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Steel, Tubular Products and Steel Wire

January 2007



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Statistics Canada
Manufacturing, Construction and Energy Division

Steel, Tubular Products and Steel Wire

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Note of appreciation

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User information

Symbols

The following standard symbols are used in Statistics Canada publications:

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

Table of contents

Highlights	4
Related products	5
Statistical tables	
1 Steel primary forms and pig iron	7
1-1 Disposition of net shipments of rolled steel products, by product, monthly 2007	7
1-2 Disposition of net shipments of rolled steel products, by product, year-to-date 2007	9
1-3 Production of pig iron	10
1-4 Pig iron and scrap charged to steel furnaces	11
1-5 Production and shipments of steel, primary forms, monthly	11
1-6 Production and shipments of steel, primary forms, year-to-date	11
2 Steel pipe and tubing	12
2-1 Production and shipments, monthly 2007	12
2-2 Production and shipments, year-to-date 2007	13
3 Steel and specified wire products	14
3-1 Factory shipments, monthly	14
3-2 Factory shipments, year-to-date	14
Data quality, concepts and methodology	
Concepts, methodology and data quality	15
Definitions	17

Highlights

January 2007

- Production and shipments of steel and steel products returned to normal levels after planned slowdowns and market conditions surrounding the holiday season in December.
- Compared to December 2006, production of primary steel and pig iron increased 18.3% in January 2007 to 1,366,359 metric tonnes and 5.6% compared to January 2006.
- Likewise total dispositions of shipments of rolled steel products jumped 36% to 1,229,467 metric tonnes in January 2007 from December 2006.
- Between December 2006 and January 2007, steel pipe and tubing production surged 31.6% to 232,461 metric tonnes.
- Total shipments of steel wire and specified wire products leapt 44.9% to 44,471 metric tonnes in January 2007 but were down 3.7 % compared to 46,168 metric tonnes in January 2006.

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 2007

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	10	1,193	14,576	7,861	2,070	23,141	..	.
21 Motor vehicles and parts	238	.	.	.	.	18,052	222	.
22 Railway operating	.	.	.	.	.	..	.	.
23 Railroad cars and locomotives	.	490	.	.	.	.	.	.
24 Shipbuilding	..	.	.	.	.	.	.	.
31 Steel fabrication	..	824	2,626	3,583	22,648	16,305	..	.
32 Metal building systems	.	.	.	.	..	..	.	.
33 Contractors' products	.	.	..	.	-7	477	175	.
34 Miscellaneous stamping and coating	..	..	1,126	404	.	1,985	.	.
41 Natural resources and extractive industries	.	.	..	.	1,528	12,501	..	.
51 Agricultural equipment	.	..	..	50	.	146	.	.
52 Non electrical machinery	.	18	..	..	.	439	..	.
53 Electrical machinery	.	.	.	.	.	..	.	.
54 Industrial packaging material	.	.	.	.	.	..	.	.
61 Pipes and tubes	.	.	.	.	.	..	.	.
62 Wire and wire products	43	.	.	.	..	3,291	18,341	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	.	.	.	..	.	.	.
Total domestic shipments	291	2,525	18,328	11,898	26,239	76,337	18,738	..
Total domestic alloy shipments	.	.	.	.	.	24,443	..	.
Exports ² (for final sale)								
81 Exports to the United States	x	1,682	17,058	9,777	481	40,475	34,183	.
82 Exports to other countries (excluding United States)	x	..	220	.	..	16,942	280	..
Total disposition	49,296	4,207	35,606	21,675	26,720	133,754	53,201	..
Total alloy shipments	.	.	.	.	.	40,452	..	.
Producers interchange, for sale	x	.	..	.	.	2,269	71	.
Exports for conversion and return ²	.	.	.	.	.	..	.	.
Imports by producers (including conversion)	..	.	.	.	.	.	..	.

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 2007

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	3,165	33,172	175,446	47,149	3,705	42,641	354,129
21 Motor vehicles and parts	2,192	..	75,934	13,623	.	35,629	145,890
22 Railway operating	.	..	.	.	.	.	..
23 Railroad cars and locomotives	.	1,809	..	.	.	.	2,299
24 Shipbuilding	.	..	..	.	.	.	..
31 Steel fabrication	93	5,434	3,309	..	.	409	55,231
32 Metal building systems	.	..	..	.	.	2,271	2,271
33 Contractors' products	131	101	4,530	2,540	.	23,198	31,145
34 Miscellaneous stamping and coating	270	..	7,888	4,004	.	15,307	30,984
41 Natural resources and extractive industries	41	6	..	..	.	1	14,077
51 Agricultural equipment	47	182	594	75	.	.	1,094
52 Non electrical machinery	47	82	..	..	.	.	586
53 Electrical machinery	.	..	.	6,196	.	1,803	7,999
54 Industrial packaging material	.	..	2,489	11,360	..	..	13,849
61 Pipes and tubes	..	..	166,215	2,332	.	1,518	170,065
62 Wire and wire products	598	..	440	161	.	17	22,891
63 Containers and closures	.	..	365	83	4,652	.	5,100
64 Appliances and utensils industries	.	..	.	6,514	.	2,977	9,491
70 Miscellaneous industries	245	..	.	.	.	.	245
Total domestic shipments	6,829	40,786	437,210	94,037	8,357	125,771	867,346
Total domestic alloy shipments	130	..	.	..	.	.	24,573
Exports² (for final sale)							
81 Exports to the United States	8,550	18,950	90,669	x	10,411	32,478	320,714
82 Exports to other countries (excluding United States)	.	852	4,067	x	1,355	10,312	41,407
Total disposition	15,379	60,588	531,946	108,411	20,123	168,561	1,229,467
Total alloy shipments	130	..	.	..	.	.	40,582
Producers interchange, for sale	.	..	1,720	x	.	.	58,675
Exports for conversion and return ²	.	..	..	..	.	..	..
Imports by producers (including conversion)	.	571	2,162	1,344	.	..	4,077

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 2007

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	10	1,193	14,576	7,861	2,070	23,141	..	.
21 Motor vehicles and parts	238	18,052	222	.
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32 Metal building systems
33 Contractors' products	-7	477	175	.
34 Miscellaneous stamping and coating	1,126	404	.	1,985	.	.
41 Natural resources and extractive industries	1,528	12,501	..	.
51 Agricultural equipment	50	.	146	.	.
52 Non electrical machinery	.	18	439	..	.
53 Electrical machinery
54 Industrial packaging material
61 Pipes and tubes
62 Wire and wire products	43	3,291	18,341	.
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Total disposition	49,296	4,207	35,606	21,675	26,720	133,754	53,201	..
Total alloy shipments	40,452	..	.
Producers interchange, for sale	x	2,269	71	.
Exports for conversion and return ²
Imports by producers (including conversion)

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 2007

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	3,165	33,172	175,446	47,149	3,705	42,641	354,129
21 Motor vehicles and parts	2,192	..	75,934	13,623	.	35,629	145,890
22 Railway operating	.	..	.	.	.	.	..
23 Railroad cars and locomotives	.	1,809	..	.	.	.	2,299
24 Shipbuilding	.	..	.	.	.	.	..
31 Steel fabrication	93	5,434	3,309	..	.	409	55,231
32 Metal building systems	.	..	..	.	.	2,271	2,271
33 Contractors' products	131	101	4,530	2,540	.	23,198	31,145
34 Miscellaneous stamping and coating	270	..	7,888	4,004	.	15,307	30,984
41 Natural resources and extractive industries	41	6	..	..	.	1	14,077
51 Agricultural equipment	47	182	594	75	.	.	1,094
52 Non electrical machinery	47	82	..	..	.	.	586
53 Electrical machinery	.	.	.	6,196	.	1,803	7,999
54 Industrial packaging material	.	.	2,489	11,360	..	..	13,849
61 Pipes and tubes	..	..	166,215	2,332	.	1,518	170,065
62 Wire and wire products	598	.	440	161	.	17	22,891
63 Containers and closures	.	.	365	83	4,652	.	5,100
64 Appliances and utensils industries	.	.	.	6,514	.	2,977	9,491
70 Miscellaneous industries	245	.	.	.	.	.	245
Total domestic shipments	6,829	40,786	437,210	94,037	8,357	125,771	867,346
Total domestic alloy shipments	130	24,573
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81 Exports to the United States	8,550	18,950	90,669	x	10,411	32,478	320,714
82 Exports to other countries (excluding United States)	.	852	4,067	x	1,355	10,312	41,407
Total disposition	15,379	60,588	531,946	108,411	20,123	168,561	1,229,467
Total alloy shipments	130	..	.	..	.	.	40,582
Producers interchange, for sale	.	.	1,720	x	.	.	58,675
Exports for conversion and return ²	.	.	..	..	.	..	..
Imports by producers (including conversion)	.	571	2,162	1,344	.	..	4,077

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	
	2006	2007	2006	2007
	metric tonnes			
Production of pig iron	706,407	753,155	706,407	753,155

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

	January		Year-to-date	
	2006	2007	2006	2007
	metric tonnes			
Pig iron including pre-reduced iron	725,521	777,417	725,521	777,417
Scrap				
Own make	182,973	156,902	182,973	156,902
Purchased	515,209	554,918	515,209	554,918
Total, pig iron and scrap products	1,423,703	1,489,237	1,423,703	1,489,237

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

	Production		Shipments	
	2006	2007	2006	2007
	metric tonnes			
January				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	532,931	534,005	x	49,339
Basic oxygen furnace	761,193	832,354	20,243	36,146
Steel, primary forms - Total	1,294,124	1,366,359	x	85,485
Included in "Steel primary forms total" above				
Continuous cast steel	1,277,784	1,353,760	x	80,066

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

	Production		Shipments	
	2006	2007	2006	2007
	metric tonnes			
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	532,931	534,005	x	49,339
Basic oxygen furnace	761,193	832,354	20,243	36,146
Steel, primary forms - Total	1,294,124	1,366,359	x	85,485
Included in "Steel primary forms total" above				
Continuous cast steel	1,277,784	1,353,760	x	80,066

Table 2-1
Steel pipe and tubing — Production and shipments, monthly 2007

	Production	Shipments for sale		Total shipments
		Domestic ¹ shipments	Exports ²	
metric tonnes				
January				
Total, pipe and tubing	232,461	163,654	78,373	242,027
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	8,129	2,865	22	2,887
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	3,133	8,916	1,186	10,102
over 16" (40.64 cm) outside diameter	50,674	28,163	15,610	43,773
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	16,687	9,454	8,723	18,177
over 16" (40.64 cm) periphery	39,509	12,412	27,138	39,550
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	5,331	2,225	3,000	5,225
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	1,742	739	1,380	2,119
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	827	267	63	330
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	1,167	1,927	63	1,990
over 16" (40.64 cm) outside diameter	3,146	1,233	522	1,755
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	25,412	17,705	7,721	25,426
Mechanical tubing, welded, produced from cold rolled	13,914	6,354	3,545	9,899
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	53,847	x	x	67,495
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	8,396	9,400	743	10,143
Other tubular products	547	x	x	3,156

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 2007

	Production	Shipments for sale		Total shipments
		Domestic ¹ shipments	Exports ²	
metric tonnes				
Year-to-date				
Total, pipe and tubing	232,461	163,654	78,373	242,027
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	8,129	2,865	22	2,887
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over 16" (40.64 cm) outside diameter	50,674	28,163	15,610	43,773
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over 16" (40.64 cm) outside diameter	3,146	1,233	522	1,755
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	25,412	17,705	7,721	25,426
Mechanical tubing, welded, produced from cold rolled	13,914	6,354	3,545	9,899
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	53,847	x	x	67,495
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	8,396	9,400	743	10,143
Other tubular products	547	x	x	3,156

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
	2006	2007			
		Total shipments	Domestic shipments	Exports ²	
metric tonnes					
January					
Barbed wire	x	x	x	x	.
Uncoated steel wire	20,062	17,817	10,034	7,783	.
Galvanized steel wire	12,622	13,205	5,554	7,651	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	841	603	x	x	605
Wire mesh, bright or uncoated and galvanized	2,989	3,426	x	x	3,694
Wire rope	x	3,629	x	x	3,335
Nails and staples	x	x	x	x	x
Wire roofing nails of a length of 25 mm or more, iron or steel	4,882	4,079	x	x	x
Staples of iron or steel	x	x	x	x	x
All other wire products	971	1,214	x	x	1,873
Grand total	46,168	44,471	24,565	19,906	.

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
	2006	2007			
		Total shipments	Domestic shipments	Exports ²	
metric tonnes					
Barbed wire	x	x	x	x	.
Uncoated steel wire	20,062	17,817	10,034	7,783	.
Galvanized steel wire	12,622	13,205	5,554	7,651	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	841	603	x	x	605
Wire mesh, bright or uncoated and galvanized	2,989	3,426	x	x	3,694
Wire rope	x	3,629	x	x	3,335
Nails and staples	x	x	x	x	x
Wire roofing nails of a length of 25 mm or more, iron or steel	4,882	4,079	x	x	x
Staples of iron or steel	x	x	x	x	x
All other wire products	971	1,214	x	x	1,873
Grand total	46,168	44,471	24,565	19,906	.

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
	percentage	
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).