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Steel, Tubular Products and Steel Wire

August 2009



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Statistics Canada
Manufacturing, Construction and Energy Division

Steel, Tubular Products and Steel Wire

August 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

August 2009

- Monthly production of primary steel and pig iron increased 24.5% in August 2009 to 733,067 metric tonnes.
- In the same month, the total disposition of shipments of rolled steel products increased 17.8% to 735,473 metric tonnes.
- Between July 2009 and August 2009, production of steel pipe and tubing increased 14.6% to 109,914 metric tonnes.
- Total shipments of steel wire and specified wire products increased 4.2% to 34,884 metric tonnes in August 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								
August								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	5	1,258	3,088	2,156	3,962	x	0	.
21 Motor vehicles and parts	174	0	54	15	.	3,901	0	.
22 Railway operating	0	.	.	.	0	24	0	.
23 Railroad cars and locomotives	.	141	.	.	.	.	.	.
24 Shipbuilding	0	.	.	.	.	.	.	.
31 Steel fabrication	0	397	494	2,111	52,111	x	0	.
32 Metal building systems	.	0	0	.	0	0	.	.
33 Contractors' products	.	0	0	.	521	50	0	.
34 Miscellaneous stamping and coating	0	0	0	0	.	820	.	.
41 Natural resources and extractive industries	.	40	0	0	326	9,672	0	.
51 Agricultural equipment	.	0	0	0	0	89	.	65
52 Non electrical machinery	.	0	1,907	16	.	5,322	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	179	1,836	5,543	4,298	56,920	26,377	x	65
Total domestic alloy shipments	0	.	.	.	.	3,681	0	.
81 Exports to the United States	0	761	1,426	2,122	63	10,827	x	.
82 Exports to other countries (excluding United States)	20,995	0	0	0	0	10,643	x	0
Total disposition	21,174	2,597	6,969	6,420	56,983	47,847	x	65
Total alloy shipments	0	.	.	.	.	5,627	0	.
Producers interchange, for sale	0	.	0	.	.	751	210	.
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							
August							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	x	16,280	117,879	13,880	1,157	27,432	193,677
21 Motor vehicles and parts	1,071	0	18,340	5,283	0	23,515	52,353
22 Railway operating	.	0	.	.	.	.	24
23 Railroad cars and locomotives	.	118	0	.	.	.	259
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	x	3,987	4,866	0	.	3,180	87,722
32 Metal building systems	.	.	0	.	.	2,652	2,652
33 Contractors' products	x	0	2,076	x	.	25,392	30,187
34 Miscellaneous stamping and coating	x	0	1,922	x	.	16,518	22,945
41 Natural resources and extractive industries	44	3	0	0	.	1	10,086
51 Agricultural equipment	0	0	0	0	.	.	154
52 Non electrical machinery	0	0	151	0	.	0	7,396
53 Electrical machinery	.	.	17	686	.	1,407	2,110
54 Industrial packaging material	.	.	110	2,816	0	0	2,926
61 Pipes and tubes	0	0	57,314	241	.	1,274	58,829
62 Wire and wire products	x	.	122	x	.	133	14,936
63 Containers and closures	0	.	0	0	2,800	.	2,800
64 Appliances and utensils industries	.	.	.	3,164	.	1,718	4,882
70 Miscellaneous industries	17	0	0	.	.	.	17
Total domestic shipments	x	20,388	202,797	31,940	3,957	103,222	493,955
Total domestic alloy shipments	262	0	.	0	.	.	3,943
81 Exports to the United States	616	5,243	x	9,714	14,488	23,840	169,870
82 Exports to other countries (excluding United States)	0	0	x	718	397	6,598	71,648
Total disposition	x	25,631	317,535	42,372	18,842	133,660	735,473
Total alloy shipments	240	0	.	0	.	.	5,867
Producers interchange, for sale	0	.	0	0	.	0	961
Exports for conversion and return	.	.	0	0	.	0	0
Imports by producers (including conversion)	.	0	691	484	.	0	1,175

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	10	12,188	32,432	31,786	29,051	x	698	.
21 Motor vehicles and parts	701	17	563	69	.	31,616	194	.
22 Railway operating	..	.	.	.	..	60	..	.
23 Railroad cars and locomotives	.	530	.	.	.	.	.	.
24 Shipbuilding	..	.	.	.	.	.	.	.
31 Steel fabrication	..	2,379	9,833	18,812	274,503	x	..	.
32 Metal building systems	.	4	21	.	244	210	.	.
33 Contractors' products	.	..	..	.	3,589	x	x	.
34 Miscellaneous stamping and coating	..	..	1,384	1,000	.	x	.	.
41 Natural resources and extractive industries	.	698	78	..	5,633	x	..	.
51 Agricultural equipment	.	..	..	41	..	2,063	.	65
52 Non electrical machinery	.	..	14,370	30	.	41,422	..	.
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	15,863	15,816	58,681	51,738	313,359	244,893	x	65
Total domestic alloy shipments	..	.	.	.	.	29,290	..	.
81 Exports to the United States	x	6,770	17,678	24,751	1,034	x	x	.
82 Exports to other countries (excluding United States)	x	..	428	21	..	x	x	..
Total disposition	x	22,586	76,787	76,510	314,393	416,820	x	65
Total alloy shipments	..	.	.	.	.	44,040	..	.
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	110,107	753,974	153,379	11,022	206,988	1,420,186
21 Motor vehicles and parts	6,599	..	137,594	31,130	..	161,246	369,729
22 Railway operating	.	..	.	.	.	.	60
23 Railroad cars and locomotives	.	335	..	.	.	.	865
24 Shipbuilding	.	..	.	.	.	.	..
31 Steel fabrication	x	30,070	27,918	86	.	20,498	409,386
32 Metal building systems	.	..	493	.	.	14,277	15,249
33 Contractors' products	x	244	30,170	x	.	157,400	206,507
34 Miscellaneous stamping and coating	x	..	x	x	.	x	162,031
41 Natural resources and extractive industries	238	3	23	..	.	3	x
51 Agricultural equipment	418	804	..	..	.	.	3,391
52 Non electrical machinery	..	417	899	..	.	..	57,138
53 Electrical machinery	.	.	170	5,460	.	8,611	14,241
54 Industrial packaging material	.	.	3,361	20,299	..	..	23,660
61 Pipes and tubes	59	..	519,412	7,649	.	12,073	539,193
62 Wire and wire products	x	.	x	x	.	x	x
63 Containers and closures	..	.	49	981	39,869	.	40,899
64 Appliances and utensils industries	.	.	.	30,564	.	16,076	46,640
70 Miscellaneous industries	479	34	..	.	.	.	3,826
Total domestic shipments	x	142,014	1,487,452	287,192	50,891	719,456	3,536,439
Total domestic alloy shipments	1,481	..	.	..	.	.	30,771
Exports ² (for final sale)							
81 Exports to the United States	x	44,563	x	89,396	105,352	172,138	1,292,693
82 Exports to other countries (excluding United States)	..	6,369	x	11,624	x	57,582	529,336
Total disposition	x	192,946	2,243,669	388,212	x	949,176	5,358,468
Total alloy shipments	1,577	..	.	..	.	.	45,617
Producers interchange, for sale	..	.	x	..	.	..	x
Exports for conversion and return ²	.	.	..	..	.	..	..
Imports by producers (including conversion)	.	134	2,707	9,895	.	..	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

	August		Year-to-date	
	2008	2009	2008	2009
metric tonnes				
Production of pig iron	796,996	x	6,649,517	x

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

	August		Year-to-date	
	2008	2009	2008	2009
	metric tonnes			
Pig iron including pre-reduced iron	790,041	388,987	6,469,266	x
Scrap				
Own make	123,145	99,677	1,085,476	824,258
Purchased	565,455	318,482	4,734,384	2,238,384
Total, pig iron and scrap products	1,478,641	807,146	12,289,126	6,218,682

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			
August				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	536,935	x	x	x
Basic oxygen furnace	823,621	x	x	0
Steel, primary forms - Total	1,360,556	733,067	230,664	x
Included in "Steel primary forms total" above				
Continuous cast steel	1,355,338	732,111	223,744	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	4,413,513	x	x	x
Basic oxygen furnace	6,800,915	x	x	x
Steel, primary forms - Total	11,214,428	5,479,066	1,995,210	x
Included in "Steel primary forms total" above				
Continuous cast steel	11,114,659	5,271,037	1,887,050	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			
August				
Total, pipe and tubing	109,914	56,275	40,920	97,195
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	x	0	x
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	7,887	8,838	x	x
over 16" (40.64 cm) outside diameter	18,878	x	x	225
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	10,914	10,117	5,486	16,234
over 16" (40.64 cm) periphery	39,069	10,254	14,246	21,531
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	3,991	1,422	2,458	3,880
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	791	1,218	163	1,381
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	281	259	30	289
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	652	110	18	128
over 16" (40.64 cm) outside diameter	982	66	17	83
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	12,091	9,827	4,247	14,074
Mechanical tubing, welded, produced from cold rolled	7,252	3,953	2,040	5,993
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	10,013	7,243	1,986	9,229
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	2,107	1,791	977	2,768
Other tubular products	x	1,070	1,292	2,362

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	1,046,168	594,363	468,005	1,062,368
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	x	313	x
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	59,124	x	x	x
over 16" (40.64 cm) outside diameter	251,748	x	x	246,976
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	91,360	103,419	50,296	154,346
over 16" (40.64 cm) periphery	233,391	76,941	144,354	219,326
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	22,090	10,664	14,565	25,229
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	11,174	9,601	2,308	11,909
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	2,915
over 16" (40.64 cm) outside diameter	11,371	x	x	1,143
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	69,513	55,899	28,581	84,480
Mechanical tubing, welded, produced from cold rolled	51,506	x	x	43,080
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	180,381	140,575	29,890	170,465
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	25,833	17,099	..	19,585
Other tubular products	x	7,246	4,731	11,977

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					
August					
Barbed wire	x	x	x	x	.
Uncoated steel wire	14,602	14,523	7,969	6,554	.
Galvanized steel wire	11,933	6,615	2,698	3,917	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	x	2,495	x	x	2,711
Wire mesh, bright or uncoated and galvanized	5,337	3,359	x	x	3,316
Wire rope	3,159	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	1,620	1,113	466	647	1,144
Staples of iron or steel	x	x	x	x	x
All other wire products	1,611	x	x	0	x
Grand total	45,694	34,884	20,972	13,912	.

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	143,167	104,837	59,303	45,534	.
Galvanized steel wire	109,639	68,111	27,129	40,982	.
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	43,630	27,283	x	x	26,324
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	15,308	7,596	3,492	4,104	x
Staples of iron or steel	x	x	x	x	x
All other wire products	x	x	x	..	x
Grand total	411,964	293,116	178,211	114,905	.

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).