



Catalogue no. 41-019-X

Steel, Tubular Products and Steel Wire

November 2007



Statistics
Canada

Statistique
Canada

Canada

How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website at www.statcan.ca or contact us by e-mail at infostats@statcan.ca or by phone from 8:30am to 4:30pm Monday to Friday at:

Toll-free telephone (Canada and the United States):

Inquiries line **1-800-263-1136**

National telecommunications device for the hearing impaired **1-800-363-7629**

Fax line **1-877-287-4369**

Depository Services Program inquiries line **1-800-635-7943**

Depository Services Program fax line **1-800-565-7757**

Statistics Canada national contact centre: 1-613-951-8116

Fax line **1-613-951-0581**

Information to access the product

This product, catalogue no. 41-019-X, is available for free in electronic format. To obtain a single issue, visit our website at www.statcan.ca and select Publications.

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, the Agency has developed *standards of service* which its employees observe in serving its clients.

To obtain a copy of these service standards, please contact Statistics Canada toll free at 1-800-263-1136. The service standards are also published on www.statcan.ca under About us > Providing services to Canadians.



Statistics Canada
Manufacturing, Construction and Energy Division

Steel, Tubular Products and Steel Wire

November 2007

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2008

All rights reserved. The content of this electronic publication may be reproduced, in whole or in part, and by any means, without further permission from Statistics Canada, subject to the following conditions: that it be done solely for the purposes of private study, research, criticism, review or newspaper summary, and/or for non-commercial purposes; and that Statistics Canada be fully acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, by any means—electronic, mechanical or photocopy—or for any purposes without prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

January 2008

Catalogue no. 41-019-X, vol. 3, no. 11

ISSN 1712-980X

Frequency: Monthly

Ottawa

La version française de cette publication est disponible sur demande (n° 41-019-X au catalogue).

Note of appreciation

Canada owes the success of its statistical system to a long standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

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

Table of contents

Highlights	4
Related products	5
Statistical tables	
1 Steel primary forms and pig iron	7
1-1 Disposition of net shipments of rolled steel products, by product, monthly 2007	7
1-2 Disposition of net shipments of rolled steel products, by product, year-to-date 2007	9
1-3 Production of pig iron	10
1-4 Pig iron and scrap charged to steel furnaces	11
1-5 Production and shipments of steel, primary forms, monthly	11
1-6 Production and shipments of steel, primary forms, year-to-date	11
2 Steel pipe and tubing	12
2-1 Production and shipments, monthly 2007	12
2-2 Production and shipments, year-to-date 2007	13
3 Steel and specified wire products	14
3-1 Factory shipments, monthly	14
3-2 Factory shipments, year-to-date	14
Data quality, concepts and methodology	
Concepts, methodology and data quality	15
Definitions	17

Highlights

November 2007

- Monthly production of primary steel and pig iron fell 8.1% in November 2007 to 1,224,275 metric tonnes.
- In the same month, the total disposition of shipments of rolled steel products declined 5.9% to 1,296,532 metric tonnes.
- Between October 2007 and November 2007, production of steel pipe and tubing grew 2.0% to 234,840 metric tonnes.
- Total shipments of steel wire and specified wire products decreased 5.0% to 47,316 metric tonnes in November 2007.

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 2007

SDC No.	Steel primary forms	Rails and heavy structural sections	Intermediate structural sections	Light structural sections	Concrete reinforcing bars	Other hot rolled bars	Wire rods	Railway track material
metric tonnes								
November								
Domestic shipments								
11 Steel service centres and other wholesalers and warehouses	0	4,505	7,692	6,641	5,900	21,143	662	.
21 Motor vehicles and parts	279	.	.	.	.	12,095	0	.
22 Railway operating	0	.	.	.	.	0	0	.
23 Railroad cars and locomotives	.	329	.	.	.	.	.	.
24 Shipbuilding	0	.	.	.	.	.	.	.
31 Steel fabrication	0	1,174	1,094	4,235	35,697	14,345	0	.
32 Metal building systems	.	.	.	.	0	0	.	.
33 Contractors' products	.	0	0	.	79	646	284	.
34 Miscellaneous stamping and coating	0	25	169	484	.	1,262	.	.
41 Natural resources and extractive industries	.	.	0	14	1,778	13,009	0	.
51 Agricultural equipment	.	8	0	5	0	163	.	.
52 Non electrical machinery	.	0	0	0	.	369	0	.
53 Electrical machinery	.	.	.	.	.	0	.	.
54 Industrial packaging material	.	.	.	.	.	0	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	501	.	.	.	0	3,811	27,313	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	0	.	.	0	0	.	.
Total domestic shipments	780	6,041	8,955	11,379	43,454	66,843	28,259	0
Total domestic alloy shipments	0	.	.	.	.	24,100	0	.
Exports ² (for final sale)								
81 Exports to the United States	x	2,729	10,533	8,234	0	28,977	44,378	.
82 Exports to other countries (excluding United States)	0	216	47	.	0	16,270	3,339	0
Total disposition	x	8,986	19,535	19,613	43,454	112,090	75,976	0
Total alloy shipments	0	.	.	.	.	26,722	0	.
Producers interchange, for sale	x	.	0	.	.	1,289	36	.
Exports for conversion and return ²	.	.	.	.	.	0	.	.
Imports by producers (including conversion)	11,415	.	.	.	.	.	0	.

See footnotes 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 2007

SDC No.	Cold finished bars	Plates ³	Hot rolled sheets and coils	Cold reduced sheets and strip and other cold rolled and coated	Tin plate and tin free steel (T.F.S.)	Galvanized sheets including galvalume	Total, rolled steel products
metric tonnes							
November							
Domestic shipments							
11 Steel service centres and other wholesalers and warehouses	2,803	34,936	157,640	31,738	1,483	37,864	313,007
21 Motor vehicles and parts	1,967	0	57,109	12,858	0	58,305	142,613
22 Railway operating	.	0	.	.	.	.	0
23 Railroad cars and locomotives	.	289	0	.	.	.	618
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	118	4,169	5,640	13	.	777	67,262
32 Metal building systems	.	.	0	.	.	2,813	2,813
33 Contractors' products	63	85	5,820	2,168	.	30,324	39,469
34 Miscellaneous stamping and coating	298	0	1,254	3,786	.	17,939	25,217
41 Natural resources and extractive industries	59	0	0	0	.	0	14,860
51 Agricultural equipment	93	498	74	37	.	.	878
52 Non electrical machinery	0	379	202	0	.	0	950
53 Electrical machinery	.	.	.	2,635	.	416	3,051
54 Industrial packaging material	.	.	488	7,584	0	0	8,072
61 Pipes and tubes	44	0	179,296	2,560	.	2,880	184,780
62 Wire and wire products	408	.	687	93	.	34	32,847
63 Containers and closures	0	.	337	105	8,183	.	8,625
64 Appliances and utensils industries	.	.	.	2,837	.	1,416	4,253
70 Miscellaneous industries	151	.	.	.	.	.	151
Total domestic shipments	6,004	40,356	408,547	66,414	9,666	152,768	849,466
Total domestic alloy shipments	226	0	.	0	.	.	24,326
Exports ² (for final sale)							
81 Exports to the United States	6,544	18,384	94,033	x	11,701	37,490	368,373
82 Exports to other countries (excluding United States)	.	2,229	35,800	3,108	968	16,716	78,693
Total disposition	12,548	60,969	538,380	x	22,335	206,974	1,296,532
Total alloy shipments	226	0	.	0	.	.	26,948
Producers interchange, for sale	0	.	2,730	x	.	.	55,748
Exports for conversion and return ²	.	.	0	0	.	0	0
Imports by producers (including conversion)	.	2,086	15,879	18,343	.	0	47,723

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

2. These data include exports reported by steel producers only and are not the same as published in the Exports by commodities, catalogue number 65-004-XPB.

3. 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 2007

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	2,605	38,928	88,348	74,709	41,670	211,458	13,922	.
21 Motor vehicles and parts	2,304	.	.	.	.	166,297	1,004	.
22 Railway operating	.	.	.	.	.	0	.	.
23 Railroad cars and locomotives	.	4,805	.	.	.	.	.	.
24 Shipbuilding	0	.	.	.	.	.	.	.
31 Steel fabrication	63	10,908	17,258	43,528	373,742	167,613	0	.
32 Metal building systems	.	.	.	.	0	0	.	.
33 Contractors' products	.	39	0	.	1,395	3,851	1,396	.
34 Miscellaneous stamping and coating	0	320	5,026	4,278	.	17,840	.	.
41 Natural resources and extractive industries	.	.	89	50	12,394	114,914	0	.
51 Agricultural equipment	.	20	24	97	20	2,573	.	.
52 Non electrical machinery	.	64	0	0	.	3,826	0	.
53 Electrical machinery	.	.	.	.	.	0	.	.
54 Industrial packaging material	.	.	.	.	.	0	.	.
61 Pipes and tubes	.	.	.	.	.	0	.	.
62 Wire and wire products	4,063	.	.	.	0	31,839	274,852	.
63 Containers and closures	.	.	.	.	.	.	.	.
64 Appliances and utensils industries	.	.	.	.	.	.	.	.
70 Miscellaneous industries	.	92	.	.	0	4,880	.	.
Total domestic shipments	9,035	55,176	110,745	122,662	429,221	725,091	291,174	0
Total domestic alloy shipments	63	.	.	.	.	234,275	0	.
Exports ² (for final sale)								
81 Exports to the United States	x	27,251	129,139	92,592	13,092	390,779	411,700	.
82 Exports to other countries (excluding United States)	x	798	1,603	.	0	193,868	12,869	0
Total disposition	x	83,225	241,487	215,254	442,313	1,309,738	715,743	0
Total alloy shipments	63	.	.	.	.	369,917	0	.
Producers interchange, for sale	x	.	0	.	.	13,237	251	.
Exports for conversion and return ²	.	.	.	.	.	0	.	.
Imports by producers (including conversion)	42,411	.	.	.	.	.	0	.

See footnotes 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 2007

SDC No.	Cold finished bars	Plates ³	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	29,480	360,010	1,687,063	396,925	22,577	432,717	3,400,412
21 Motor vehicles and parts	22,480	75	734,869	152,317	13	616,251	1,695,610
22 Railway operating	.	0	.	.	.	.	0
23 Railroad cars and locomotives	.	8,713	-19	.	.	.	13,499
24 Shipbuilding	.	.	.	.	.	.	0
31 Steel fabrication	955	59,193	56,338	366	.	9,155	739,119
32 Metal building systems	.	.	0	.	.	32,888	32,888
33 Contractors' products	1,077	647	50,281	24,700	.	362,327	445,713
34 Miscellaneous stamping and coating	2,783	4,138	57,790	53,443	.	191,461	337,079
41 Natural resources and extractive industries	572	12	28	0	.	1	128,060
51 Agricultural equipment	1,142	3,469	4,553	766	.	.	12,664
52 Non electrical machinery	321	2,713	3,008	0	.	1,410	11,342
53 Electrical machinery	.	.	.	36,472	.	14,592	51,064
54 Industrial packaging material	.	.	14,207	102,674	262	0	117,143
61 Pipes and tubes	679	0	1,804,410	28,987	.	38,196	1,872,272
62 Wire and wire products	4,547	.	10,081	1,124	.	297	326,803
63 Containers and closures	402	.	9,099	2,103	103,269	.	114,873
64 Appliances and utensils industries	.	.	.	62,734	.	29,837	92,571
70 Miscellaneous industries	2,611	.	.	.	.	.	7,583
Total domestic shipments	67,049	438,970	4,431,708	862,611	126,121	1,729,132	9,398,695
Total domestic alloy shipments	2,393	0	.	0	.	.	236,731
Exports ² (for final sale)							
81 Exports to the United States	76,932	214,617	972,262	x	129,429	x	3,597,721
82 Exports to other countries (excluding United States)	.	21,194	141,079	x	13,441	x	679,876
Total disposition	143,981	674,781	5,545,049	x	268,991	2,263,334	13,676,292
Total alloy shipments	1,472	0	.	0	.	.	371,452
Producers interchange, for sale	83	.	45,835	x	.	.	826,282
Exports for conversion and return ²	.	.	0	0	.	0	0
Imports by producers (including conversion)	.	38,257	107,864	67,471	.	0	256,003

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

2. These data include exports reported by steel producers only and are not the same as published in the Exports by commodities, catalogue number 65-004-XPB.

3. Effective January 2000, producers have changed the way they report hot rolled products. The result is a change in definitions. Plates including plates for pipes and tubes becomes plates. Hot rolled sheet and strip becomes hot rolled sheets and coils and now includes all hot rolled flat products in coils, regardless of thickness.

Table 1-3

Steel primary forms and pig iron — Production of pig iron

	November		Year-to-date	
	2006	2007	2006	2007
metric tonnes				
Production of pig iron	539,591	705,754	7,666,441	7,836,265

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

	November		Year-to-date	
	2006	2007	2006	2007
	metric tonnes			
Pig iron including pre-reduced iron	522,235	682,858	8,079,543	8,187,506
Scrap				
Own make	129,135	157,924	1,871,145	1,738,649
Purchased	469,384	498,095	5,655,548	5,816,504
Total, pig iron and scrap products	1,120,754	1,338,877	15,606,236	15,742,659

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

	Production		Shipments	
	2006	2007	2006	2007
	metric tonnes			
November				
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	477,328	508,595	76,598	x
Basic oxygen furnace	551,129	715,680	..	x
Steel, primary forms - Total	1,028,457	1,224,275	76,598	164,921
Included in "Steel primary forms total" above				
Continuous cast steel	1,011,597	1,208,445	72,930	151,079

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

	Production		Shipments	
	2006	2007	2006	2007
	metric tonnes			
Steel, primary forms (carbon and alloy including continuous cast steel)				
Electric furnace	5,900,826	5,897,971	x	x
Basic oxygen furnace	8,343,220	8,417,632	x	x
Steel, primary forms - Total	14,244,046	14,315,603	x	1,628,070
Included in "Steel primary forms total" above				
Continuous cast steel	14,064,687	14,146,629	x	1,546,917

Table 2-1
Steel pipe and tubing — Production and shipments, monthly 2007

	Production	Shipments for sale		
		Domestic shipments ¹	Exports ²	Total shipments
	metric tonnes			
November				
Total, pipe and tubing	234,840	118,964	114,095	233,059
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	4,938	3,369	834	4,203
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	367	4,713	0	4,713
over 16" (40.64 cm) outside diameter	62,433	201	45,607	45,808
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	14,978	10,876	9,083	19,959
over 16" (40.64 cm) periphery	43,362	15,195	27,885	43,080
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	5,404	2,076	3,453	5,529
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	769	1,099	636	1,735
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	2,854	612	894	1,506
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	568	445	19	464
over 16" (40.64 cm) outside diameter	1,850	999	147	1,146
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	23,635	18,009	6,596	24,605
Mechanical tubing, welded, produced from cold rolled	12,580	4,571	3,257	7,828
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	50,269	48,083	11,178	59,261
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	9,077	6,801	3,601	10,402
Other tubular products	1,756	1,915	905	2,820

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

2. As reported by respondents to this survey. For total exports see Exports by commodity, catalogue number 65-004-XPB.

Table 2-2
Steel pipe and tubing — Production and shipments, year-to-date 2007

	Production	Shipments for sale		Total shipments
		Domestic shipments ¹	Exports ²	
metric tonnes				
Year-to-date				
Total, pipe and tubing	2,421,784	1,337,555	1,225,979	2,563,534
Pipe welded and seamless				
Line pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	x	35,404	1,192	36,596
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	38,837	50,484	7,063	57,547
over 16" (40.64 cm) outside diameter	514,447	126,218	421,913	548,131
Hollow structural sections				
up to and including 16" (40.64 cm) periphery	227,184	120,750	114,032	234,782
over 16" (40.64 cm) periphery	544,701	176,446	359,827	536,273
Standard pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	47,118	22,500	31,892	54,392
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	14,715	18,255	8,646	26,901
Other pipe				
up to and including 4 1/2" (11.43 cm) outside diameter	24,003	7,857	3,677	11,534
over 4 1/2" (11.43 cm) up to and including 16" (40.64 cm) outside diameter	20,588	12,845	233	13,078
over 16" (40.64 cm) outside diameter	23,368	x	x	12,883
Mechanical tubing				
Mechanical tubing, welded, produced from hot rolled	295,175	202,509	86,577	289,086
Mechanical tubing, welded, produced from cold rolled	158,757	59,559	34,708	94,267
Oil country tubular goods				
Oil country tubular goods, welded and seamless, casing (including coupling)	410,408	x	x	x
Oil country tubular goods, welded and seamless, oilwell tubing (including coupling)	64,869	x	x	x
Other tubular products	x	x	x	x

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

2. As reported by respondents to this survey. For total exports see Exports by commodity, catalogue number 65-004-XPB.

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

	Shipments				Production
	2006	2007			
		Total shipments	Domestic shipments	Exports ²	
	metric tonnes				
November					
Barbed wire	180	x	x	x	.
Uncoated steel wire	16,238	17,826	10,147	7,679	.
Galvanized steel wire	8,971	14,325	6,382	7,943	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	730	760	x	x	865
Wire mesh, bright or uncoated and galvanized	4,915	5,414	x	x	5,503
Wire rope	2,745	3,589	x	x	3,507
Nails and staples	x	x	x	2,143	x
Wire roofing nails of a length of 25 mm or more, iron or steel	2,341	3,807	1,664	2,143	3,980
Staples of iron or steel	x	x	x	0	x
All other wire products	2,168	1,140	1,138	2	1,365
Grand total	38,507	47,316	27,442	19,874	.

1. Totals may not add due to rounding.

2. As reported by respondents to this survey. For total exports see Exports by commodity, catalogue number 65-004-XPB.

Table 3-2
Steel and specified wire products — Factory shipments 1, year-to-date

	Shipments				Production
	2006	2007			
		Total shipments	Domestic shipments	Exports ²	
	metric tonnes				
Barbed wire	x	x	x	x	.
Uncoated steel wire	201,573	193,887	109,804	84,083	.
Galvanized steel wire	143,023	144,650	60,553	84,097	.
Other coated steel wire	x	x	x	x	.
Farm fencing and wire chain link fabric	10,823	x	x	x	x
Wire mesh, bright or uncoated and galvanized	51,369	51,931	x	x	53,770
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	48,218	x	x	x
Staples of iron or steel	x	x	x	x	x
All other wire products	x	x	x	x	x
Grand total	525,243	511,293	295,409	215,884	.

1. Totals may not add due to rounding.

2. As reported by respondents to this survey. For total exports see Exports by commodity, catalogue number 65-004-XPB.

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.

More detailed information is available from the Annual Survey of Manufactures and Logging, CANSIM Table 301-0003. Specific enquiries should be directed to: The Marketing and Dissemination Section, Manufacturing, Construction and Energy Division, Statistics Canada, Ottawa, Ontario, K1A 0T6 (Telephone: 1-866-873-8789 or (613) 951-9497; Fax: (613) 951-9499; Internet: manufact@statcan.ca).