

# Monthly Survey of Manufacturing, September 2023

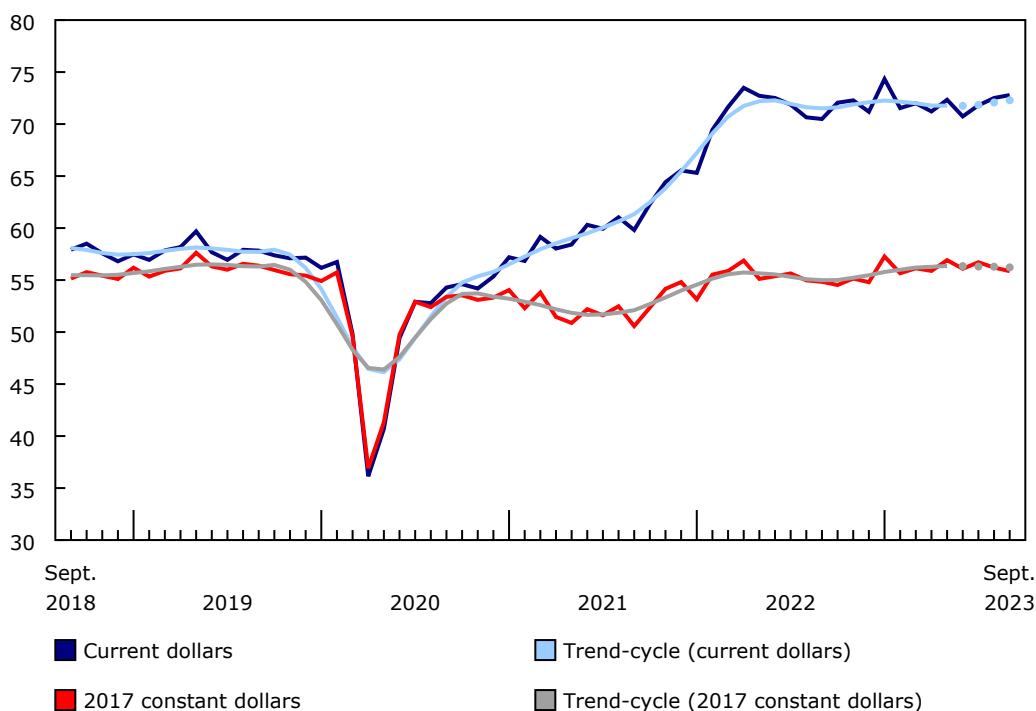
Released at 8:30 a.m. Eastern time in *The Daily*, Wednesday, November 15, 2023

Manufacturing sales rose 0.4% to \$72.8 billion in September, on higher sales in 10 of 21 subsectors, led by the petroleum and coal product (+6.3%), wood (+2.9%), and machinery (+1.3%) subsectors. The gains were partially offset by lower sales of chemicals (-1.8%) and motor vehicle parts (-2.6%). On a quarterly basis, total sales rose 1.3% in the third quarter of 2023, mainly on higher sales of petroleum and coal (+8.5%) and food (+3.6%) products. On a year-over-year basis, sales increased 3.3% in September.

Total manufacturing sales in constant dollars declined 0.6% in September, indicating a lower volume of goods sold. The [Industrial Product Price Index](#) was up 0.4% in September.

## 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 of petroleum and coal products increase the most

Sales of petroleum and coal products rose 6.3% to \$9.1 billion in September, the highest level since January 2023. The gain was mainly attributable to higher prices of refined petroleum energy products (including liquid biofuels) (+3.6%) and to a lesser extent, higher volumes (+0.7%). Prices of crude oil and bitumen rose 10.1% in September,



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partly as Saudi Arabia and Russia announced that they had extended a voluntary oil production cut through the end of the year. Russia also put in place a ban on exports of gasoline and diesel fuel, further impacting prices of refinery energy products.

On a quarterly basis, petroleum and coal sales increased 8.5% in the third quarter of 2023, following two consecutive quarterly declines. Meanwhile, exports of refined petroleum energy products (including liquid biofuels) decreased 11.5% month over month in September.

Wood product sales increased 2.9% to \$3.1 billion in September, the fourth consecutive monthly gain. On a quarterly basis, wood product sales rose 6.5% in the third quarter of 2023, following five consecutive quarterly declines. The wildfires in 2023 impacted production in many sawmills across Canada. The prices of logs, pulpwood and other forestry products have been trending upward since June 2023, rising 3.5% in September. This impacted the price of lumber and other sawmill products which rose 0.4% in September while their exports posted the fifth consecutive monthly gain, up 1.0% in the month.

Sales of chemicals declined 1.8% to \$5.5 billion in September, mainly on lower sales of resin, synthetic rubber, and artificial and synthetic fibres and filaments (-24.8%) and basic chemicals (-9.7%). Maintenance shutdowns in some major petrochemical and resin plants in Alberta and Ontario were mainly responsible for the declines. On a quarterly basis, sales of chemical products fell 3.5% in the third quarter of 2023, while year over year, they were down 4.5% in September.

## **Sales increase in five provinces, led by Alberta and Quebec**

Manufacturing sales rose in five provinces in September, led by Alberta and Quebec. Ontario posted the largest decrease.

In Alberta, sales rose 4.3% to \$9.1 billion in September, the third consecutive monthly increase, led by the petroleum and coal (+13.4%) and fabricated metal (+14.4%) product subsectors. Sales of chemicals posted the largest decrease, down 5.6% to \$1.2 billion in September. Meanwhile, the petroleum and coal subsector mainly contributed to an 8.9% increase in total sales in Edmonton in September. On a quarterly basis, total sales in Alberta rose 6.3% to \$26.1 billion in the third quarter of 2023.

Sales in Quebec increased 0.7% to \$17.7 billion in September, mostly on higher sales of petroleum and coal products (+10.7%) and production of aerospace products and parts (+5.8%). The gains were partially offset by an 11.6% decline in sales of machinery. With the increase in September, total sales in Quebec were up 1.9% in the third quarter of 2023 and increased 0.3% on a yearly basis in September. In Québec, total sales rose 5.8% to \$2.1 billion in September, mainly driven by higher sales of petroleum and coal products, while in Montréal, total sales were down 1.7%.

In Ontario, sales edged down 0.3% to \$32.9 billion in September, mainly on lower sales of motor vehicle parts (-2.4%) and fabricated metals (-3.4%). The decline in sales of motor vehicle parts in September followed significant sales posted for August. Exports of motor vehicle engines and motor vehicle parts fell 2.7%. On a quarterly basis, total sales in Ontario edged down 0.1% in the third quarter of 2023, while they were up 7.9% on a year-over-year basis in September.

## **Total inventories increase**

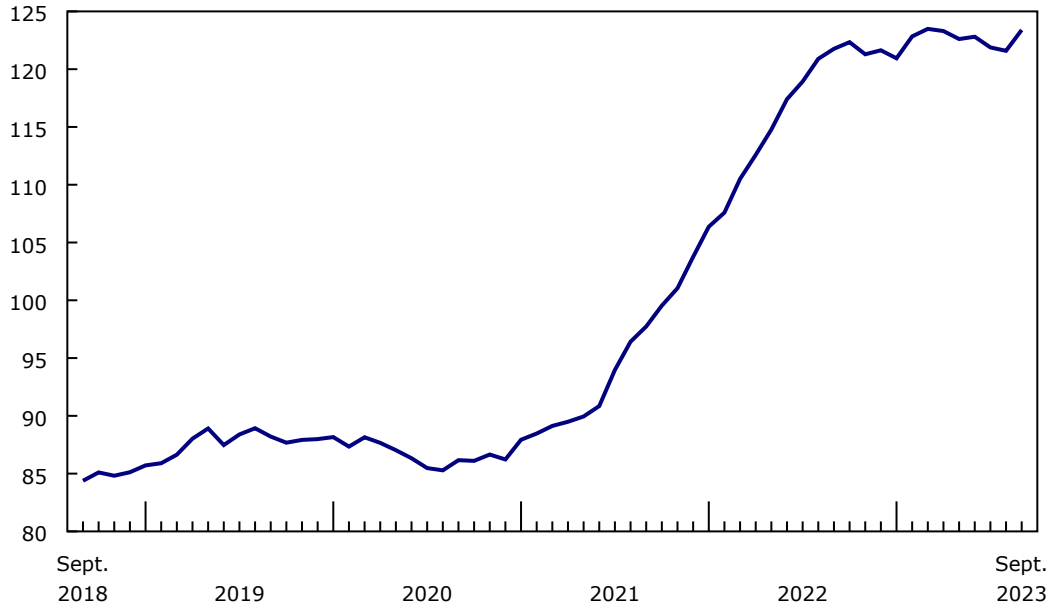
Total inventories increased 1.5% to \$123.4 billion in September, on higher goods in process (+2.4%), raw material (+1.1%) and finished product (+1.3%) inventories. Widespread gains were observed across 12 of 21 subsectors, led by the petroleum and coal (+4.0%), primary metal (+2.8%), and beverage and tobacco (+9.0%) subsectors. Inventories of plastic and rubber products decreased the most, down 2.9% to \$4.3 billion in September.

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## Chart 2 Inventory levels increase

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billions of dollars



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

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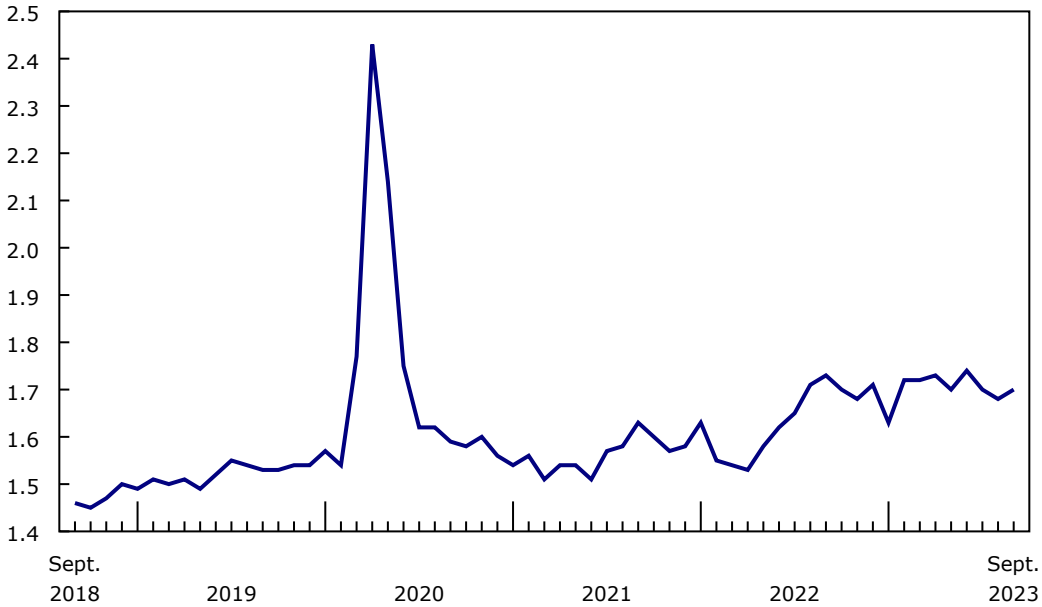
The inventory-to-sales ratio rose from 1.68 in August to 1.70 in September. This ratio measures the time, in months, that would be required to exhaust inventories if sales were to remain at their current level.

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**Chart 3**  
**The inventory-to-sales ratio increases**

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ratio



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

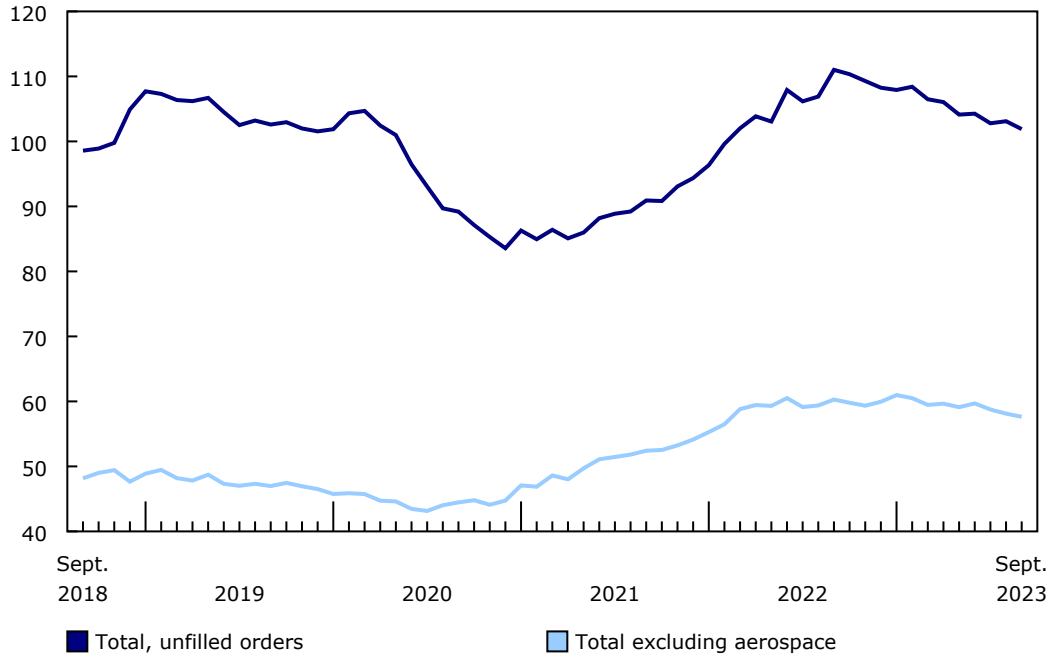
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**Unfilled orders decline**

Unfilled orders fell 1.2% to \$101.9 billion in September, primarily on a 1.6% decline in unfilled orders in the aerospace product and parts industry. Production of aerospace products and parts often increase at the end of each quarter, resulting in lower unfilled orders.

**Chart 4**  
**Unfilled orders decline**

billions of dollars



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

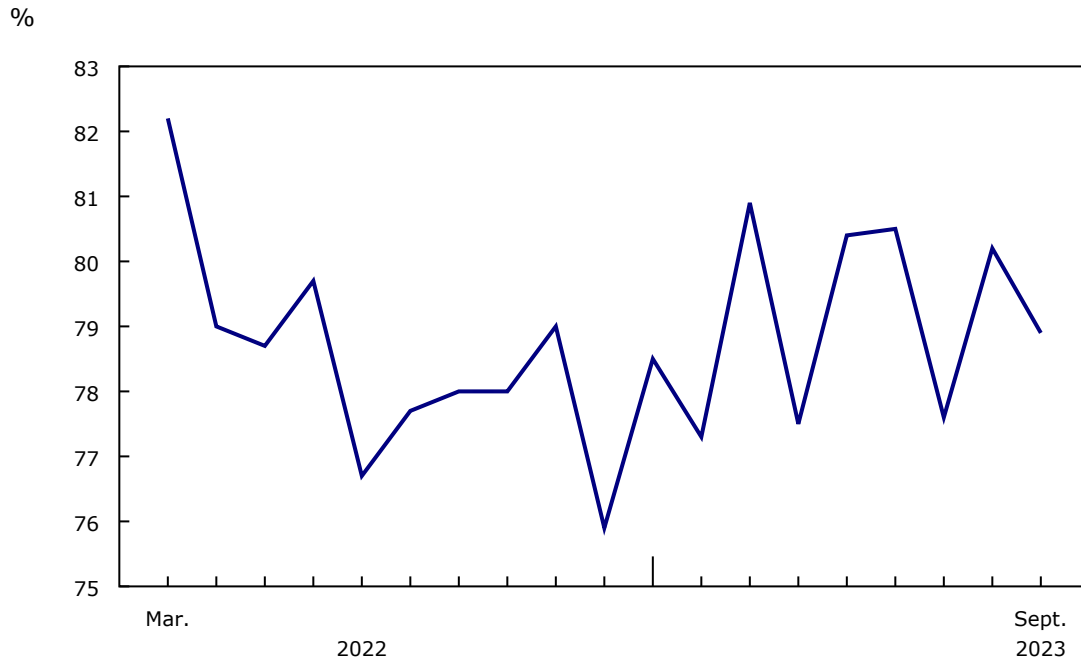
**Capacity utilization rate declines**

The capacity utilization rate (not seasonally adjusted) for the total manufacturing sector decreased from 80.2% in August to 78.9% in September, on lower production. The declines in the capacity utilization rates were more pronounced in the petroleum and coal (-5.5 percentage points), transportation equipment (-2.6 percentage points) and chemical (-3.2 percentage points) subsectors. The capacity utilization rate of primary metal manufacturing increased 1.7 percentage points in September.

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**Chart 5**  
**The capacity utilization rate declines**

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

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**Table 1**  
**Manufacturing: Principal statistics – Seasonally adjusted**

	September 2022	August 2023 <sup>r</sup>	September 2023 <sup>p</sup>	August to September 2023	September 2022 to September 2023
	millions of dollars			% change <sup>1</sup>	
Manufacturing sales (current dollars)	70,487	72,506	72,787	0.4	3.3
Manufacturing sales (2017 constant dollars)	54,834	56,207	55,856	-0.6	1.9
Manufacturing sales (current dollars) excluding motor vehicles, parts and accessories	64,208	63,545	63,873	0.5	-0.5
Inventories	121,762	121,590	123,394	1.5	1.3
Unfilled orders	111,008	103,104	101,894	-1.2	-8.2
New orders	74,598 <sup>E</sup>	72,823 <sup>E</sup>	71,578 <sup>E</sup>	-1.7	-4.0
Inventory-to-sales ratio <sup>2</sup>	1.73	1.68	1.70	...	...

<sup>r</sup> revised

<sup>p</sup> preliminary

... not applicable

<sup>E</sup> 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**

	September 2022	August 2023 <sup>r</sup>	September 2023 <sup>p</sup>	August to September 2023	September 2022 to September 2023
	millions of dollars			% change <sup>1</sup>	
Food manufacturing	12,071	12,725	12,768	0.3	5.8
Beverage and tobacco product	1,495	1,431	1,351	-5.6	-9.7
Textile mills	166	160	156	-3.0	-6.0
Textile product mills	146	148	157	6.1	7.5
Apparel manufacturing	254	241	244	1.3	-4.2
Leather and allied product	29	35	30 <sup>E</sup>	-13.2	5.6
Wood product	3,545	3,035	3,122	2.9	-11.9
Paper manufacturing	2,949	2,563	2,488	-2.9	-15.6
Printing and related support activities	750	744	725	-2.5	-3.3
Petroleum and coal product	9,320	8,598	9,141	6.3	-1.9
Chemical	5,734	5,577	5,477	-1.8	-4.5
Plastics and rubber products	3,440	3,307	3,339	1.0	-2.9
Non-metallic mineral product	1,646	1,718	1,733	0.9	5.3
Primary metal	5,664	5,473	5,400	-1.3	-4.7
Fabricated metal product	4,377	4,545	4,487	-1.3	2.5
Machinery	4,233	4,761	4,823	1.3	13.9
Computer and electronic product	1,685	1,569	1,515	-3.5	-10.1
Electrical equipment, appliance and component	1,118	1,191	1,245	4.5	11.3
Transportation equipment	9,179	12,176	12,066	-0.9	31.4
Motor vehicle	3,614	5,710	5,749	0.7	59.0
Motor vehicle body and trailer	414	494	464	-6.1	11.9
Motor vehicle parts	2,665	3,251	3,166	-2.6	18.8
Aerospace product and parts	1,753	1,971	1,991	1.0	13.5
Railroad rolling stock	185	97	83 <sup>E</sup>	-14.0	-54.9
Ship and boat building	210	260	244	-6.1	16.5
Furniture and related product	1,323	1,284	1,277	-0.6	-3.5
Miscellaneous manufacturing	1,363	1,224	1,245	1.7	-8.6
Non-durable goods industries	36,355	35,529	35,876	1.0	-1.3
Durable goods industries	34,133	36,977	36,911	-0.2	8.1

<sup>r</sup> revised

<sup>p</sup> preliminary

<sup>E</sup> use with caution

1. Percentage change calculated at thousands of dollars.

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



**Table 3**  
**Manufacturing sales: Provinces and territories – Seasonally adjusted**

	September 2022	August 2023 <sup>r</sup>	September 2023 <sup>p</sup>	August to September 2023	September 2022 to September 2023
	millions of dollars			% change <sup>1</sup>	
<b>Canada</b>	<b>70,487</b>	<b>72,506</b>	<b>72,787</b>	<b>0.4</b>	<b>3.3</b>
Newfoundland and Labrador	288	312	263	-15.9	-8.8
Prince Edward Island	234	294	278	-5.3	18.7
Nova Scotia	876	894	837	-6.4	-4.4
New Brunswick	2,051	2,137	2,140	0.1	4.3
Quebec	17,602	17,547	17,663	0.7	0.3
Ontario	30,471	32,968	32,875	-0.3	7.9
Manitoba	2,166	2,250	2,250	0.0	3.9
Saskatchewan	2,134	2,006	2,047	2.0	-4.1
Alberta	8,972	8,735	9,110	4.3	1.5
British Columbia	5,687	5,356	5,319	-0.7	-6.5
Yukon	3	4	4 <sup>E</sup>	-6.3	38.7
Northwest Territories and Nunavut	4	2	2	-25.1	-52.6

<sup>r</sup> revised

<sup>p</sup> preliminary

<sup>E</sup> use with caution

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**

	September 2022	August 2023 <sup>r</sup>	September 2023 <sup>p</sup>	August to September 2023	September 2022 to September 2023
	millions of dollars			% change <sup>1</sup>	
Halifax	247	259	250	-3.5	1.4
Québec	2,076	1,961	2,074	5.8	-0.1
Sherbrooke	261	260	252	-3.3	-3.5
Montréal	8,162	8,225	8,088	-1.7	-0.9
Ottawa–Gatineau, Ontario and Quebec	788	690	668	-3.2	-15.2
Toronto	11,835	13,434	13,456	0.2	13.7
Hamilton	2,073	1,913	1,914	0.1	-7.7
Kitchener–Cambridge–Waterloo	2,401	2,489	2,476	-0.5	3.1
Windsor	1,356	2,043	1,701	-16.8	25.5
Winnipeg	1,077	1,207	1,218	0.9	13.1
Regina	871	776	819	5.7	-5.9
Saskatoon	541	564	533	-5.4	-1.4
Calgary	1,226	1,345	1,376	2.3	12.2
Edmonton	4,554	4,216	4,592	8.9	0.8
Vancouver	2,983	2,945	3,018	2.5	1.2

<sup>r</sup> revised

<sup>p</sup> 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**

	September 2022	August 2023 <sup>r</sup>	September 2023 <sup>p</sup>	August to September 2023	September 2022 to September 2023
	%			percentage point change	
Manufacturing	78.0	80.2	78.9	-1.3	0.9
Non-durable goods industries	78.9	79.8	78.3	-1.5	-0.6
Food manufacturing	80.6 <sup>E</sup>	78.9 <sup>E</sup>	80.2 <sup>E</sup>	1.3	-0.4
Beverage and tobacco product manufacturing	75.5	81.0	71.6	-9.4	-3.9
Beverage manufacturing	76.7	88.0 <sup>E</sup>	73.1	-14.9	-3.6
Tobacco manufacturing	68.3	53.1	62.1	9.0	-6.2
Textile mills	81.6	73.2	75.4	2.2	-6.2
Textile product mills	73.0	70.4	72.3 <sup>E</sup>	1.9	-0.7
Apparel manufacturing	79.2 <sup>E</sup>	77.1 <sup>E</sup>	76.9 <sup>E</sup>	-0.2	-2.3
Leather and allied product manufacturing	73.0	84.4 <sup>E</sup>	77.7 <sup>E</sup>	-6.7	4.7
Paper manufacturing	83.7	79.0	80.5	1.5	-3.2
Printing and related support activities	78.9 <sup>E</sup>	76.7 <sup>E</sup>	76.2 <sup>E</sup>	-0.5	-2.7
Petroleum and coal products manufacturing	81.8	90.2	84.7	-5.5	2.9
Chemical manufacturing	73.2 <sup>E</sup>	73.6	70.4 <sup>E</sup>	-3.2	-2.8
Plastics and rubber products manufacturing	73.6 <sup>E</sup>	71.3 <sup>E</sup>	70.3 <sup>E</sup>	-1.0	-3.3
Plastic product manufacturing	74.6 <sup>E</sup>	71.0 <sup>E</sup>	69.2 <sup>E</sup>	-1.8	-5.4
Rubber product manufacturing	68.3	73.1	77.7	4.6	9.4
Durable goods industries	77.2	80.7	79.6	-1.1	2.4
Wood product manufacturing	81.1	76.1	76.5 <sup>E</sup>	0.4	-4.6
Non-metallic mineral product manufacturing	77.5 <sup>E</sup>	77.4 <sup>E</sup>	76.6 <sup>E</sup>	-0.8	-0.9
Primary metal manufacturing	75.4	74.2	75.9	1.7	0.5
Fabricated metal product manufacturing	77.6 <sup>E</sup>	78.6 <sup>E</sup>	77.3 <sup>E</sup>	-1.3	-0.3
Machinery manufacturing	79.8 <sup>E</sup>	81.3 <sup>E</sup>	79.6 <sup>E</sup>	-1.7	-0.2
Computer and electronic product manufacturing	80.2	82.8	79.7 <sup>E</sup>	-3.1	-0.5
Electrical equipment, appliance and component manufacturing	86.4	81.6 <sup>E</sup>	83.3 <sup>E</sup>	1.7	-3.1
Transportation equipment manufacturing	73.3	86.5	83.9	-2.6	10.6
Furniture and related product manufacturing	83.4 <sup>E</sup>	79.0 <sup>E</sup>	76.8 <sup>E</sup>	-2.2	-6.6
Miscellaneous manufacturing	76.8 <sup>E</sup>	77.8 <sup>E</sup>	77.4 <sup>E</sup>	-0.4	0.6

<sup>r</sup> revised

<sup>p</sup> preliminary

<sup>E</sup> 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 industry groups, 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 November 22.

### Next release

Data from the Monthly Survey of Manufacturing for October will be released on December 14.

**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](mailto:infostats@statcan.gc.ca)) or Media Relations ([statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca](mailto:statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca)).