

Monthly Survey of Manufacturing, May 2023

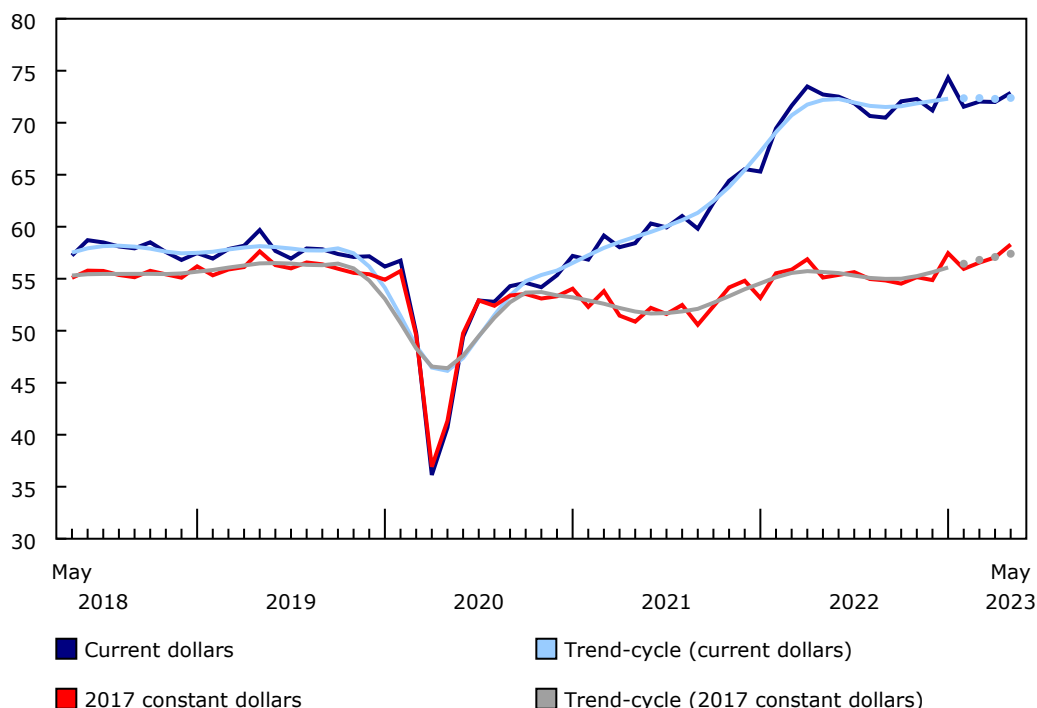
Released at 8:30 a.m. Eastern time in *The Daily*, Friday, July 14, 2023

Manufacturing sales increased 1.2% to \$72.9 billion in May, following a 0.1% decline in April, mainly driven by higher sales of chemical products (+4.8%), motor vehicles (+4.8%) and machinery (+4.2%). Sales in primary metal manufacturing decreased the most (-6.9%). Year over year, total sales were up 0.2% in May.

Total sales in constant dollars rose 2.2% in May, indicating a higher volume of goods sold. The [Industrial Product Price Index](#) fell 1.0% in May.

Chart 1 Manufacturing sales

billions of dollars



Note(s): Data are seasonally adjusted. The higher variability associated with the trend-cycle estimates is indicated with a dotted line on the chart for the current reference month and the three previous months. For more information, see the Note to readers.

Source(s): Tables [16-10-0047-01](#) and [16-10-0013-01](#).

Sales increase in chemical manufacturing

Following a 3.2% increase in April, sales of chemical products rose 4.8% to \$5.9 billion in May, mostly on higher sales of pesticide, fertilizer, and other agricultural chemical products in Alberta and pharmaceutical and medicine products in Ontario. Prices for pesticide, fertilizer and other agricultural chemical products increased 4.3% in May, following four consecutive monthly declines, and contributed to the gain. [Exports of basic chemical products](#) rose 2.0% in May. Year over year, total sales of chemical products increased 0.8% in May.

Motor vehicle sales rose 4.8% to \$4.9 billion in May, following a 3.6% decline in April. Nearly all auto manufacturers in Ontario sold more motor vehicles in May, leading to higher exports of motor vehicles and parts (+3.8%). As semiconductor chip supply continues to improve in 2023, the number of motor vehicles manufactured and sold in Ontario increased significantly in 2023 compared with the same months a year earlier.



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Sales of primary metals decrease the most

Sales of primary metals fell 6.9% to \$5.2 billion in May, mainly on lower volume as real sales declined 6.7%. Weakening demand led manufacturing activities around the world to contract, notably in China, resulting in lower sales in the non-ferrous metal (except aluminum) production and processing industry (-15.3%). Prices of primary non-ferrous metals also declined in May (-2.8%). Total primary metal sales in May were the lowest since June 2021 and fell 16.4% on a year-over-year basis.

Sales rise in five provinces, led by Ontario and Alberta

Manufacturing sales increased in five provinces in May, led by Ontario and Alberta. Quebec posted the largest decline.

Ontario sales rose 3.2% to \$32.9 billion in May, mainly on higher sales of chemical products (+15.2%), motor vehicle parts (+6.2%) and motor vehicles (+4.2%). The motor vehicle and motor vehicle parts industries also contributed to the higher total sales in Toronto (+5.4%) and Windsor (+10.6%).

In Alberta, sales increased 3.9% to \$9.4 billion in May, mainly on higher sales of petroleum and coal (+6.8%) and food products (+2.8%). Despite declines in prices of refined petroleum energy products (including liquid biofuels) since January 2023, sales of petroleum and coal products have been trending upward since March 2023. On a year-over-year basis, total sales in Alberta were down 0.4% in May.

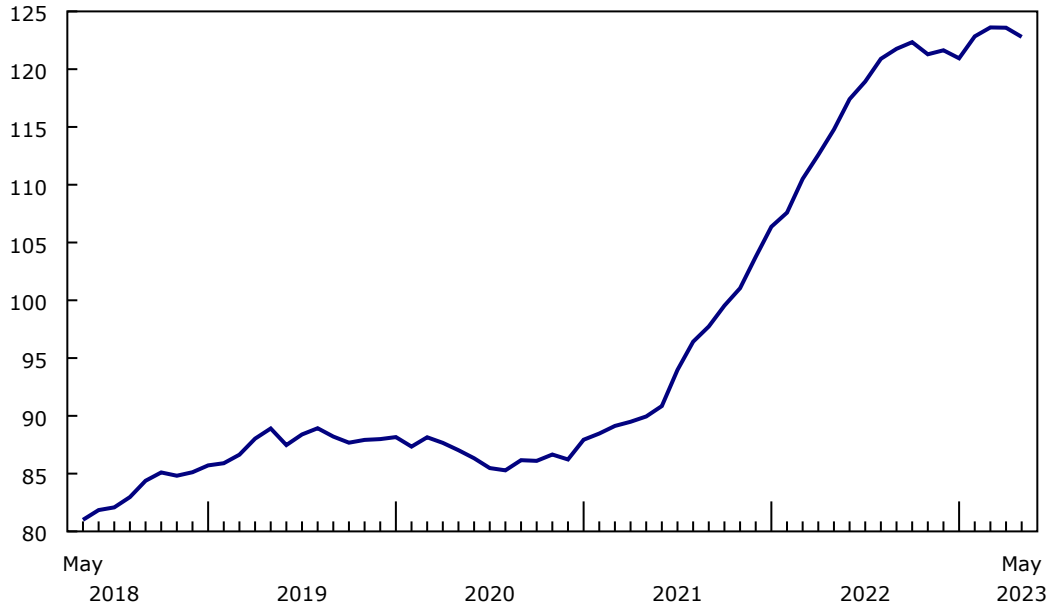
In Quebec, sales fell 2.5% to \$17.7 billion in May, primarily driven by a 13.2% decrease in primary metal manufacturing. Slowdowns in global economic activities contributed to the decline. With the monthly decrease in May, total sales in Quebec were 4.0% lower compared with May of last year. Despite the decline in total sales in Quebec, Montréal total sales rose 3.0% to \$8.8 billion in May, mainly on higher sales of chemical products and petroleum and coal products.

Total inventories decline

Total inventory levels declined 0.6% to \$122.8 billion in May on lower inventories in 11 of 21 manufacturing industries, led by the food product (-3.5%), petroleum and coal product (-3.0%) and motor vehicle parts (-8.8%) industries. Lower raw materials (-1.0%) and finished product inventories (-0.8%) were responsible for the decline. On a year-over-year basis, total inventories were still up 7.0% in May.

Chart 2
Inventory levels decline

billions of dollars

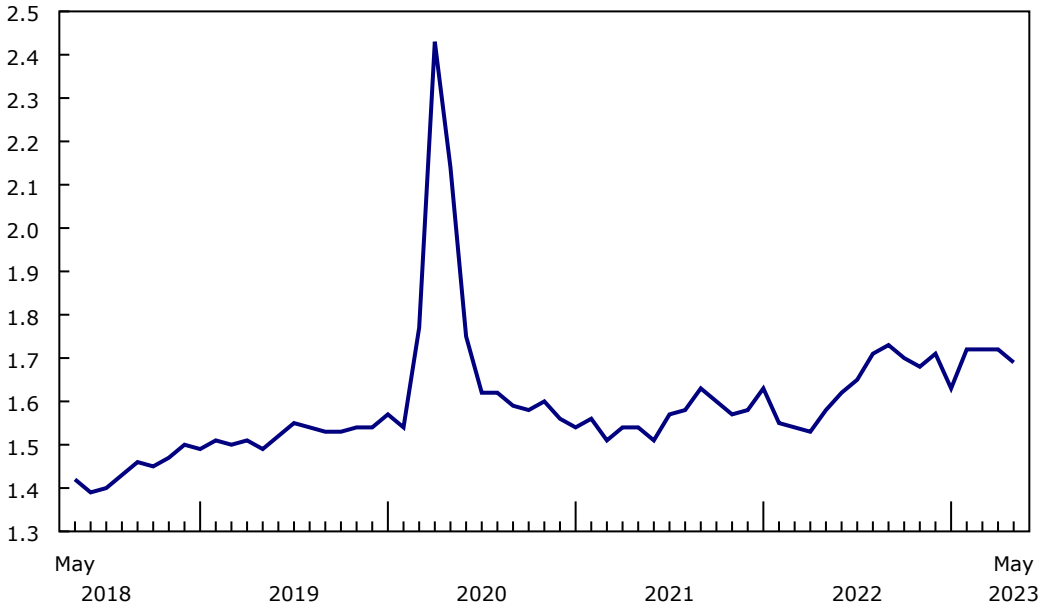


Note(s): Data are seasonally adjusted.
Source(s): Table [16-10-0047-01](#).

The inventory-to-sales ratio decreased from 1.72 in April to 1.69 in May. This ratio measures the time, in months, that would be required to exhaust inventories if sales were to remain at their current level.

Chart 3 The inventory-to-sales ratio decreases

ratio



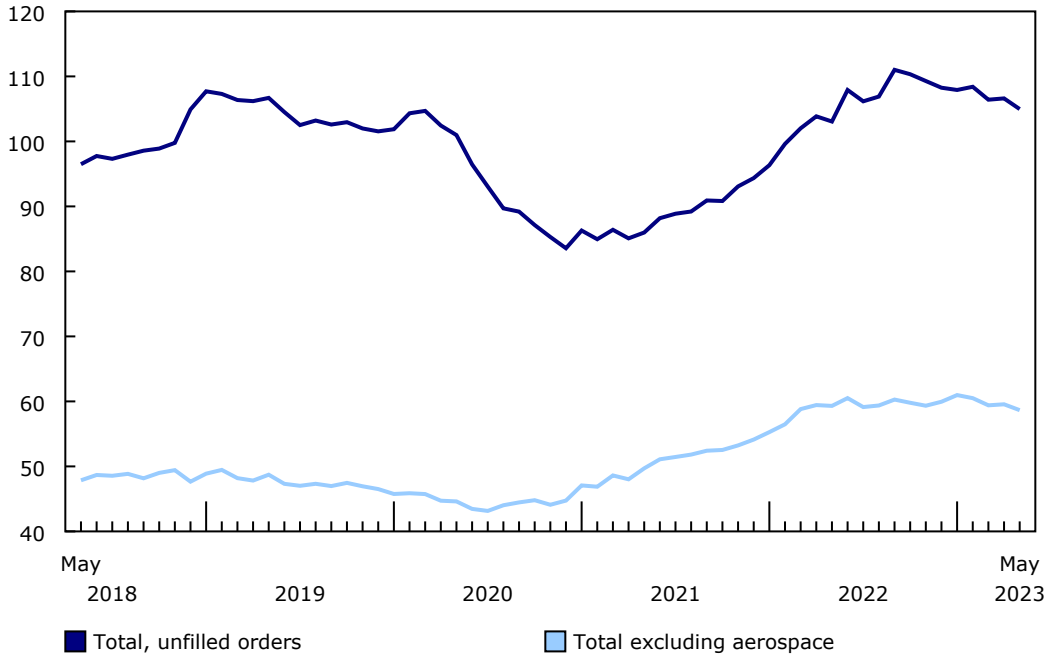
Note(s): Data are seasonally adjusted.
Source(s): Table [16-10-0047-01](#).

Unfilled orders decline

Total unfilled orders decreased 1.5% to \$105.0 billion in May, the lowest level since May 2022. The aerospace product and parts industry contributed the most to the decline (-1.6%).

Chart 4
Unfilled orders decline

billions of dollars

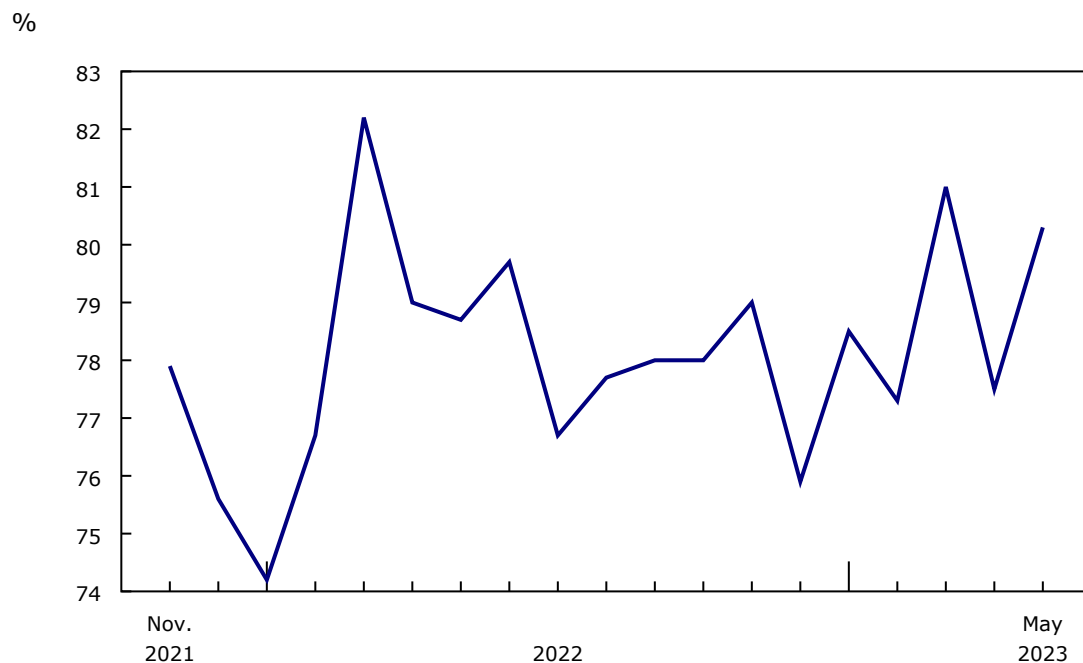


Note(s): Data are seasonally adjusted.
Source(s): Table 16-10-0047-01.

Capacity utilization rate increases

The capacity utilization rate (not seasonally adjusted) for the total manufacturing sector rose from 77.5% in April to 80.3% in May due to higher production. The gains were noticeable in transportation equipment (+7.3 percentage points), non-metallic mineral product (+8.8 percentage points) and chemical (+4.5 percentage points) manufacturing.

Chart 5
The capacity utilization rate increases



Note(s): Data are not seasonally adjusted.
Source(s): Table 16-10-0012-01.

Table 1
Manufacturing: Principal statistics – Seasonally adjusted

	May 2022	April 2023 ^r	May 2023 ^p	April to May 2023	May 2022 to May 2023
	millions of dollars			% change ¹	
Manufacturing sales (current dollars)	72,715	71,993	72,874	1.2	0.2
Manufacturing sales (2017 constant dollars)	55,113	57,052	58,292	2.2	5.8
Manufacturing sales (current dollars) excluding motor vehicles, parts and accessories	66,882	64,129	64,603	0.7	-3.4
Inventories	114,780	123,587	122,795	-0.6	7.0
Unfilled orders	103,058	106,614	104,972	-1.5	1.9
New orders	71,916 ^E	72,191 ^E	71,231 ^E	-1.3	-1.0
Inventory-to-sales ratio ²	1.58	1.72	1.69

^r revised

^p preliminary

... not applicable

^E use with caution

1. Percentage change calculated at thousands of dollars for current dollars and millions of dollars for constant dollars.

2. The inventory-to-sales ratio measures the time in months that it would take to exhaust inventories if sales were to remain at the current rate.

Source(s): Tables 16-10-0047-01 and 16-10-0013-01.

Table 2
Manufacturing sales by industry – Seasonally adjusted

	May 2022	April 2023 ^r	May 2023 ^p	April to May 2023	May 2022 to May 2023
	millions of dollars			% change ¹	
Food manufacturing	11,669	12,437	12,327	-0.9	5.6
Beverage and tobacco product	1,538	1,515	1,509	-0.4	-1.9
Textile mills	162	161	167	3.3	3.1
Textile product mills	162	143	164	14.9	1.5
Apparel manufacturing	259	277	264	-4.7	1.9
Leather and allied product	31	31	33	8.9	6.5
Wood product	4,369	2,845	2,824	-0.7	-35.4
Paper manufacturing	2,815	2,775	2,704	-2.6	-3.9
Printing and related support activities	734	810	824	1.7	12.3
Petroleum and coal product	11,390	9,024	9,042	0.2	-20.6
Chemical	5,868	5,644	5,915	4.8	0.8
Plastics and rubber products	3,555	3,297	3,475	5.4	-2.2
Non-metallic mineral product	1,535	1,666	1,774	6.5	15.5
Primary metal	6,239	5,605	5,218	-6.9	-16.4
Fabricated metal product	4,347	4,556	4,623	1.5	6.3
Machinery	4,022	4,586	4,778	4.2	18.8
Computer and electronic product	1,598	1,602	1,600	-0.2	0.1
Electrical equipment, appliance and component	1,102	1,181	1,278	8.3	16.0
Transportation equipment	8,549	11,199	11,609	3.7	35.8
Motor vehicle	3,262	4,653	4,877	4.8	49.5
Motor vehicle body and trailer	389	500	494	-1.3	27.0
Motor vehicle parts	2,570	3,211	3,394	5.7	32.1
Aerospace product and parts	1,650	2,019	2,019	0.0	22.4
Railroad rolling stock	159	178	174	-2.3	9.2
Ship and boat building	241	261	243	-7.0	0.8
Furniture and related product	1,339	1,279	1,326	3.7	-1.0
Miscellaneous manufacturing	1,433	1,361	1,420	4.3	-0.9
Non-durable goods industries	38,181	36,114	36,424	0.9	-4.6
Durable goods industries	34,533	35,879	36,449	1.6	5.5

^r revised

^p preliminary

1. Percentage change calculated at thousands of dollars.

Source(s): Table 16-10-0047-01.

Table 3
Manufacturing sales: Provinces and territories – Seasonally adjusted

	May 2022	April 2023 ^r	May 2023 ^p	April to May 2023	May 2022 to May 2023
	millions of dollars			% change ¹	
Canada	72,715	71,993	72,874	1.2	0.2
Newfoundland and Labrador	410	289	217	-24.8	-47.0
Prince Edward Island	260	280	264	-5.8	1.7
Nova Scotia	1,004	874	905	3.6	-9.9
New Brunswick	2,472	1,955	1,930	-1.3	-21.9
Quebec	18,429	18,127	17,683	-2.4	-4.0
Ontario	30,651	31,873	32,896	3.2	7.3
Manitoba	2,076	2,185	2,211	1.2	6.5
Saskatchewan	2,190	1,969	2,006	1.9	-8.4
Alberta	9,389	9,005	9,356	3.9	-0.4
British Columbia	5,826	5,432	5,401	-0.6	-7.3
Yukon	3	4	4	18.3	35.4
Northwest Territories and Nunavut	4	2	2	0.6	-61.8

^r revised

^p preliminary

1. Percentage change calculated at thousands of dollars.

Source(s): Tables [16-10-0047-01](#) and [16-10-0048-01](#).

Table 4
Manufacturing sales by selected census metropolitan area – Seasonally adjusted

	May 2022	April 2023 ^r	May 2023 ^p	April to May 2023	May 2022 to May 2023
	millions of dollars			% change ¹	
Halifax	283	271	269	-0.7	-4.9
Québec	2,410	1,802	1,869	3.7	-22.4
Sherbrooke	249	275	287	4.3	15.5
Montréal	8,192	8,558	8,816	3.0	7.6
Ottawa–Gatineau, Ontario and Quebec	813	871	870	-0.2	6.9
Toronto	11,613	13,025	13,731	5.4	18.2
Hamilton	2,159	2,016	1,972	-2.2	-8.6
Kitchener–Cambridge–Waterloo	2,211	2,585	2,769	7.1	25.2
Windsor	1,464	1,729	1,912	10.6	30.6
Winnipeg	1,019	1,124	1,147	2.0	12.5
Regina	932	791	751	-5.1	-19.4
Saskatoon	506	547	597	9.2	18.0
Calgary	1,247	1,315	1,328	1.0	6.5
Edmonton	4,945	4,532	4,908	8.3	-0.8
Vancouver	3,030	2,942	3,050	3.7	0.6

^r revised

^p preliminary

1. Percentage change calculated at thousands of dollars.

Note(s): Data in this table are seasonally adjusted.

Source(s): Table [16-10-0011-01](#).

Table 5
Manufacturing capacity utilization rates by industry – Unadjusted

	May 2022	April 2023 ^r	May 2023 ^p	April to May 2023	May 2022 to May 2023
	%			percentage point change	
Manufacturing	78.7	77.5	80.3	2.8	1.6
Non-durable goods industries	81.2	77.7	79.0	1.3	-2.2
Food manufacturing	80.0 ^E	79.4 ^E	80.5 ^E	1.1	0.5
Beverage and tobacco product manufacturing	81.8	68.4	71.5	3.1	-10.3
Beverage manufacturing	83.3	69.7	71.8	2.1	-11.5
Tobacco manufacturing	74.1	61.9	69.5	7.6	-4.6
Textile mills	80.4	81.7	83.7	2.0	3.3
Textile product mills	79.0 ^E	67.8 ^E	74.5 ^E	6.7	-4.5
Apparel manufacturing	79.2 ^E	86.4 ^E	83.6 ^E	-2.8	4.4
Leather and allied product manufacturing	67.3	78.7	77.1 ^E	-1.6	9.8
Paper manufacturing	84.5	81.3	82.7	1.4	-1.8
Printing and related support activities	76.3 ^E	72.3 ^E	78.0 ^E	5.7	1.7
Petroleum and coal products manufacturing	85.0	84.7	83.2	-1.5	-1.8
Chemical manufacturing	79.8 ^E	73.5	78.0 ^E	4.5	-1.8
Plastics and rubber products manufacturing	75.3 ^E	66.4 ^E	69.3 ^E	2.9	-6.0
Plastic product manufacturing	75.8 ^E	66.1 ^E	68.6 ^E	2.5	-7.2
Rubber product manufacturing	72.7	67.8	74.0	6.2	1.3
Durable goods industries	76.3	77.3	81.5	4.2	5.2
Wood product manufacturing	84.4	77.3	79.1 ^E	1.8	-5.3
Non-metallic mineral product manufacturing	78.1 ^E	68.5 ^E	77.3 ^E	8.8	-0.8
Primary metal manufacturing	77.2	73.8	75.0	1.2	-2.2
Fabricated metal product manufacturing	75.6 ^E	74.9 ^E	80.4 ^E	5.5	4.8
Machinery manufacturing	80.0 ^E	80.3 ^E	81.8 ^E	1.5	1.8
Computer and electronic product manufacturing	73.4	78.1 ^E	79.9 ^E	1.8	6.5
Electrical equipment, appliance and component manufacturing	87.7 ^E	82.7 ^E	85.6 ^E	2.9	-2.1
Transportation equipment manufacturing	67.7	79.8	87.1	7.3	19.4
Furniture and related product manufacturing	85.7 ^E	78.9 ^E	84.0 ^E	5.1	-1.7
Miscellaneous manufacturing	81.4 ^E	76.0	76.4 ^E	0.4	-5.0

^r revised

^p preliminary

^E use with caution

Note(s): Data in this table are not seasonally adjusted.

Source(s): Table 16-10-0012-01.

Sustainable development goals

On January 1, 2016, the world officially began implementing the [2030 Agenda for Sustainable Development](#)—the United Nations' transformative plan of action that addresses urgent global challenges over the following 15 years. The plan is based on 17 specific sustainable development goals.

The Monthly Survey of Manufacturing is an example of how Statistics Canada supports the reporting on the global sustainable development goals. This release will be used to help measure the following goal:



Note to readers

Monthly data in this release are seasonally adjusted and are expressed in current dollars, unless otherwise specified.

Seasonally adjusted data are data that have been modified to eliminate the effect of seasonal and calendar influences to allow for more meaningful comparisons of economic conditions from period to period. For more information on seasonal adjustment, see [Seasonally adjusted data – Frequently asked questions](#).

Trend-cycle estimates are included in selected charts as a complement to the seasonally adjusted series. These data represent a smoothed version of the seasonally adjusted time series and provide information on longer-term movements, including changes in direction underlying the series. For information on trend-cycle data, see [Trend-cycle estimates – Frequently asked questions](#).

Both seasonally adjusted data and trend-cycle estimates are subject to revision as additional observations become available. These revisions could be large and could even lead to a reversal of movement, especially for reference months near the end of the series or during periods of economic disruption.

Non-durable goods industries include food; beverage and tobacco products; textile mills; textile product mills; apparel; leather and allied products; paper; printing and related support activities; petroleum and coal products; chemicals; and plastics and rubber products.

Durable goods industries include wood products; non-metallic mineral products; primary metals; fabricated metal products; machinery; computer and electronic products; electrical equipment, appliances and components; transportation equipment; furniture and related products; and miscellaneous manufacturing.

Production-based industries

For the aerospace and shipbuilding industries, the value of production is used instead of the value of sales of goods manufactured. The value of production is calculated by adjusting monthly sales of goods manufactured by the monthly change in inventories of goods in process and finished products manufactured. The value of production is used because of the extended period of time that it normally takes to manufacture products in these industries.

Unfilled orders are a stock of orders that will contribute to future sales, assuming that the orders are not cancelled.

New orders are those received, whether sold in the current month or not. New orders are measured as the sum of sales for the current month plus the change in unfilled orders from the previous month to the current month.

Manufacturers reporting sales, inventories and unfilled orders in US dollars

Some Canadian manufacturers report sales, inventories and unfilled orders in US dollars. These data are then converted to Canadian dollars as part of the data production cycle.

For sales, based on the assumption that they occur throughout the month, the average monthly exchange rate for the reference month established by the Bank of Canada is used for the conversion. The monthly average exchange rate is available in table 33-10-0163-01. Inventories and unfilled orders are reported at the end of the reference period. For most respondents, the daily average exchange rate on the last working day of the month is used for the conversion of these variables.

However, some manufacturers choose to report their data as of a day other than the last working day of the month. In these instances, the daily average exchange rate on the day selected by the respondent is used. Note that because of exchange rate fluctuations, the daily average exchange rate on the day selected by the respondent can differ from both the exchange rate on the last working day of the month and the monthly average exchange rate. Daily average exchange rate data are available in table 33-10-0036-01.

Revision policy

Each month, the Monthly Survey of Manufacturing releases preliminary data for the reference month and revised data for the previous three months. Revisions are made to reflect new information provided by respondents and updates to administrative data.

Once a year, a revision project is undertaken to revise multiple years of data.

Real-time data tables

Real-time data tables 16-10-0118-01, 16-10-0119-01, 16-10-0014-01 and 16-10-0015-01 will be updated on July 21.

Next release

Data from the Monthly Survey of Manufacturing for June will be released on August 15.

Available tables: [16-10-0011-01](#) to [16-10-0013-01](#) , [16-10-0047-01](#) and [16-10-0048-01](#).

Definitions, data sources and methods: survey number [2101](#).

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca) or Media Relations (statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca).