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Steel, Tubular Products and Steel Wire

April 2009



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Statistics Canada
Manufacturing, Construction and Energy Division

Steel, Tubular Products and Steel Wire

April 2009

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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

April 2009

- Monthly production of primary steel and pig iron decreased 18.6% in April 2009 to 600,520 metric tonnes.
- In the same month, the total disposition of shipments of rolled steel products decreased 24.7% to 572,566 metric tonnes.
- Between March 2009 and April 2009, production of steel pipe and tubing decreased 37.5% to 114,574 metric tonnes.
- Total shipments of steel wire and specified wire products decreased 4.1% to 36,547 metric tonnes in April 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								
April								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	2	1,398	4,693	4,629	4,113	x	132	.
21 Motor vehicles and parts	30	17	99	10	.	2,472	0	.
22 Railway operating	0	.	.	.	0	0	0	.
23 Railroad cars and locomotives	.	0	.	.	.	.	.	.
24 Shipbuilding	0	.	.	.	.	.	.	.
31 Steel fabrication	0	311	779	2,311	28,096	x	0	.
32 Metal building systems	.	0	0	.	244	0	.	.
33 Contractors' products	.	0	0	.	325	x	0	.
34 Miscellaneous stamping and coating	0	0	51	97	.	x	.	.
41 Natural resources and extractive industries	.	73	19	0	1,150	10,867	0	.
51 Agricultural equipment	.	0	0	10	0	385	.	.
52 Non electrical machinery	.	0	1,897	0	.	5,030	0	.
53 Electrical machinery	.	.	.	.	.	0	.	.
54 Industrial packaging material	.	.	.	.	.	0	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	0	.	.	.	208	x	x	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	247	0	.	.	0	0	.	.
Total domestic shipments	279	1,799	7,538	7,057	34,136	31,023	x	0
Total domestic alloy shipments	0	.	.	.	.	3,006	0	.
81 Exports to the United States	12,517	835	1,969	3,340	114	x	x	.
82 Exports to other countries (excluding United States)	x	0	21	0	0	x	x	0
Total disposition	33,976	2,634	9,528	10,397	34,250	47,619	x	0
Total alloy shipments	0	.	.	.	.	4,386	0	.
Producers interchange, for sale	x	.	0	.	.	272	151	.
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							
April							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	x	12,590	59,629	18,942	1,678	28,618	147,402
21 Motor vehicles and parts	826	0	17,396	4,693	0	22,343	47,886
22 Railway operating	.	0	.	.	.	.	0
23 Railroad cars and locomotives	.	0	0	.	.	.	0
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	x	2,350	2,767	12	.	2,541	39,923
32 Metal building systems	.	.	0	.	.	1,488	1,732
33 Contractors' products	x	0	3,358	1,562	.	17,762	23,401
34 Miscellaneous stamping and coating	x	0	739	2,956	.	14,725	19,660
41 Natural resources and extractive industries	13	0	0	0	.	0	12,122
51 Agricultural equipment	74	0	0	0	.	.	469
52 Non electrical machinery	0	0	92	0	.	0	7,019
53 Electrical machinery	.	.	53	1,109	.	1,138	2,300
54 Industrial packaging material	.	.	266	2,202	0	0	2,468
61 Pipes and tubes	0	0	55,588	1,218	.	1,621	58,427
62 Wire and wire products	x	.	273	34	.	71	12,584
63 Containers and closures	0	.	0	218	6,322	.	6,540
64 Appliances and utensils industries	.	.	.	4,874	.	1,896	6,770
70 Miscellaneous industries	28	0	0	.	.	.	275
Total domestic shipments	x	14,940	140,161	37,820	8,000	92,203	388,978
Total domestic alloy shipments	248	0	.	0	.	.	3,254
81 Exports to the United States	641	4,106	43,191	6,811	12,525	18,102	127,415
82 Exports to other countries (excluding United States)	0	42	13,438	1,834	435	10,618	56,173
Total disposition	x	19,088	196,790	46,465	20,960	120,923	572,566
Total alloy shipments	248	0	.	0	.	.	4,634
Producers interchange, for sale	0	.	0	0	.	0	x
Exports for conversion and return	.	.	0	0	.	0	0
Imports by producers (including conversion)	.	0	26	245	.	0	271

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	4	6,171	12,966	15,221	9,612	x	689	.
21 Motor vehicles and parts	209	17	322	44	.	16,310	194	.
22 Railway operating	..	.	.	.	..	..	..	.
23 Railroad cars and locomotives	.	361	.	.	.	.	.	.
24 Shipbuilding	..	.	.	.	.	.	.	.
31 Steel fabrication	..	918	6,116	11,175	125,977	x	..	.
32 Metal building systems	.	4	21	.	244	133	.	.
33 Contractors' products	.	..	..	.	1,057	x	35	.
34 Miscellaneous stamping and coating	..	..	903	846	.	x	.	.
41 Natural resources and extractive industries	.	415	56	..	3,515	46,475	..	.
51 Agricultural equipment	.	..	..	19	..	1,483	.	.
52 Non electrical machinery	.	..	8,018	14	.	22,819	..	.
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	15,365	7,886	28,402	27,319	140,744	136,541	x	0
Total domestic alloy shipments	..	.	.	.	.	17,705	..	.
81 Exports to the United States	x	3,912	10,051	14,176	345	x	x	.
82 Exports to other countries (excluding United States)	x	..	228	21	..	x	x	..
Total disposition	x	11,798	38,681	41,516	141,089	227,706	x	0
Total alloy shipments	..	.	.	.	.	26,809	..	.
Producers interchange, for sale	x	.	..	.	.	x	x	.
Exports for conversion and return	.	.	.	.	.	..	.	.
Imports by producers (including conversion)	..	.	.	.	.	.	..	.

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	56,212	445,742	100,276	4,361	116,319	811,549
21 Motor vehicles and parts	3,206	..	83,237	16,355	..	93,128	213,022
22 Railway operating	..	..	..	..	..	..	..
23 Railroad cars and locomotives	..	190	..	..	..	..	551
24 Shipbuilding	..	..	..	..	..	..	..
31 Steel fabrication	x	17,025	14,150	86	..	10,295	188,532
32 Metal building systems	..	..	493	..	..	6,017	6,912
33 Contractors' products	x	102	15,899	6,888	..	66,132	91,180
34 Miscellaneous stamping and coating	x	..	x	13,185	..	49,988	73,208
41 Natural resources and extractive industries	80	..	3	..	..	1	50,545
51 Agricultural equipment	289	306	..	..	..	..	2,097
52 Non electrical machinery	..	192	471	..	..	..	31,514
53 Electrical machinery	..	..	53	3,146	..	3,768	6,967
54 Industrial packaging material	..	..	3,172	8,523	..	..	11,695
61 Pipes and tubes	55	..	335,834	5,091	..	7,643	348,623
62 Wire and wire products	x	..	x	84	..	227	73,448
63 Containers and closures	..	..	49	965	20,456	..	21,470
64 Appliances and utensils industries	..	..	..	16,429	..	8,214	24,643
70 Miscellaneous industries	376	34	..	..	..	..	3,723
Total domestic shipments	x	74,061	907,432	171,028	24,817	361,732	1,959,679
Total domestic alloy shipments	582	..	..	..	..	..	18,287
Exports ² (for final sale)							
81 Exports to the United States	x	25,435	346,221	56,098	46,281	94,651	733,900
82 Exports to other countries (excluding United States)	..	1,728	48,901	6,126	x	33,046	166,095
Total disposition	x	101,224	1,302,554	233,252	x	489,429	2,859,674
Total alloy shipments	746	..	..	..	..	..	27,555
Producers interchange, for sale	..	..	x	..	..	..	x
Exports for conversion and return ²	..	..	..	..	..	..	..
Imports by producers (including conversion)	..	..	931	3,098	..	..	4,029

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

	April		Year-to-date	
	2008	2009	2008	2009
metric tonnes				
Production of pig iron	856,387	349,270	3,317,289	1,752,571

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

	April		Year-to-date	
	2008	2009	2008	2009
	metric tonnes			
Pig iron including pre-reduced iron	817,751	313,907	3,234,710	1,728,157
Scrap				
Own make	125,239	86,541	535,939	430,674
Purchased	618,588	267,659	2,395,991	1,125,947
Total, pig iron and scrap products	1,561,578	668,107	6,166,640	3,284,778

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			
April				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	540,723	249,804	x	19,701
Basic oxygen furnace	867,764	350,716	x	x
Steel, primary forms - Total	1,408,487	600,520	260,597	x
Included in "Steel primary forms total" above				
Continuous cast steel	1,396,047	588,601	249,019	x

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	2,208,382	1,088,513	x	x
Basic oxygen furnace	3,394,180	1,861,032	x	x
Steel, primary forms - Total	5,602,562	2,949,545	974,975	x
Included in "Steel primary forms total" above				
Continuous cast steel	5,548,996	2,913,027	923,498	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			
April				
Total, pipe and tubing	114,574	54,258	71,458	125,716
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	76	0	76
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	7,612	3,325	0	3,325
over 16" (40.64 cm) outside diameter	35,232	2,650	38,758	41,408
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	12,070	13,926	6,514	20,440
over 16" (40.64 cm) periphery	24,594	7,127	16,725	24,852
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	1,915	1,147	1,564	2,711
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	2,240	1,684	154	1,838
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	479	x	612
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	696	320	61	381
over 16" (40.64 cm) outside diameter	1,776	110	155	265
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	9,684	8,439	3,888	12,327
Mechanical tubing, welded, produced from cold rolled	8,078	3,884	1,387	5,271
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	4,623	8,543	1,476	10,019
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	5,406	522	323	845
Other tubular products	x	1,026	320	1,346

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	633,906	383,226	211,595	594,821
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	481	313	794
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	43,290	x	x	x
over 16" (40.64 cm) outside diameter	142,706	76,621	61,533	138,154
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	44,708	47,885	25,833	73,718
over 16" (40.64 cm) periphery	113,733	37,557	73,692	112,249
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	9,948	5,720	5,693	11,413
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	3,659	2,842	1,021	3,863
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	1,984	397	2,381
over 16" (40.64 cm) outside diameter	5,663	407	291	698
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	x	29,302	15,718	45,020
Mechanical tubing, welded, produced from cold rolled	29,866	x	x	20,780
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	143,210	115,184	18,786	133,970
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	20,658	10,136	..	11,105
Other tubular products	x	3,390	1,131	4,521

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				
April					
Barbed wire	x	x	x	x	.
Uncoated steel wire	21,837	13,469	8,176	5,293	.
Galvanized steel wire	15,556	8,071	2,988	5,083	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	2,565	2,476	x	x	2,399
Wire mesh, bright or uncoated and galvanized	8,008	4,072	x	x	3,736
Wire rope	4,413	3,114	x	x	3,113
Nails and staples	x	x	x	x	x
Wire roofing nails of a length of 25 mm or more, iron or steel	1,814	910	399	511	385
Staples of iron or steel	x	x	x	x	x
All other wire products	x	1,019	1,015	4	1,159
Grand total	60,723	36,547	22,490	14,057	.

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	79,060	49,341	27,196	22,145	.
Galvanized steel wire	57,883	37,440	14,224	23,216	.
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	22,214	12,102	x	x	11,576
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	7,802	3,216	1,528	1,688	x
Staples of iron or steel	x	x	x	x	x
All other wire products	x	x	x	..	x
Grand total	217,687	147,049	87,452	59,597	.

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).