



Catalogue no. 41-019-X

Steel, Tubular Products and Steel Wire

January 2008



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Statistics Canada
Manufacturing, Construction and Energy Division

Steel, Tubular Products and Steel Wire

January 2008

Published by authority of the Minister responsible for Statistics Canada

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March 2008

Catalogue no. 41-019-X, vol. 4, no. 1

ISSN 1712-980X

Frequency: Monthly

Ottawa

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

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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
- 0s 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

January 2008

- Monthly production of primary steel and pig iron rose 13.3% in January 2008 to 1,422,670 metric tonnes.
- In the same month, the total disposition of shipments of rolled steel products rose 36.4% to 1,461,757 metric tonnes.
- Between December 2007 and January 2008, production of steel pipe and tubing rose 19.2% to 229,980 metric tonnes.
- Total shipments of steel wire and specified wire products rose 54.6% to 51,288 metric tonnes in January 2008.

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 shipments ¹ of rolled steel products, by product, monthly 2008

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								
January								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	0	4,521	10,164	8,938	6,983	25,884	438	.
21 Motor vehicles and parts	143	.	.	.	.	15,945	129	.
22 Railway operating	0	.	.	.	.	0	0	.
23 Railroad cars and locomotives	.	379	.	.	.	.	.	.
24 Shipbuilding	0	.	.	.	.	.	.	.
31 Steel fabrication	0	1,112	1,838	3,856	34,701	14,729	0	.
32 Metal building systems	.	.	.	.	0	0	.	.
33 Contractors' products	.	0	0	.	0	565	165	.
34 Miscellaneous stamping and coating	0	0	416	452	0	828	.	.
41 Natural resources and extractive industries	.	.	18	0	1,287	11,326	0	.
51 Agricultural equipment	.	3	17	24	0	523	.	.
52 Non electrical machinery	.	0	0	0	.	268	0	.
53 Electrical machinery	.	.	.	.	.	0	.	.
54 Industrial packaging material	.	.	.	.	.	0	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	0	.	.	.	0	2,573	28,669	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	0	.	.	0	1,530	.	.
Total domestic shipments	143	6,015	12,453	13,270	42,971	74,171	29,401	0
Total domestic alloy shipments	0	.	.	.	.	22,764	0	.
Exports ² (for final sale)								
81 Exports to the United States	111,184	4,061	15,672	10,643	0	35,275	45,877	.
82 Exports to other countries (excluding United States)	16	82	113	.	0	15,367	1,049	0
Total disposition	111,343	10,158	28,238	23,913	42,971	124,813	76,327	0
Total alloy shipments	0	.	.	.	.	25,181	0	.
Producers interchange, for sale	x	.	0	.	.	1,526	34	.
Exports for conversion and return ²	.	.	.	.	.	0	.	.
Imports by producers (including conversion)	3,057	.	.	.	.	.	0	.

See footnotes at the end of the table.

Table 1-1 – continued

Steel primary forms and pig iron — Disposition of net shipments ¹ of rolled steel products, by product, monthly 2008

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							
January							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	3,192	38,734	210,163	35,380	1,363	51,776	397,536
21 Motor vehicles and parts	1,963	0	63,068	10,954	0	51,030	143,232
22 Railway operating	.	0	.	.	.	.	0
23 Railroad cars and locomotives	.	203	0	.	.	.	582
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	109	3,100	5,198	149	.	492	65,284
32 Metal building systems	.	.	0	.	.	1,999	1,999
33 Contractors' products	37	34	3,022	x	.	x	41,702
34 Miscellaneous stamping and coating	274	68	4,736	4,668	.	18,893	30,335
41 Natural resources and extractive industries	53	0	0	0	.	67	12,751
51 Agricultural equipment	163	0	9	145	.	.	884
52 Non electrical machinery	0	241	147	0	.	0	656
53 Electrical machinery	.	.	.	2,660	.	516	3,176
54 Industrial packaging material	.	.	494	8,983	0	0	9,477
61 Pipes and tubes	0	0	186,819	x	.	x	192,173
62 Wire and wire products	476	.	676	64	.	18	32,476
63 Containers and closures	0	.	1,131	150	10,254	.	11,535
64 Appliances and utensils industries	.	.	.	6,437	.	2,542	8,979
70 Miscellaneous industries	216	.	0	.	.	.	1,746
Total domestic shipments	6,483	42,380	475,463	75,062	11,617	165,094	954,523
Total domestic alloy shipments	231	0	.	0	.	.	22,995
Exports ² (for final sale)							
81 Exports to the United States	1,281	25,215	124,505	34,578	12,883	34,990	456,164
82 Exports to other countries (excluding United States)	.	3,552	16,221	2,521	1,031	11,118	51,070
Total disposition	7,764	71,147	616,189	112,161	25,531	211,202	1,461,757
Total alloy shipments	231	0	.	0	.	.	25,412
Producers interchange, for sale	0	.	2,473	x	.	.	83,436
Exports for conversion and return ²	.	.	0	0	.	0	0
Imports by producers (including conversion)	.	2,084	20,184	125	.	0	25,450

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 shipments ¹ of rolled steel products, by product, year-to-date 2008

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	0	4,521	10,164	8,938	6,983	25,884	438	.
21 Motor vehicles and parts	143	15,945	129	.
22 Railway operating	0	0	0	.
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32 Metal building systems	0	0	.	.
33 Contractors' products	.	0	0	.	0	565	165	.
34 Miscellaneous stamping and coating	0	0	416	452	.	828	.	.
41 Natural resources and extractive industries	.	.	18	0	1,287	11,326	0	.
51 Agricultural equipment	.	3	17	24	0	523	.	.
52 Non electrical machinery	.	0	0	0	.	268	0	.
53 Electrical machinery	.	.	.	.	.	0	.	.
54 Industrial packaging material	.	.	.	.	.	0	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	0	.	.	.	0	2,573	28,669	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	0	.	.	0	1,530	.	.
Total domestic shipments	143	6,015	12,453	13,270	42,971	74,171	29,401	0
Total domestic alloy shipments	0	22,764	0	.
Exports ² (for final sale)								
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Total disposition	111,343	10,158	28,238	23,913	42,971	124,813	76,327	0
Total alloy shipments	0	25,181	0	.
Producers interchange, for sale	x	.	0	.	.	1,526	34	.
Exports for conversion and return ²	.	.	.	.	.	0	.	.
Imports by producers (including conversion)	3,057	.	.	.	.	.	0	.

See footnotes at the end of the table.

Table 1-2 – continued

Steel primary forms and pig iron — Disposition of net shipments ¹ of rolled steel products, by product, year-to-date 2008

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	3,192	38,734	210,163	35,380	1,363	51,776	397,536
21 Motor vehicles and parts	1,963	0	63,068	10,954	0	51,030	143,232
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34 Miscellaneous stamping and coating	274	68	4,736	4,668	.	18,893	30,335
41 Natural resources and extractive industries	53	0	0	0	.	67	12,751
51 Agricultural equipment	163	0	9	145	.	.	884
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61 Pipes and tubes	0	0	186,819	x	.	x	192,173
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Total domestic shipments	6,483	42,380	475,463	75,062	11,617	165,094	954,523
Total domestic alloy shipments	231	0	.	0	.	.	22,995
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82 Exports to other countries (excluding United States)	.	3,552	16,221	2,521	1,031	11,118	51,070
Total disposition	7,764	71,147	616,189	112,161	25,531	211,202	1,461,757
Total alloy shipments	231	0	.	0	.	.	25,412
Producers interchange, for sale	0	.	2,473	x	.	.	83,436
Exports for conversion and return ²	.	.	0	0	.	0	0
Imports by producers (including conversion)	.	2,084	20,184	125	.	0	25,450

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

	January		Year-to-date	
	2007	2008	2007	2008
metric tonnes				
Production of pig iron	753,155	860,637	753,155	860,637

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

	January		Year-to-date	
	2007	2008	2007	2008
	metric tonnes			
Pig iron including pre-reduced iron	777,417	839,274	777,417	839,274
Scrap				
Own make	156,902	151,708	156,902	151,708
Purchased	554,918	575,940	554,918	575,940
Total, pig iron and scrap products	1,489,237	1,566,922	1,489,237	1,566,922

Table 1-5
Steel primary forms and pig iron — Production and shipments of steel, primary forms, monthly

	Production		Shipments	
	2007	2008	2007	2008
	metric tonnes			
January				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	534,005	549,869	49,339	x
Basic oxygen furnace	832,354	872,801	36,146	x
Steel, primary forms - Total	1,366,359	1,422,670	85,485	221,368
Included in "Steel primary forms total" above				
Continuous cast steel	1,353,760	1,408,855	80,066	208,194

Table 1-6
Steel primary forms and pig iron — Production and shipments of steel, primary forms, year-to-date

	Production		Shipments	
	2007	2008	2007	2008
	metric tonnes			
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	534,005	549,869	49,339	x
Basic oxygen furnace	832,354	872,801	36,146	x
Steel, primary forms - Total	1,366,359	1,422,670	85,485	221,368
Included in "Steel primary forms total" above				
Continuous cast steel	1,353,760	1,408,855	80,066	208,194

Table 2-1
Steel pipe and tubing — Production and shipments, monthly 2008

	Production	Shipments for sale		Total shipments
		Domestic shipments ¹	Exports ²	
metric tonnes				
January				
Total, pipe and tubing	229,980	131,629	108,419	240,048
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	3,801	4,095	478	4,573
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	10,063	7,392	0	7,392
over 16" (40.64 cm) outside diameter	53,655	12,061	36,976	49,037
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	20,234	11,755	9,969	21,724
over 16" (40.64 cm) periphery	47,397	15,714	31,993	47,707
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	4,708	2,461	3,892	6,353
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	1,017	x	x	1,182
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	650	282	1,030	1,312
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	619	x	x	410
over 16" (40.64 cm) outside diameter	1,395	252	211	463
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	24,102	15,679	6,583	22,262
Mechanical tubing, welded, produced from cold rolled	12,677	4,343	3,111	7,454
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	43,834	49,532	10,780	60,312
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	5,407	5,428	2,418	7,846
Other tubular products	421	1,521	500	2,021

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 2008

	Production	Shipments for sale		Total shipments
		Domestic shipments ¹	Exports ²	
metric tonnes				
Year-to-date				
Total, pipe and tubing	229,980	131,629	108,419	240,048
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	3,801	4,095	478	4,573
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	10,063	7,392	0	7,392
over 16" (40.64 cm) outside diameter	53,655	12,061	36,976	49,037
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over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	1,017	x	x	1,182
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over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	619	x	x	410
over 16" (40.64 cm) outside diameter	1,395	252	211	463
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	24,102	15,679	6,583	22,262
Mechanical tubing, welded, produced from cold rolled	12,677	4,343	3,111	7,454
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	43,834	49,532	10,780	60,312
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	5,407	5,428	2,418	7,846
Other tubular products	421	1,521	500	2,021

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 shipments 1, monthly

	Shipments				Production
	2007	2008			
		Total shipments	Domestic shipments	Exports ²	
metric tonnes					
January					
Barbed wire	x	x	x	x	.
Uncoated steel wire	17,817	19,552	9,389	10,163	.
Galvanized steel wire	13,205	15,059	5,840	9,219	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	603	x	x	x	2,780
Wire mesh, bright or uncoated and galvanized	3,426	4,086	x	x	4,335
Wire rope	3,629	3,543	x	x	3,163
Nails and staples	x	x	x	x	x
Wire roofing nails of a length of 25 mm or more, iron or steel	4,079	1,575	312	1,263	1,189
Staples of iron or steel	x	x	x	x	x
All other wire products	1,214	x	x	1	599
Grand total	44,471	51,288	26,134	25,154	.

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 shipments 1, year-to-date

	Shipments				Production
	2007	2008			
		Total shipments	Domestic shipments	Exports ²	
	metric tonnes				
Barbed wire	x	x	x	x	.
Uncoated steel wire	17,817	19,552	9,389	10,163	.
Galvanized steel wire	13,205	15,059	5,840	9,219	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	603	x	x	x	2,780
Wire mesh, bright or uncoated and galvanized	3,426	4,086	x	x	4,335
Wire rope	3,629	3,543	x	x	3,163
Nails and staples	x	x	x	x	x
Wire roofing nails of a length of 25 mm or more, iron or steel	4,079	1,575	312	1,263	1,189
Staples of iron or steel	x	x	x	x	x
All other wire products	1,214	x	x	1	599
Grand total	44,471	51,288	26,134	25,154	.

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
	percent	
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).