1,153	2,028	3,181
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	2,208	196	1,289	1,485
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	1,450	450	109	559
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	2,127	2,394	160	2,554
over 16" (40.64 cm) outside diameter	2,318	1,062	536	1,598
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	29,366	22,028	10,670	32,698
Mechanical tubing, welded, produced from cold rolled	16,941	4,799	1,987	6,786
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	43,803	x	x	58,452
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	7,762	10,320	1,661	11,981
Other tubular products	989	x	x	4,536

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	2,037,072	1,232,821	798,545	2,031,366
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	93,292	66,384	233	66,617
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	51,511	94,167	..	94,167
over 16" (40.64 cm) outside diameter	304,542	67,302	180,563	247,865
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	180,064	84,879	97,070	181,949
over 16" (40.64 cm) periphery	400,082	121,729	270,668	392,397
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	35,386	10,670	23,559	34,229
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	8,962	2,436	8,119	10,555
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	13,019	8,438	2,060	10,498
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	14,584	x	x	23,648
over 16" (40.64 cm) outside diameter	25,861	x	x	17,154
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	254,543	165,298	75,505	240,803
Mechanical tubing, welded, produced from cold rolled	105,869	44,458	20,832	65,290
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	442,010	x	x	515,401
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	96,789	x	x	95,828
Other tubular products	10,558	x	x	34,965

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					
August					
Barbed wire	122	187	x	x	.
Uncoated steel wire	18,698	18,413	10,425	7,988	.
Galvanized steel wire	12,314	14,212	5,660	8,552	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	847	887	x	x	953
Wire mesh, bright or uncoated and galvanized	5,018	6,037	x	x	6,550
Wire rope	2,946	3,498	x	x	3,497
Nails and staples	x	x	x	x	5,224
Wire roofing nails of a length of 25 mm or more, iron or steel	5,340	4,402	x	x	x
Staples of iron or steel	x	x	x	..	x
All other wire products	x	x	x	x	2,426
Grand total	48,276	50,161	29,068	21,093	.

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	167,584	151,394	83,915	67,479	.
Galvanized steel wire	103,932	109,698	44,731	64,967	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	7,660	8,209	x	x	8,803
Wire mesh, bright or uncoated and galvanized	x	34,534	x	x	36,964
Wire rope	27,157	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	38,355	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	394,459	222,870	171,589	.

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 and Logging or ASML (Survey ID 2103). This means that estimates from the monthly surveys do not cover the entire universe of steel producers in Canada because the ASML does not survey all businesses. Instead, the ASML uses administrative data to cover the small and medium-sized establishments. These manufacturers are not part of the four monthly surveys.

General methodology

Data are collected each month, directly from survey respondents using a mail-out / mail-back process. Data capture and preliminary editing are performed simultaneously to ensure validity of the data. Businesses from whom no response has been received or whose data may contain errors are followed-up by telephone or fax.

Missing data for the current month are imputed automatically by applying to the previous month's value, the month-to-month change observed for the same period in the previous year, for the unit in question. However, an option exists for analysts to manually override this imputation with a better estimate based on pertinent knowledge about the industry or the business.

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 the direct or residual disclosure of identifiable data.

Direct disclosure could occur when the value in a tabulation cell is composed of a few respondents or when the cell is dominated by a few companies. Residual disclosure could occur when confidential information can be derived indirectly by piecing together information from different sources or data series.

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 tables of this publication.

Data accuracy

The methodology of these surveys has been designed to promote data accuracy. Since data are collected from all Canadian producers of primary steel, steel products, pig iron, steel pipe and tubing and steel wire within the target population, 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, survey results are analyzed to ensure comparability with patterns observed in historical data series and the economic condition of the industry. Information available from other sources such as the Steel Primary Forms Weekly Survey (Survey ID 2131) and the Monthly Survey of Manufacturing or MSM (Survey ID 2101) are also used in the validation process.

Coverage error

There is a degree of under coverage (referred to as coverage error) in the survey results as there is generally a lag between the time a new business comes into existence and when it is included in the universe of these sub-annual surveys. This occurs because the list of businesses surveyed is derived from the latest available survey results for the ASML which are not available until 15 months after the reference period.

This error is kept at a minimum by also using advance information from the ASML frame, feedback from the MSM and other sources such as the Canadian Steel Producer's Association, trade journals and newspaper articles, to identify new survey units.

Non-response error

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

Inaccuracy 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. To reduce such errors the format and wording in the questionnaire are 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 need for accurate data reporting.

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.

Text table 1
Coverage and non-response errors

	Coverage error based on ASML 2004	Non-response error- annual average 2005
	%	
Steel primary forms steel castings and pig iron	0	6
Ingots and rolled steel products	3	0
Steel pipe and tubing	0	0
Steel wire	0	0

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 in Canada during a reference period including intermediate products. The final 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 and Logging, 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: (613) 951-9499; Internet: manufact@statcan.ca).