

Catalogue no. 41-019-X

Steel, Tubular Products and Steel Wire

October 2009



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Published by authority of the Minister responsible for Statistics Canada

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December 2009

Catalogue no. 41-019-X, vol. 5, no. 10

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
- 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

October 2009

- Monthly production of primary steel and pig iron decreased 7.7 % in October 2009 to 867,310 metric tonnes.
- In the same month, the total disposition of shipments of rolled steel products decreased 13.1 % to 741,661 metric tonnes.
- Between September 2009 and October 2009, production of steel pipe and tubing increased 5.2 % to 140,060 metric tonnes.
- Total shipments of steel wire and specified wire products decreased 7 % to 34,560 metric tonnes in October 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								
October								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	2	1,508	5,536	3,124	4,941	7,536	22	.
21 Motor vehicles and parts	109	0	73	9	.	5,349	0	.
22 Railway operating	0	.	.	.	0	0	0	.
23 Railroad cars and locomotives	.	181	.	.	.	.	.	.
24 Shipbuilding	0	.	.	.	.	.	.	.
31 Steel fabrication	0	247	1,023	1,350	59,072	x	0	.
32 Metal building systems	.	0	0	.	30	0	.	.
33 Contractors' products	.	0	0	.	318	119	82	.
34 Miscellaneous stamping and coating	0	0	36	43	.	0	.	.
41 Natural resources and extractive industries	.	52	0	0	626	11,714	0	.
51 Agricultural equipment	.	0	0	0	0	86	.	0
52 Non electrical machinery	.	0	2,184	0	.	6,273	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	111	1,988	8,852	4,526	64,987	32,219	x	0
Total domestic alloy shipments	0	.	.	.	.	3,991	0	.
81 Exports to the United States	x	248	2,316	1,663	51	14,809	x	.
82 Exports to other countries (excluding United States)	x	0	0	0	0	15,993	x	0
Total disposition	x	2,236	11,168	6,189	65,038	63,021	x	0
Total alloy shipments	0	.	.	.	.	6,100	0	.
Producers interchange, for sale	x	.	0	.	.	452	112	.
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							
October							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	1,400	11,697	106,188	17,764	1,242	25,328	186,288
21 Motor vehicles and parts	1,207	0	20,971	6,216	0	30,861	64,795
22 Railway operating	.	0	.	.	.	.	0
23 Railroad cars and locomotives	.	163	0	.	.	.	344
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	x	3,126	5,598	0	.	2,496	73,263
32 Metal building systems	.	.	11	.	.	2,223	2,264
33 Contractors' products	x	0	8,390	x	.	20,411	31,304
34 Miscellaneous stamping and coating	x	0	2,469	x	.	17,533	x
41 Natural resources and extractive industries	10	20	0	0	.	0	12,422
51 Agricultural equipment	38	135	0	0	.	.	259
52 Non electrical machinery	0	150	279	0	.	0	8,886
53 Electrical machinery	.	.	0	1,333	.	1,574	2,907
54 Industrial packaging material	.	.	0	5,087	0	0	5,087
61 Pipes and tubes	0	0	64,937	1,097	.	1,334	67,368
62 Wire and wire products	x	.	81	71	.	67	x
63 Containers and closures	0	.	0	121	3,975	.	4,096
64 Appliances and utensils industries	.	.	.	3,885	.	1,971	5,856
70 Miscellaneous industries	143	0	0	.	.	.	143
Total domestic shipments	x	15,291	208,924	41,407	5,217	103,798	508,486
Total domestic alloy shipments	263	0	.	0	.	.	4,254
81 Exports to the United States	876	4,137	x	21,250	12,715	37,654	174,947
82 Exports to other countries (excluding United States)	0	153	12,547	586	724	8,714	58,228
Total disposition	3,988	19,581	x	63,243	18,656	150,166	741,661
Total alloy shipments	263	0	.	0	.	.	6,363
Producers interchange, for sale	0	.	0	0	.	0	x
Exports for conversion and return	.	.	0	0	.	0	0
Imports by producers (including conversion)	.	225	0	1,983	.	0	2,208

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 shipments¹ 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	15,036	41,907	38,876	38,589	x	720	.
21 Motor vehicles and parts	882	17	689	90	.	42,128	194	.
22 Railway operating	..	.	.	.	..	60	..	.
23 Railroad cars and locomotives	.	820	.	.	.	.	.	.
24 Shipbuilding	..	.	.	.	.	.	.	.
31 Steel fabrication	..	3,647	11,469	24,354	397,142	x	..	.
32 Metal building systems	.	4	21	.	356	210	.	.
33 Contractors' products	.	..	..	.	4,039	x	x	.
34 Miscellaneous stamping and coating	..	..	1,443	1,140	.	x	.	.
41 Natural resources and extractive industries	.	816	90	..	7,109	x	..	.
51 Agricultural equipment	.	..	..	41	..	2,226	.	65
52 Non electrical machinery	.	..	18,135	30	.	53,415	..	.
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	16,050	20,340	73,754	64,531	447,574	307,243	x	65
Total domestic alloy shipments	..	.	.	.	.	37,299	..	.
81 Exports to the United States	x	7,595	22,002	29,525	1,085	x	x	.
82 Exports to other countries (excluding United States)	x	..	534	21	..	x	x	..
Total disposition	x	27,935	96,290	94,077	448,659	541,803	x	65
Total alloy shipments	..	.	.	.	.	56,794	..	.
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	134,927	991,283	194,202	14,140	263,330	1,827,794
21 Motor vehicles and parts	8,988	..	181,678	43,012	..	220,381	498,059
22 Railway operating	.	..	.	.	.	.	60
23 Railroad cars and locomotives	.	607	..	.	.	.	1,427
24 Shipbuilding	.	..	.	.	.	.	..
31 Steel fabrication	x	38,228	38,549	86	.	26,477	545,995
32 Metal building systems	.	..	584	.	.	19,433	20,608
33 Contractors' products	x	244	43,864	x	.	201,278	270,367
34 Miscellaneous stamping and coating	x	..	x	x	.	x	x
41 Natural resources and extractive industries	287	26	23	..	.	4	x
51 Agricultural equipment	520	1,560	..	..	.	.	4,412
52 Non electrical machinery	..	751	1,513	.	.	..	73,844
53 Electrical machinery	.	.	220	8,695	.	11,830	20,745
54 Industrial packaging material	.	.	3,381	30,981	..	..	34,362
61 Pipes and tubes	59	..	651,625	9,913	.	14,415	676,012
62 Wire and wire products	x	.	x	x	.	x	x
63 Containers and closures	..	.	49	1,127	48,264	.	49,440
64 Appliances and utensils industries	.	.	.	38,349	.	20,279	58,628
70 Miscellaneous industries	657	34	..	.	.	.	4,004
Total domestic shipments	x	176,377	1,931,403	377,600	62,404	935,560	4,584,602
Total domestic alloy shipments	2,035	..	.	..	.	.	39,334
Exports ² (for final sale)							
81 Exports to the United States	x	54,271	x	123,853	130,750	241,635	1,657,752
82 Exports to other countries (excluding United States)	..	6,522	x	17,864	x	72,318	690,951
Total disposition	x	237,170	x	519,317	x	1,249,513	6,933,305
Total alloy shipments	2,131	..	.	..	.	.	58,925
Producers interchange, for sale	..	.	x	..	.	..	x
Exports for conversion and return ²	.	.	..	..	.	..	..
Imports by producers (including conversion)	.	440	2,733	14,819	.	..	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

	October		Year-to-date	
	2008	2009	2008	2009
metric tonnes				
Production of pig iron	634,449	449,918	8,006,798	x

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

	October		Year-to-date	
	2008	2009	2008	2009
	metric tonnes			
Pig iron including pre-reduced iron	614,990	460,580	7,803,731	x
Scrap				
Own make	104,286	84,187	1,307,302	1,010,926
Purchased	435,813	414,745	5,739,878	3,073,539
Total, pig iron and scrap products	1,155,089	959,512	14,850,911	8,223,316

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			
October				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	432,670	440,394	x	56,073
Basic oxygen furnace	629,979	426,916	x	x
Steel, primary forms - Total	1,062,649	867,310	155,360	254,987
Included in "Steel primary forms total" above				
Continuous cast steel	1,049,487	856,342	142,382	244,621

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	5,398,919	x	x	x
Basic oxygen furnace	8,217,776	x	x	x
Steel, primary forms - Total	13,616,695	7,286,198	2,362,175	x
Included in "Steel primary forms total" above				
Continuous cast steel	13,494,210	7,059,870	2,224,181	x

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

	Production	Shipments for sale		
		Domestic shipments ¹	Exports	Total shipments
	metric tonnes			
October				
Total, pipe and tubing	140,060	71,933	48,809	120,742
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	1,195	388	0	388
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	11,264	x	x	x
over 16" (40.64 cm) outside diameter	21,776	x	x	x
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	11,827	11,035	7,222	18,257
over 16" (40.64 cm) periphery	39,476	12,884	22,952	35,836
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	1,517	904	508	1,412
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	1,108	1,117	200	1,317
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	454	x	x	228
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	883	74	33	107
over 16" (40.64 cm) outside diameter	1,250	42	1	43
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	11,742	10,209	4,138	14,347
Mechanical tubing, welded, produced from cold rolled	9,941	4,419	2,425	6,844
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	26,021	16,457	8,754	25,211
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	1,023	2,510	742	3,252
Other tubular products	583	1,413	1,481	2,894

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	1,325,180	728,085	548,865	1,276,950
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	82,178	x	x	x
over 16" (40.64 cm) outside diameter	293,208	x	x	x
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	115,821	126,521	63,568	190,089
over 16" (40.64 cm) periphery	311,754	94,778	181,261	277,039
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	27,930	12,852	17,157	30,009
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	14,282	12,161	2,695	14,856
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	3,163
over 16" (40.64 cm) outside diameter	13,649	x	x	1,228
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	94,086	75,910	37,602	113,512
Mechanical tubing, welded, produced from cold rolled	71,138	x	x	57,359
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	224,362	171,668	45,338	217,006
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	26,887	21,480	..	25,632
Other tubular products	x	9,734	7,409	17,143

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					
October					
Barbed wire	x	x	x	x	.
Uncoated steel wire	14,402	16,112	8,417	7,695	.
Galvanized steel wire	10,583	6,685	2,333	4,352	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	3,093	797	x	x	828
Wire mesh, bright or uncoated and galvanized	4,702	3,826	x	x	3,874
Wire rope	x	x	x	x	x
Nails and staples	x	2,817	1,588	1,229	x
Wire roofing nails of a length of 25 mm or more, iron or steel	876	x	x	x	1,172
Staples of iron or steel	x	x	x	x	x
All other wire products	1,498	x	x	5	x
Grand total	42,847	34,560	19,359	15,201	.

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	172,757	136,978	76,189	60,789	.
Galvanized steel wire	131,899	81,748	32,200	49,548	.
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	53,567	34,962	x	x	34,441
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	17,271	x	x	x	x
Staples of iron or steel	x	x	x	x	x
All other wire products	x	x	x	..	x
Grand total	500,152	364,847	219,367	145,480	.

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).