

Catalogue no. 41-019-X

Steel, Tubular Products and Steel Wire

November 2009



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Published by authority of the Minister responsible for Statistics Canada

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January 2010

Catalogue no. 41-019-X, vol. 5, no. 11

ISSN 1712-980X

Frequency: Monthly

Ottawa

Cette publication est également disponible en français.

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
- 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

November 2009

- Monthly production of primary steel and pig iron increased 19.9 % in November 2009 to 1,039,707 metric tonnes.
- In the same month, the total disposition of shipments of rolled steel products decreased 1.7 % to 728,757 metric tonnes.
- Between October 2009 and November 2009, production of steel pipe and tubing increased 3.7 % to 145,235 metric tonnes.
- Total shipments of steel wire and specified wire products decreased 11.3 % to 30,649 metric tonnes in November 2009.

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 2009

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								
November								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	0	1,089	4,120	3,054	5,380	5,322	0	.
21 Motor vehicles and parts	109	0	55	6	.	4,487	0	.
22 Railway operating	0	.	.	.	0	0	0	.
23 Railroad cars and locomotives	.	181	.	.	.	.	.	.
24 Shipbuilding	0	.	.	.	.	.	.	.
31 Steel fabrication	0	192	1,063	2,822	49,490	x	0	.
32 Metal building systems	.	0	0	.	110	0	.	.
33 Contractors' products	.	0	0	.	334	152	184	.
34 Miscellaneous stamping and coating	0	0	218	60	.	182	.	.
41 Natural resources and extractive industries	.	138	0	0	1,013	10,720	0	.
51 Agricultural equipment	.	0	0	0	0	307	.	0
52 Non electrical machinery	.	0	1,482	0	.	7,178	0	.
53 Electrical machinery	.	.	.	.	.	0	.	.
54 Industrial packaging material	.	.	.	.	.	0	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	0	.	.	.	0	x	x	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	0	0	.	.	0	0	.	.
Total domestic shipments	109	1,600	6,938	5,942	56,327	29,077	x	0
Total domestic alloy shipments	0	.	.	.	.	5,024	x	.
81 Exports to the United States	x	336	1,936	1,970	110	14,652	x	.
82 Exports to other countries (excluding United States)	12,271	0	0	0	0	15,336	x	0
Total disposition	x	1,936	8,874	7,912	56,437	59,065	x	0
Total alloy shipments	0	.	.	.	.	7,936	0	.
Producers interchange, for sale	x	.	0	.	.	404	122	.
Exports for conversion and return	.	.	.	.	.	0	.	.
Imports by producers (including conversion)	0	.	.	.	.	.	0	.

See notes 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 2009

SDC No.	Cold finished bars	Plates ²	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							
November							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	1,515	12,357	131,785	16,048	898	25,539	207,107
21 Motor vehicles and parts	1,196	0	21,543	6,622	0	30,517	64,535
22 Railway operating	.	0	.	.	.	.	0
23 Railroad cars and locomotives	.	190	0	.	.	.	371
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	x	1,592	3,558	0	.	2,965	62,192
32 Metal building systems	.	.	0	.	.	1,955	2,065
33 Contractors' products	x	0	6,134	x	.	17,471	26,312
34 Miscellaneous stamping and coating	x	0	2,237	x	.	13,067	x
41 Natural resources and extractive industries	60	0	0	0	.	1	11,932
51 Agricultural equipment	27	76	0	0	.	.	410
52 Non electrical machinery	0	148	135	0	.	0	8,943
53 Electrical machinery	.	.	71	1,145	.	1,533	2,749
54 Industrial packaging material	.	.	0	2,752	0	0	2,752
61 Pipes and tubes	0	0	72,359	601	.	1,563	74,523
62 Wire and wire products	x	.	194	34	.	99	x
63 Containers and closures	0	.	0	540	4,119	.	4,659
64 Appliances and utensils industries	.	.	.	3,508	.	2,058	5,566
70 Miscellaneous industries	36	0	0	.	.	.	36
Total domestic shipments	x	14,363	238,016	36,892	5,017	96,768	514,954
Total domestic alloy shipments	286	0	.	0	.	.	x
81 Exports to the United States	1,034	4,513	x	13,054	9,794	35,267	165,575
82 Exports to other countries (excluding United States)	0	288	x	1,001	850	7,240	48,228
Total disposition	x	19,164	304,109	50,947	15,661	139,275	728,757
Total alloy shipments	286	0	.	0	.	.	8,222
Producers interchange, for sale	0	.	0	0	.	0	x
Exports for conversion and return	.	.	0	0	.	0	0
Imports by producers (including conversion)	.	26	0	2,386	.	0	2,412

1. Compiled by principal consuming industries, according to distribution of shipments reported by iron and steel mills.

2. 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 2009

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	16,125	46,027	41,930	43,969	x	720	.
21 Motor vehicles and parts	991	17	744	96	.	46,615	194	.
22 Railway operating	..	.	.	.	..	60	..	.
23 Railroad cars and locomotives	.	1,001	.	.	.	.	.	.
24 Shipbuilding	..	.	.	.	.	.	.	.
31 Steel fabrication	..	3,839	12,532	27,176	446,632	x	..	.
32 Metal building systems	.	4	21	.	466	210	.	.
33 Contractors' products	.	..	..	.	4,373	x	x	.
34 Miscellaneous stamping and coating	..	..	1,661	1,200	.	x	.	.
41 Natural resources and extractive industries	.	954	90	..	8,122	x	..	.
51 Agricultural equipment	.	..	..	41	..	2,533	.	65
52 Non electrical machinery	.	..	19,617	30	.	60,593	..	.
53 Electrical machinery	.	.	.	.	.	..	.	.
54 Industrial packaging material	.	.	.	.	.	..	.	.
61 Pipes and tubes	.	.	.	.	.	..	.	.
62 Wire and wire products	12,701	.	.	.	339	x	x	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	2,451	..	.	.	..	862	.	.
Total domestic shipments	16,159	21,940	80,692	70,473	503,901	336,320	x	65
Total domestic alloy shipments	..	.	.	.	.	42,323	x	.
81 Exports to the United States	x	7,931	23,938	31,495	1,195	x	x	.
82 Exports to other countries (excluding United States)	x	..	534	21	..	x	x	..
Total disposition	x	29,871	105,164	101,989	505,096	600,868	x	65
Total alloy shipments	..	.	.	.	.	64,730	..	.
Producers interchange, for sale	x	.	..	.	.	x	x	.
Exports for conversion and return	.	.	.	.	.	..	.	.
Imports by producers (including conversion)	x	.	.	.	.	.	..	.

See notes 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 2009

SDC No.	Cold finished bars	Plates ²	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	x	147,284	1,123,068	210,250	15,038	288,869	2,034,901
21 Motor vehicles and parts	10,184	..	203,221	49,634	..	250,898	562,594
22 Railway operating	..	..	..	..	..	..	60
23 Railroad cars and locomotives	..	797	..	..	..	..	1,798
24 Shipbuilding	..	..	..	..	..	..	..
31 Steel fabrication	x	39,820	42,107	86	..	29,442	608,187
32 Metal building systems	..	..	584	..	..	21,388	22,673
33 Contractors' products	x	244	49,998	x	..	218,749	296,679
34 Miscellaneous stamping and coating	x	..	x	x	..	x	x
41 Natural resources and extractive industries	347	26	23	..	..	5	x
51 Agricultural equipment	547	1,636	..	..	..	..	4,822
52 Non electrical machinery	..	899	1,648	..	..	..	82,787
53 Electrical machinery	..	..	291	9,840	..	13,363	23,494
54 Industrial packaging material	..	..	3,381	33,733	..	..	37,114
61 Pipes and tubes	59	..	723,984	10,514	..	15,978	750,535
62 Wire and wire products	x	..	x	x	..	x	x
63 Containers and closures	..	..	49	1,667	52,383	..	54,099
64 Appliances and utensils industries	..	..	..	41,857	..	22,337	64,194
70 Miscellaneous industries	693	34	..	..	..	..	4,040
Total domestic shipments	x	190,740	2,169,419	414,492	67,421	1,032,328	5,099,556
Total domestic alloy shipments	2,321	..	..	..	..	..	x
Exports ² (for final sale)							
81 Exports to the United States	x	58,784	x	136,907	140,544	276,902	1,823,327
82 Exports to other countries (excluding United States)	..	6,810	x	18,865	x	79,558	739,179
Total disposition	x	256,334	x	570,264	x	1,388,788	7,662,062
Total alloy shipments	2,417	..	..	..	..	..	67,147
Producers interchange, for sale	..	..	x	..	..	..	x
Exports for conversion and return ²	..	..	..	..	..	..	..
Imports by producers (including conversion)	..	466	2,733	17,205	..	..	x

1. Compiled by principal consuming industries, according to distribution of shipments reported by iron and steel mills.

2. 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

	November		Year-to-date	
	2008	2009	2008	2009
metric tonnes				
Production of pig iron	352,116	581,520	8,358,914	x

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

	November		Year-to-date	
	2008	2009	2008	2009
	metric tonnes			
Pig iron including pre-reduced iron	320,815	602,888	8,124,546	x
Scrap				
Own make	96,328	111,906	1,403,630	1,122,832
Purchased	288,245	446,571	6,028,123	3,520,110
Total, pig iron and scrap products	705,388	1,161,365	15,556,299	9,384,681

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

	Production		Shipments	
	2008	2009	2008	2009
	metric tonnes			
November				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	289,806	459,207	x	x
Basic oxygen furnace	326,741	580,500	x	x
Steel, primary forms - Total	616,547	1,039,707	83,223	269,764
Included in "Steel primary forms total" above				
Continuous cast steel	603,767	1,029,504	73,986	260,297

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

	Production		Shipments	
	2008	2009	2008	2009
	metric tonnes			
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	5,688,725	x	x	x
Basic oxygen furnace	8,544,517	x	x	x
Steel, primary forms - Total	14,233,242	8,325,905	2,445,398	x
Included in "Steel primary forms total" above				
Continuous cast steel	14,097,977	8,089,374	2,298,167	x

Table 2-1
Steel pipe and tubing — Production and shipments, monthly 2009

	Production	Shipments for sale		Total shipments
		Domestic shipments ¹	Exports	
	metric tonnes			
November				
Total, pipe and tubing	145,235	80,604	46,711	127,315
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	265	0	265
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	14,556	x	x	x
over 16" (40.64 cm) outside diameter	27,573	14,412	0	14,412
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	10,667	11,284	6,084	17,368
over 16" (40.64 cm) periphery	32,999	11,604	19,964	31,568
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	237	314	283	597
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	256	540	82	622
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	12	x	x
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	74	72	23	95
over 16" (40.64 cm) outside diameter	1,863	66	9	75
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	11,499	x	x	12,524
Mechanical tubing, welded, produced from cold rolled	9,166	4,605	2,128	6,733
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	32,009	23,583	10,478	34,061
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	2,906	2,595	1,699	4,294
Other tubular products	x	1,037	894	1,931

1. Including for own use by the steel pipe and tubing industries.

Table 2-2
Steel pipe and tubing — Production and shipments, year-to-date 2009

	Production	Shipments for sale		
		Domestic shipments ¹	Exports	Total shipments
		metric tonnes		
Year-to-date				
Total, pipe and tubing	1,470,415	808,689	595,576	1,404,265
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	x	..	x
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	96,734	x	x	x
over 16" (40.64 cm) outside diameter	320,781	x	x	x
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	126,488	137,805	69,652	207,457
over 16" (40.64 cm) periphery	344,753	106,382	201,225	308,607
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	28,167	13,166	17,440	30,606
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	14,538	12,701	2,777	15,478
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	x	x	x
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	x	x	x	3,258
over 16" (40.64 cm) outside diameter	15,512	x	x	1,303
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	105,585	x	x	126,036
Mechanical tubing, welded, produced from cold rolled	80,304	x	x	64,092
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	256,371	195,251	55,816	251,067
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	29,793	24,075	..	29,926
Other tubular products	x	10,771	8,303	19,074

1. Including for own use by the steel pipe and tubing industries.

Table 3-1
Steel and specified wire products — Factory shipments¹, monthly

	Shipments				Production
	2008	2009			
		Total shipments	Domestic shipments	Exports	
metric tonnes					
November					
Barbed wire	x	x	x	x	.
Uncoated steel wire	10,902	14,715	7,791	6,924	.
Galvanized steel wire	9,449	5,958	x	x	.
Other coated steel wire	x	x	x	0	.
Farm fencing and wire chain link fabric	2,542	623	x	x	645
Wire mesh, bright or uncoated and galvanized	3,014	3,170	x	x	3,390
Wire rope	4,498	x	x	x	x
Nails and staples	x	1,859	959	900	x
Wire roofing nails of a length of 25 mm or more, iron or steel	676	x	x	x	1,373
Staples of iron or steel	x	x	x	x	x
All other wire products	x	x	x	1	x
Grand total	35,869	30,649	17,390	13,259	.

1. Totals may not add due to rounding.

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

	Shipments				Production
	2008	2009			
		Total shipments	Domestic shipments	Exports	
	metric tonnes				
Barbed wire	x	x	x	x	.
Uncoated steel wire	183,659	151,693	83,980	67,713	.
Galvanized steel wire	141,348	87,706	x	x	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	x	x	x	x	x
Wire mesh, bright or uncoated and galvanized	56,581	38,132	x	x	37,831
Wire rope	x	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	17,947	x	x	x	x
Staples of iron or steel	x	x	x	x	x
All other wire products	x	x	x	..	x
Grand total	536,021	395,496	236,757	158,739	.

1. Totals may not add due to rounding.

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.

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 301-0006. Specific enquiries should be directed to: The Dissemination and Frame Services section, Manufacturing and Energy Division, Statistics Canada, Ottawa, Ontario, K1A 0T6 (Telephone: 1-866-873-8789 or 613-951-9497; Fax line: 613-951-3877; Internet: manufact@statcan.gc.ca).