

Catalogue no. 41-019-X

Steel, Tubular Products and Steel Wire

July 2012



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Published by authority of the Minister responsible for Statistics Canada

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September 2012

Catalogue no. 41-019-X, vol. 8, no. 7

ISSN 1712-980X

Frequency: Monthly

Ottawa

Cette publication est également disponible en français.

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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
- * significantly different from reference category ($p < 0.05$)

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Highlights

July 2012

- Monthly production of primary steel and pig iron increased 12.2% in July 2012 to 1,133,478 metric tonnes.
- In the same month, the total disposition of shipments of rolled steel products decreased 1.8% to 964,125 metric tonnes.
- Between June 2012 and July 2012, production of steel pipe and tubing decreased 16.9% to 180,730 metric tonnes.
- Total shipments of steel wire and specified wire products decreased 15.9% to 33,252 metric tonnes in July 2012.

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 of rolled steel products, by product and industry monthly 2012

	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							
July								
Domestic shipments								
Steel service centres and other wholesalers and warehouses	0	1,012	7,621	4,556	768	2,417	0	.
Motor vehicles and parts	181	0	x	22	.	4,880	0	.
Railway operating	0	.	.	.	0	54	0	.
Railroad cars and locomotives	.	0	.	.	.	.	.	.
Shipbuilding	0	.	.	.	.	.	.	.
Steel fabrication	0	60	1,224	1,948	40,132	440	0	.
Metal building systems	.	0	0	0	32	0	.	.
Contractors' products	.	0	0	.	415	36	146	.
Miscellaneous stamping and coating	0	13	269	219	.	9	.	.
Natural resources and extractive industries	.	0	0	0	0	10,178	0	.
Agricultural equipment	.	0	0	0	0	2	.	0
Non electrical machinery	.	0	x	0	.	6,050	0	.
Electrical machinery	.	.	.	.	.	0	.	.
Industrial packaging material	.	.	.	.	.	0	.	.
Pipes and tubes	.	.	.	.	.	0	.	.
Wire and wire products	0	.	.	.	0	0	x	.
Containers and closures	.	.	.	.	.	.	.	.
Appliances and utensils industries	.	.	.	.	.	.	.	.
Miscellaneous industries	0	0	.	.	0	0	.	.
Total domestic shipments	181	1,085	x	6,745	41,347	24,066	x	0
Total domestic alloy shipments	0	.	.	.	.	4,102	x	.
Exports to the United States	x	1,205	x	1,314	0	16,308	x	.
Exports to other countries (excluding United States)	x	0	100	0	0	22,560	x	0
Total disposition	x	2,290	15,052	8,059	41,347	62,934	x	0
Total alloy shipments	0	.	.	.	.	8,362	x	.
Producers interchange, for sale	x	.	0	.	.	228	36	.
Exports for conversion and return	.	.	.	.	.	0	.	.
Imports by producers (including conversion)	x	.	.	.	.	.	0	.

See notes at the end of the table.

Table 1-1 – continued

Steel primary forms and pig iron — Disposition of net shipments of rolled steel products, by product and industry monthly 2012

	Cold finished bars	Plates ¹	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							
July							
Domestic shipments							
Steel service centres and other wholesalers and warehouses	1,154	14,488	193,426	14,130	1,227	28,377	269,176
Motor vehicles and parts	x	0	26,942	7,632	0	39,818	80,124
Railway operating	.	0	0	.	.	0	54
Railroad cars and locomotives	.	996	0	.	.	.	996
Shipbuilding	.	.	.	.	.	.	0
Steel fabrication	x	7,220	x	0	.	1,890	x
Metal building systems	.	.	0	.	.	1,688	1,720
Contractors' products	0	0	5,095	2,292	.	24,545	32,529
Miscellaneous stamping and coating	0	0	4,001	2,761	.	17,163	24,435
Natural resources and extractive industries	145	0	0	0	.	0	10,323
Agricultural equipment	0	0	0	0	.	0	2
Non electrical machinery	x	11	921	0	.	0	8,030
Electrical machinery	.	.	40	907	.	1,542	2,489
Industrial packaging material	.	.	0	4,274	0	0	4,274
Pipes and tubes	0	0	103,356	1,027	.	958	105,341
Wire and wire products	x	.	x	91	.	132	x
Containers and closures	0	.	0	315	1,065	.	1,380
Appliances and utensils industries	.	.	0	47	.	732	779
Miscellaneous industries	97	0	0	.	.	.	97
Total domestic shipments	x	22,715	336,458	33,476	2,292	116,845	613,163
Total domestic alloy shipments	176	0	.	0	.	.	x
Exports to the United States	1,041	12,466	x	13,862	18,648	54,342	281,980
Exports to other countries (excluding United States)	0	2,961	x	361	333	13,058	68,982
Total disposition	x	38,142	450,770	47,699	21,273	184,245	964,125
Total alloy shipments	622	0	.	0	.	.	x
Producers interchange, for sale	0	.	0	0	.	0	x
Exports for conversion and return	.	.	0	0	.	1,048	1,048
Imports by producers (including conversion)	.	0	2,699	249	.	0	x

1. 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.

Note(s): Compiled by principal consuming industries, according to distribution of shipments reported by iron and steel mills.

Table 1-2

Steel primary forms and pig iron — Disposition of net shipments of rolled steel products, by product and industry, year-to-date 2012

	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								
Steel service centres and other wholesalers and warehouses	9	10,829	47,212	40,312	20,643	x	0	.
Motor vehicles and parts	x	0	x	167	.	36,000	0	.
Railway operating	0	.	.	.	0	184	0	.
Railroad cars and locomotives	.	0	.	.	.	.	.	.
Shipbuilding	0	.	.	.	.	.	.	.
Steel fabrication	0	815	9,606	12,567	263,266	x	0	.
Metal building systems	.	0	0	0	261	326	.	.
Contractors' products	.	0	0	.	2,868	1,697	1,439	.
Miscellaneous stamping and coating	0	52	1,691	1,671	.	3,782	.	.
Natural resources and extractive industries	.	408	38	0	7,242	68,067	0	.
Agricultural equipment	.	0	24	40	0	2,720	.	0
Non electrical machinery	.	0	x	6	.	51,001	0	.
Electrical machinery	.	.	.	.	.	0	.	.
Industrial packaging material	.	.	.	.	.	0	.	.
Pipes and tubes	.	.	.	.	.	0	.	.
Wire and wire products	0	.	.	.	0	1,773	x	.
Containers and closures	.	.	.	.	.	.	.	.
Appliances and utensils industries	.	.	.	.	.	.	.	.
Miscellaneous industries	0	0	.	.	0	0	.	.
Total domestic shipments	x	12,104	x	54,763	294,280	229,810	x	0
Total domestic alloy shipments	0	.	.	.	.	35,415	x	.
Exports to the United States	x	6,462	x	35,366	0	164,655	x	.
Exports to other countries (excluding United States)	x	0	617	18	0	172,766	x	0
Total disposition	x	18,566	99,792	90,147	294,280	567,231	x	0
Total alloy shipments	0	.	.	.	.	65,026	x	.
Producers interchange, for sale	x	.	0	.	.	3,710	517	.
Exports for conversion and return	.	.	.	.	.	0	.	.
Imports by producers (including conversion)	x	.	.	.	.	.	0	.

See notes at the end of the table.

Table 1-2 – continued

Steel primary forms and pig iron — Disposition of net shipments of rolled steel products, by product and industry, year-to-date 2012

	Cold finished bars	Plates ¹	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							
Steel service centres and other wholesalers and warehouses	x	127,695	1,320,215	109,767	7,841	234,713	1,989,878
Motor vehicles and parts	x	0	221,477	57,115	0	342,171	664,802
Railway operating	.	0	0	.	.	0	184
Railroad cars and locomotives	.	4,475	0	.	.	.	4,475
Shipbuilding	.	.	.	.	.	.	0
Steel fabrication	x	45,335	x	203	.	12,122	x
Metal building systems	.	.	0	.	.	12,047	12,634
Contractors' products	408	1,302	36,036	12,728	.	156,956	213,434
Miscellaneous stamping and coating	86	0	36,697	21,916	.	102,037	167,932
Natural resources and extractive industries	610	0	0	3	.	19	76,387
Agricultural equipment	251	2,807	0	0	.	0	5,842
Non electrical machinery	x	1,496	7,373	0	.	0	69,209
Electrical machinery	.	.	434	7,020	.	11,498	18,952
Industrial packaging material	.	.	395	31,086	0	0	31,481
Pipes and tubes	0	0	633,478	5,255	.	12,083	650,816
Wire and wire products	x	.	x	773	.	458	x
Containers and closures	0	.	227	2,657	6,459	.	9,343
Appliances and utensils industries	.	.	0	5,662	.	6,030	11,692
Miscellaneous industries	1,103	0	0	.	.	.	1,103
Total domestic shipments	x	183,110	2,288,057	254,185	14,300	890,134	4,431,597
Total domestic alloy shipments	1,156	0	.	0	.	.	x
Exports (for final sale)							
Exports to the United States	x	93,805	x	116,723	129,621	334,776	2,040,581
Exports to other countries (excluding United States)	41	26,568	x	13,757	4,940	90,705	511,587
Total disposition	x	303,483	3,037,423	384,665	148,861	1,315,615	6,983,765
Total alloy shipments	4,515	0	.	0	.	.	x
Producers interchange, for sale	0	.	0	0	.	0	x
Exports for conversion and return	.	.	0	0	.	1,106	1,106
Imports by producers (including conversion)	.	0	19,561	6,208	.	0	x

1. 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.

Note(s): Compiled by principal consuming industries, according to distribution of shipments reported by iron and steel mills.

Table 1-3

Steel primary forms and pig iron — Production of pig iron

	July		Year-to-date	
	2011	2012	2011	2012
metric tonnes				
Production of pig iron	607,896	652,898	4,259,754	4,514,572

Table 1-4

Steel primary forms and pig iron — Pig iron and scrap charged to steel furnaces

	July		Year-to-date	
	2011	2012	2011	2012
	metric tonnes			
Pig iron including pre-reduced iron	638,481	680,243	4,492,645	4,656,613
Scrap				
Own make	119,898	116,532	806,495	925,284
Purchased	435,674	368,125	3,329,716	3,218,497
Total, pig iron and scrap products	1,194,053	1,164,900	8,628,856	8,800,394

Table 1-5

Steel primary forms and pig iron — Production and shipments of steel, primary forms, monthly

	Production		Shipments	
	2011	2012	2011	2012
	metric tonnes			
July				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	423,436	474,107	x	x
Basic oxygen furnace	641,174	659,371	x	x
Steel, primary forms - Total	1,064,610	1,133,478	148,331	181,669
Included in "Steel primary forms total" above				
Continuous cast steel	1,048,491	1,100,852	136,517	153,900

Table 1-6

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

	Production		Shipments	
	2011	2012	2011	2012
	metric tonnes			
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	3,328,434	3,450,680	x	x
Basic oxygen furnace	4,371,083	4,612,163	x	x
Steel, primary forms - Total	7,699,517	8,062,843	1,212,683	1,231,543
Included in "Steel primary forms total" above				
Continuous cast steel	7,591,355	7,828,793	1,132,159	1,032,547

Table 2-1
Steel pipe and tubing — Production and shipments, monthly 2012

	Production	Shipments for sale		
		Domestic shipments ¹	Exports	Total shipments
		metric tonnes		
July				
Total, pipe and tubing	180,730	130,967	103,362	234,328
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	1,047	1,779	0	1,779
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	23,805	x	x	30,776
over 16" (40.64 cm) outside diameter	26,459	4,087	29,052	33,139
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	5,006	x	x	10,541
over 16" (40.64 cm) periphery	x	x	x	x
Standard 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	x
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	x	30	x
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	2,804	x	x	x
over 16" (40.64 cm) outside diameter	x	638	6	644
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	8,691	13,593	5,421	19,013
Mechanical tubing, welded, produced from cold rolled	9,656	3,523	1,491	5,014
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	47,377	38,164	27,664	65,828
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	7,454	4,082	x	x
Other tubular products	x	1,971	425	2,397

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 2012

	Production	Shipments for sale		
		Domestic shipments ¹	Exports	Total shipments
		metric tonnes		
Total, pipe and tubing	1,394,255	924,777	663,315	1,588,093
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	16,192	15,463	0	15,463
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	x	x	x	133,015
over 16" (40.64 cm) outside diameter	152,277	8,217	112,560	120,778
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	x	x	x	87,670
over 16" (40.64 cm) periphery	x	x	x	x
Standard 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	x
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	17,126	x	x	x
over 16" (40.64 cm) outside diameter	x	x	116	x
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	73,694	104,157	47,877	152,031
Mechanical tubing, welded, produced from cold rolled	x	33,310	13,204	46,512
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	376,687	264,826	163,131	427,956
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	x	43,818	x	x
Other tubular products	x	9,806	4,801	14,606

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

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

	Shipments				Production
	2011	2012			
		Total shipments	Domestic shipments	Exports	
	metric tonnes				
July					
Barbed wire	x	x	x	0	.
Uncoated steel wire	17,238	15,960	7,170	8,790	.
Galvanized steel wire	6,583	6,036	2,598	3,438	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	x	823	x	x	875
Wire mesh, bright or uncoated and galvanized	3,944	x	2,456	x	2,558
Wire rope	x	x	x	x	x
Nails and staples	x	x	x	1,594	x
Wire roofing nails of a length of 25 mm or more, iron or steel	x	2,460	866	1,594	2,601
Staples of iron or steel	1	x	x	0	x
All other wire products	x	x	x	5	x
Grand total	34,909	33,252	17,643	15,609	.

Note(s): Data has been revised from March 2010 to November 2011. These revised data are available at: www.statcan.gc.ca/cansim, table 303-0047. Totals may not add due to rounding.

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

	Shipments				Production
	2011	2012			
		Total shipments	Domestic shipments	Exports	
	metric tonnes				
Barbed wire	x	x	x	x	.
Uncoated steel wire	136,370	127,780	57,966	69,814	.
Galvanized steel wire	52,142	53,186	23,966	29,220	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	x	5,876	x	x	6,010
Wire mesh, bright or uncoated and galvanized	30,569	x	23,574	x	25,379
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	x	19,482	x	x	18,849
Staples of iron or steel	4	x	x	0	x
All other wire products	x	x	x	17	x
Grand total	276,554	274,149	148,888	125,261	.

Note(s): Data has been revised from March 2010 to November 2011. These revised data are available at: www.statcan.gc.ca/cansim, table 303-0047. 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 (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 (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 the Annual Survey of Manufactures and Logging (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 Annual Survey of Manufactures (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).