

**FOR RELEASE AT 10:00 AM EDT, FRIDAY, MAY 12, 2023**

## **BENCHMARK REPORT ON MANUFACTURERS' SHIPMENTS, INVENTORIES AND ORDERS**

Release Number: CB 23-69 M3-3 (23)-B

**May 12, 2023** — The U.S. Census Bureau released revisions to the monthly data from the Manufacturers' Shipments, Inventories, and Orders (M3) Survey, which span the seasonally adjusted data for January 2012 through March 2023 and the data not seasonally adjusted for January 2017 through March 2023. These revisions can be found in the "Historical Time Series and M3 Survey Revision Information" section of the "Data" tab located at < [www.census.gov/m3](http://www.census.gov/m3)>. An updated Benchmark Release contains revised monthly tables for January 2023 through March 2023 on a 2017 North American Industry Classification System (NAICS) basis. Also, four Excel spreadsheets comprise the Benchmark Report, which contain revised data for 2019 through 2022, and can be found in the "Benchmark Report" section at the link listed above. This comprehensive revision includes:

- Benchmarking the M3 shipments and inventories data to the 2021 and 2020 Annual Survey of Manufactures (ASM) data;
- Incorporating the unfilled orders to shipments ratios obtained for 2021, 2020, and 2019 from the Manufacturers' Unfilled Orders (M3UFO) Survey;
- Adjusting the new orders data to be consistent with the benchmarked shipments and unfilled orders data;
- Correcting monthly data for late receipts, reclassifications of reported data, and revisions to previously reported data;
- Updating the seasonally adjusted data based on the results of benchmarking and the recent annual review of the seasonal adjustment models.

Data in the April 2023 Advance Report on Durable Goods, scheduled for release on May 26, 2023, at 8:30 a.m. EDT, and the Full Report, scheduled for release on June 5, 2023, at 10:00 a.m. EDT, will be consistent with the data contained in the report issued today. The full text and tables of this release can be found at <[www.census.gov/m3](http://www.census.gov/m3)>.

### **Data Inquiries**

Economic Indicators Division, Shipments, Inventories, and Orders Branch (M3)  
301-763-4832  
[eid.m3.qs@census.gov](mailto:eid.m3.qs@census.gov)



U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU  
[census.gov](http://census.gov)

### **Media Inquiries**

Public Information Office  
301-763-3030  
[pio@census.gov](mailto:pio@census.gov)

## EXPLANATORY NOTES

Figures in text are adjusted for seasonality, but not for inflation. Figures on new and unfilled orders exclude data for semiconductor manufacturing.

### Description of the survey

This report is compiled from results of the U.S. Census Bureau's Manufacturers' Shipments, Inventories, and Orders (M3) survey, which is a voluntary survey authorized by Title 13 of the United States Code. This survey provides statistics on a calendar-month basis for manufacturers' value of shipments, new orders (net of cancellations), end-of-month order backlog (unfilled orders), end-of-month total inventory (at current cost or market value), and inventories by stage of fabrication (materials and supplies, work-in-process, and finished goods). Data published from the M3 survey are based on a panel of approximately 5,000 reporting units that represent approximately 3,100 companies and provide an indication of month-to-month change for the Manufacturing Sector. These reporting units may be divisions of diversified large companies, large homogenous companies, or single-unit manufacturers in 92 industry categories, which are combined into 65 publication levels due to the small monthly panel size. The survey methodology assumes that the month-to-month changes of the total operations of the reporting units in the M3 panel effectively represent the month-to-month movements of all establishments that make up the category. The companies for which shipments data are currently reported or imputed in the M3 survey represent approximately 60 percent of the total value of shipments for manufacturing establishments in the 2017 Economic Census, and these companies include roughly 61 percent of the manufacturing companies with \$500 million or more in shipments in the 2017 Economic Census. The companies for which shipments data are currently reported in the M3 survey represent approximately 51 percent of the total value of shipments for manufacturing establishments in the 2017 Economic Census. Statistics based on the M3 panel differ from the results that would be obtained from a complete enumeration of all manufacturing companies. The M3 panel is not based on a probability sample; therefore, the sampling errors that are normally provided with sample surveys cannot be measured. Nonsampling errors are attributable to many sources. The use of company or divisional reports to estimate the monthly change for establishments is one source of nonsampling error. The use of primarily large companies to represent the month-to-month movement of all companies is another potential source. Any corrections will be published in the full report. Corrections received after the full report will be released in the next month's advance report. Any revisions made later than two months will be reflected in the annual benchmark publication. Additional survey documentation can be found on our web site:

[www.census.gov/manufacturing/m3/how the data are collected/index.html](http://www.census.gov/manufacturing/m3/how_the_data_are_collected/index.html).

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## RESOURCES

### API

The Census Bureau's application programming interface (API) lets developers create custom apps to reach new users and makes key demographic, socio-economic and housing statistics more accessible than ever before.

[<www.census.gov/developers/>](http://www.census.gov/developers/).

### FRED Mobile App



Receive the latest updates on the nation's key economic indicators by downloading the FRED App [<https://fred.stlouisfed.org/fred-mobile/>](https://fred.stlouisfed.org/fred-mobile/) for both Apple and Android devices. FRED, the signature database of the Federal Reserve Bank of St. Louis, now incorporates the Census Bureau's 13 economic indicators.

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**Table 1. Value of Manufacturers' Shipments for Industry Groups<sup>1</sup>**  
**January 2023 - March 2023**

[Estimates are shown in millions of dollars and are based on data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

Industry	Seasonally Adjusted						Not Seasonally Adjusted						
	Monthly			Percent Change			Monthly				Year to date		
	Mar. 2023	Feb. 2023	Jan. 2023	Feb. - Mar.	Jan. - Feb.	Dec. - Jan.	Mar. 2023	Feb. 2023	Jan. 2023	Mar. 2022	2023	2022	Percent change 2023/ 2022
All manufacturing industries <sup>2</sup> .....	574,998	578,124	581,720	-0.5	-0.6	0.7	612,862	535,019	540,816	607,719	1,688,697	1,627,643	3.8
Excluding transportation <sup>2</sup> .....	486,124	491,328	494,157	-1.1	-0.6	1.1	510,172	452,928	463,539	517,051	1,426,639	1,394,639	2.3
Excluding defense <sup>2</sup> .....	559,965	562,951	566,355	-0.5	-0.6	0.7	596,143	520,451	528,057	592,053	1,644,651	1,586,550	3.7
With unfilled orders.....	194,334	192,131	192,528	1.1	-0.2	0.1	213,121	179,930	174,986	201,666	568,037	539,196	5.3
Durable goods industries <sup>2</sup> .....	279,706	277,684	279,043	0.7	-0.5	0.1	306,448	259,423	253,017	291,764	818,888	775,754	5.6
Wood products.....	13,468	13,417	13,484	0.4	-0.5	0.4	13,812	12,244	11,612	14,188	37,668	38,526	-2.2
Nonmetallic mineral products.....	13,080	13,222	13,369	-1.1	-1.1	1.2	13,318	11,516	11,781	13,091	36,615	35,216	4.0
Primary metals.....	26,976	26,787	26,877	0.7	-0.3	1.8	29,241	25,799	26,333	29,703	81,373	80,770	0.7
Iron and steel mills.....	15,102	14,847	14,715	1.7	0.9	-0.2	16,278	14,128	14,445	15,442	44,851	43,005	4.3
Aluminum and nonferrous metals.....	10,159	10,205	10,455	-0.5	-2.4	3.8	11,056	10,027	10,279	12,518	31,362	33,222	-5.6
Ferrous metal foundries.....	1,715	1,735	1,707	-1.2	1.6	7.2	1,907	1,644	1,609	1,743	5,160	4,543	13.6
Fabricated metal products.....	35,380	35,329	35,288	0.1	0.1	-0.2	37,390	33,132	33,071	37,543	103,593	103,760	-0.2
Machinery.....	37,090	37,410	37,375	-0.9	0.1	0.8	41,180	35,446	33,761	40,316	110,387	105,976	4.2
Farm machinery.....	2,371	2,374	2,483	-0.1	-4.4	-4.6	2,789	2,516	2,240	3,885	7,545	10,289	-26.7
Construction machinery.....	4,225	4,107	4,260	2.9	-3.6	4.7	4,774	3,968	3,816	3,877	12,558	10,003	25.5
Mining, oil field, and gas field machinery.....	1,635	1,904	1,591	-14.1	19.7	0.4	1,745	1,774	1,502	1,551	5,021	4,094	22.6
Industrial machinery.....	3,702	3,834	3,834	-3.4	0.0	6.4	4,113	3,261	3,264	4,288	10,638	10,768	-1.2
Photographic equipment.....	623	611	622	2.0	-1.8	-2.7	730	550	523	737	1,803	1,812	-0.5
Ventilation, heating, air-conditioning, and refrigeration equipment.....	4,676	4,734	4,788	-1.2	-1.1	1.9	5,126	4,039	3,908	4,856	13,073	12,224	6.9
Metalworking machinery.....	2,717	2,861	2,778	-5.0	3.0	-1.8	2,967	2,651	2,537	3,052	8,155	8,210	-0.7
Turbines, generators, and other power transmission equipment.....	4,051	3,837	3,740	5.6	2.6	-2.0	4,131	3,858	3,567	3,612	11,556	10,561	9.4
Material handling equipment.....	3,795	3,760	3,843	0.9	-2.2	2.2	4,365	3,666	3,612	4,181	11,643	10,829	7.5
Computers and electronic products <sup>2</sup> .....	29,342	29,423	29,430	-0.3	0.0	0.5	30,888	26,514	26,893	29,997	84,295	81,122	3.9
Computers.....	799	805	798	-0.7	0.9	5.1	760	636	697	692	2,093	1,928	8.6
Computer storage devices.....	370	358	372	3.4	-3.8	6.0	481	273	324	431	1,078	990	8.9
Other peripheral equipment.....	796	765	775	4.1	-1.3	2.0	858	602	718	600	2,178	1,477	47.5
Nondefense communications equipment.....	2,919	2,951	2,931	-1.1	0.7	0.6	3,426	2,404	2,325	3,284	8,155	7,900	3.2
Defense communications equipment....	203	205	208	-1.0	-1.4	2.0	209	202	169	203	580	554	4.7
Audio and video equipment.....	377	368	467	2.4	-21.2	33.0	325	324	402	428	1,051	1,287	-18.3
Electronic components.....	4,766	4,861	4,760	-2.0	2.1	0.9	5,113	4,492	4,373	5,025	13,978	13,362	4.6
Nondefense search and navigation equipment.....	1,615	1,621	1,604	-0.4	1.1	-1.0	1,825	1,529	1,436	1,834	4,790	4,733	1.2
Defense search and navigation equipment.....	3,188	3,207	3,194	-0.6	0.4	-1.2	3,416	3,054	2,676	3,361	9,146	9,032	1.3
Electromedical, measuring, and control instruments.....	8,811	8,736	8,711	0.9	0.3	-0.4	9,742	7,801	7,569	9,473	25,112	24,739	1.5
Electrical equipment, appliances, and components.....	14,126	13,946	14,116	1.3	-1.2	4.0	15,487	12,765	12,359	14,243	40,611	36,748	10.5
Electric lighting equipment.....	1,283	1,269	1,258	1.1	0.9	1.0	1,350	1,151	1,141	1,258	3,642	3,422	6.4
Household appliances.....	2,346	2,361	2,437	-0.6	-3.1	3.4	2,621	2,081	1,980	2,690	6,682	6,594	1.3
Electrical equipment.....	4,592	4,505	4,650	1.9	-3.1	6.6	5,267	4,178	4,037	4,474	13,482	11,307	19.2
Batteries.....	1,370	1,306	1,247	4.9	4.7	5.1	1,437	1,160	1,091	1,079	3,688	2,705	36.3
Transportation equipment.....	88,874	86,796	87,563	2.4	-0.9	-1.4	102,690	82,091	77,277	90,668	262,058	233,004	12.5
Automobiles.....	8,763	8,681	8,309	0.9	4.5	-0.3	10,827	8,183	6,987	9,997	25,997	23,136	12.4
Light trucks and utility vehicles.....	20,583	20,594	21,310	-0.1	-3.4	-0.3	24,355	19,335	18,829	22,347	62,519	55,339	13.0
Heavy duty trucks.....	2,652	2,824	2,958	-6.1	-4.5	3.3	3,051	2,681	2,692	2,635	8,424	6,779	24.3
Motor vehicle bodies, parts, and trailers.....	29,049	29,028	28,866	0.1	0.6	0.8	32,258	28,689	27,375	30,573	88,322	82,920	6.5
Nondefense aircraft and parts.....	12,570	10,205	10,392	23.2	-1.8	-11.8	15,275	8,282	8,362	9,576	31,919	23,779	34.2
Defense aircraft and parts.....	4,652	4,681	4,864	-0.6	-3.8	0.9	5,176	4,266	3,982	5,080	13,424	12,836	4.6
Ships and boats.....	3,832	3,852	3,855	-0.5	-0.1	2.5	4,203	3,921	3,192	3,780	11,316	10,034	12.8
Furniture and related products.....	6,905	6,896	6,993	0.1	-1.4	0.6	7,016	6,590	6,462	6,891	20,068	19,489	3.0
Miscellaneous durable goods.....	14,465	14,458	14,548	0.0	-0.6	-0.4	15,426	13,326	13,468	15,124	42,220	41,143	2.6
Non durable goods industries.....	295,292	300,440	302,677	-1.7	-0.7	1.2	306,414	275,596	287,799	315,955	869,809	851,889	2.1
Food products.....	80,326	80,257	79,999	0.1	0.3	0.3	81,725	77,142	77,185	81,330	236,052	231,775	1.8
Grain and oilseed milling.....	10,146	10,212	10,180	-0.6	0.3	0.6	10,384	9,833	10,090	10,333	30,307	28,912	4.8
Dairy products.....	11,803	11,819	11,875	-0.1	-0.5	0.1	11,945	11,023	11,651	11,722	34,619	33,456	3.5
Meat, poultry, and seafood products...	24,252	24,152	24,230	0.4	-0.3	-0.6	24,599	23,169	22,851	25,452	70,619	71,938	-1.8
Beverage and tobacco products.....	17,195	16,757	16,752	2.6	0.0	-1.2	17,116	15,574	15,704	15,207	48,394	42,135	14.9
Beverages.....	10,687	10,833	10,725	-1.3	1.0	1.4	10,608	9,650	9,677	9,887	29,935	27,642	8.3
Tobacco.....	6,508	5,924	6,027	9.9	-1.7	-5.5	6,508	5,924	6,027	5,320	18,459	14,493	27.4
Textile mills.....	2,117	2,149	2,165	-1.5	-0.7	-0.6	2,209	2,098	2,008	2,381	6,315	6,709	-5.9
Textile products.....	2,014	2,043	2,042	-1.4	0.0	0.0	2,079	1,998	1,851	2,154	5,928	6,050	-2.0
Apparel.....	837	858	871	-2.4	-1.5	-1.1	797	805	835	803	2,437	2,329	4.6
Leather and allied products.....	498	505	527	-1.4	-4.2	1.7	503	469	483	449	1,455	1,173	24.0
Paper products.....	17,596	17,541	17,515	0.3	0.1	1.3	18,291	16,510	17,259	18,040	52,060	50,950	2.2
Pulp, paper, and paperboard mills.....	7,048	7,038	7,048	0.1	-0.1	2.4	7,218	6,564	7,066	6,914	20,848	19,729	5.7
Paperboard containers.....	6,349	6,313	6,265	0.6	0.8	0.7	6,693	5,882	6,164	6,748	18,739	18,791	-0.3
Printing.....	7,346	7,410	7,380	-0.9	0.4	-0.1	7,566	6,777	7,047	7,370	21,390	20,201	5.9
Petroleum and coal products.....	64,762	70,223	73,138	-7.8	-4.0	4.1	65,454	58,993	68,043	78,319	192,490	193,767	-0.7
Petroleum refineries.....	59,981	65,428	68,330	-8.3	-4.2	4.5	60,984	55,160	64,159	74,109	180,303	182,533	-1.2
Chemical products.....	77,952	77,919	77,415	0.0	0.7	0.8	84,483	72,339	73,771	83,161	230,593	223,895	3.0
Pesticides, fertilizers, and other agricultural chemicals.....	4,001	3,929	3,983	1.8	-1.4	-2.2	5,407	4,128	3,805	5,485	13,340	13,631	-2.1
Pharmaceuticals and medicines.....	24,623	24,645	24,355	-0.1	1.2	-0.1	25,727	22,217	23,226	23,480	71,170	63,920	11.3
Paints, coatings, and adhesives.....	4,130	4,227	4,180	-2.3	1.1	-1.1	4,531	3,807	3,738	4,652	12,076	12,057	0.2
Plastics and rubber products.....	24,649	24,778	24,873	-0.5	-0.4	-0.1	26,191	22,891	23,613	26,741	72,695	72,905	-0.3

<sup>1</sup> Estimates of shipments and new orders are for the duration of the period, while estimates of unfilled orders and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes.

<sup>2</sup> Estimates and percent changes of shipments for the semiconductor industry are included in computers and electronic products, and all other applicable aggregate totals.

Note: Estimates of manufacturers' shipments, inventories and orders are subject to survey error and revision. One major component of survey error is nonsampling error, which includes errors of coverage, response, and nonreporting. Since the survey panel is not a probability sample, estimates of sampling error cannot be calculated. For further details on survey design, methodology, and data limitations see <<https://www.census.gov/manufacturing/m3/>>.

Source: U.S. Census Bureau, Manufacturers' Shipments, Inventories, and Orders (M3) Survey, Benchmark Report, May 12, 2023. Information on data sources and methodology can be found on our website at <[www.census.gov/manufacturing/m3/how\\_the\\_data\\_are\\_collected/index.html](https://www.census.gov/manufacturing/m3/how_the_data_are_collected/index.html)>.

The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data (Project No. P-6000307, Disclosure Review Board (DRB) approval number: CBDRB-FY23-0294).

**Table 2. Value of Manufacturers' New Orders for Industry Groups<sup>1</sup>**
**January 2023 - March 2023**
**[Estimates are shown in millions of dollars and are based on data from the Manufacturers' Shipments, Inventories, and Orders Survey.]**

Industry	Seasonally Adjusted						Not Seasonally Adjusted						
	Monthly			Percent Change			Monthly				Year to date		
	Mar. 2023	Feb. 2023	Jan. 2023	Feb. - Mar.	Jan. - Feb.	Dec. - Jan.	Mar. 2023	Feb. 2023	Jan. 2023	Mar. 2022	2023	2022	Percent change 2023/ 2022
All manufacturing industries <sup>2</sup> .....	573,809	571,265	581,049	0.4	-1.7	0.0	618,458	532,423	542,609	614,653	1,693,490	1,655,878	2.3
Excluding transportation <sup>2</sup> .....	480,824	485,546	487,600	-1.0	-0.4	0.9	508,467	450,774	462,194	517,251	1,421,435	1,397,781	1.7
Excluding defense <sup>2</sup> .....	558,249	555,847	564,163	0.4	-1.5	-0.2	597,936	518,089	529,198	596,400	1,645,223	1,614,754	1.9
With unfilled orders.....	198,491	190,665	197,315	4.1	-3.4	-1.9	223,287	182,385	182,836	213,110	588,508	582,105	1.1
Durable goods industries <sup>2</sup> .....	278,517	270,825	278,372	2.8	-2.7	-1.3	312,044	256,827	254,810	298,698	823,681	803,989	2.4
Primary metals.....	26,920	26,708	26,548	0.8	0.6	0.7	29,373	26,530	26,580	30,244	82,483	83,546	-1.3
Iron and steel mills.....	15,095	14,863	14,452	1.6	2.8	-1.9	16,481	14,652	14,423	15,915	45,556	44,659	2.0
Aluminum and nonferrous metals.....	10,115	10,113	10,458	0.0	-3.3	4.4	11,024	10,176	10,539	12,474	31,739	33,983	-6.6
Ferrous metal foundries.....	1,710	1,732	1,638	-1.3	5.7	1.9	1,868	1,702	1,618	1,855	5,188	4,904	5.8
Fabricated metal products.....	35,209	35,056	34,958	0.4	0.3	-0.8	39,004	33,820	33,915	39,548	106,739	108,453	-1.6
Machinery.....	36,863	37,201	37,254	-0.9	-0.1	0.2	40,698	36,279	36,487	40,634	113,464	111,750	1.5
Construction machinery.....	4,169	3,665	3,860	13.8	-5.1	0.0	4,688	3,740	4,041	4,003	12,469	11,281	10.5
Mining, oil field, and gas field machinery.....	1,573	1,933	1,605	-18.6	20.4	0.8	1,683	1,803	1,516	1,425	5,002	3,881	28.9
Industrial machinery.....	3,604	3,886	4,192	-7.3	-7.3	13.9	3,981	3,228	4,372	4,383	11,581	11,610	-0.2
Photographic equipment.....	694	720	640	-3.6	12.5	2.6	734	787	536	655	2,057	1,773	16.0
Ventilation, heating, air-conditioning, and refrigeration equipment.....	4,907	4,713	4,829	4.1	-2.4	-1.7	5,543	4,135	4,390	4,892	14,068	13,246	6.2
Metalworking machinery.....	2,649	2,896	2,758	-8.5	5.0	3.2	2,730	2,967	2,665	3,044	8,362	8,509	-1.7
Turbines, generators, and other power transmission equipment.....	3,915	3,865	3,563	1.3	8.5	-7.0	3,995	3,886	3,390	3,601	11,271	10,675	5.6
Material handling equipment.....	3,797	3,809	3,980	-0.3	-4.3	2.6	4,243	3,767	3,907	4,434	11,917	11,795	1.0
Computers and electronic products <sup>2</sup> .....	24,509	23,976	23,850	2.2	0.5	-0.2	27,768	21,339	20,820	26,791	69,927	68,319	2.4
Computers.....	815	799	819	2.0	-2.4	8.5	776	630	718	694	2,124	1,913	11.0
Nondefense communications equipment.....	2,885	2,897	2,942	-0.4	-1.5	1.6	3,451	2,415	2,298	3,461	8,164	8,232	-0.8
Defense communications equipment.....	195	201	201	-3.0	0.0	3.1	201	202	172	202	575	549	4.7
Electronic components.....	4,695	4,742	4,589	-1.0	3.3	-0.6	4,897	4,352	4,358	5,060	13,607	13,838	-1.7
Nondefense search and navigation equipment.....	1,761	1,709	1,647	3.0	3.8	-14.0	2,040	1,612	1,575	2,020	5,227	5,298	-1.3
Defense search and navigation equipment.....	3,626	3,208	3,157	13.0	1.6	2.9	4,521	2,968	2,431	3,938	9,920	8,955	10.8
Electromedical, measuring, and control instruments.....	8,837	8,776	8,729	0.7	0.5	-1.1	10,055	7,815	7,677	9,801	25,547	25,334	0.8
Electrical equipment, appliances, and components.....	14,200	14,165	13,975	0.2	1.4	2.9	15,565	13,299	13,081	14,673	41,945	38,849	8.0
Electric lighting equipment.....	1,336	1,296	1,223	3.1	6.0	-10.1	1,438	1,192	1,115	1,316	3,745	3,526	6.2
Household appliances.....	2,423	2,547	2,439	-4.9	4.4	-2.7	2,780	2,060	2,010	2,696	6,850	6,436	6.4
Electrical equipment.....	4,503	4,523	4,574	-0.4	-1.1	13.3	5,064	4,443	4,669	4,694	14,176	13,129	8.0
Transportation equipment.....	92,985	85,719	93,449	8.5	-8.3	-4.2	109,991	81,649	80,415	97,402	272,055	258,097	5.4
Motor vehicle bodies, parts, and trailers.....	29,104	29,362	28,888	-0.9	1.6	1.4	32,030	29,754	27,920	30,654	89,704	84,421	6.3
Nondefense aircraft and parts.....	16,598	8,560	14,770	93.9	-42.0	-27.8	20,211	6,942	10,186	14,202	37,339	47,084	-20.7
Defense aircraft and parts.....	5,528	4,598	5,281	20.2	-12.9	12.7	6,681	3,638	4,888	4,961	15,207	11,224	35.5
Ships and boats.....	2,725	3,474	4,441	-21.6	-21.8	-0.6	4,402	4,739	4,201	5,092	13,342	11,608	14.9
Furniture and related products.....	6,854	6,955	7,013	-1.5	-0.8	1.4	7,125	6,877	6,727	6,999	20,729	19,845	4.5
Nondurable goods industries.....	295,292	300,440	302,677	-1.7	-0.7	1.2	306,414	275,596	287,799	315,955	869,809	851,889	2.1

<sup>1</sup> Estimates of shipments and new orders are for the duration of the period, while estimates of unfilled orders and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes.

<sup>2</sup> Data on new orders are not available for the semiconductor industry. Estimates and percent changes for new orders exclude semiconductor industry data.

Note: Estimates of manufacturers' shipments, inventories and orders are subject to survey error and revision. One major component of survey error is nonsampling error, which includes errors of coverage, response, and nonreporting.

Since the survey panel is not a probability sample, estimates of sampling error cannot be calculated. For further details on survey design, methodology, and data limitations see <<https://www.census.gov/manufacturing/m3/>>.

Source: U.S. Census Bureau, Manufacturers' Shipments, Inventories, and Orders (M3) Survey, Benchmark Report, May 12, 2023. Information on data sources and methodology can be found on our website at

<[www.census.gov/manufacturing/m3/how\\_the\\_data\\_are\\_collected/index.html](https://www.census.gov/manufacturing/m3/how_the_data_are_collected/index.html)>.

The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data (Project No. P-6000307, Disclosure Review Board (DRB) approval number: CBDRB-FY23-0294).

**Table 3. Value of Manufacturers' Unfilled Orders for Industry Groups<sup>1</sup>****January 2023 - March 2023****[Estimates are shown in millions of dollars and are based on data from the Manufacturers' Shipments, Inventories, and Orders Survey.]**

Industry	Seasonally Adjusted						Not Seasonally Adjusted				
	Monthly			Percent Change			Monthly				Percent Change Mar. 2023/ 2022
	Mar. 2023	Feb. 2023	Jan. 2023	Feb. - Mar.	Jan. - Feb.	Dec. - Jan.	Mar. 2023	Feb. 2023	Jan. 2023	Mar. 2022	
All manufacturing industries <sup>2</sup> .....	1,279,679	1,275,522	1,276,988	0.3	-0.1	0.4	1,290,767	1,280,601	1,278,146	1,232,263	4.7
Excluding transportation <sup>2</sup> .....	498,578	498,532	498,921	0.0	-0.1	-0.2	502,858	499,993	497,096	499,940	0.6
Excluding defense <sup>2</sup> .....	1,044,719	1,041,089	1,042,800	0.3	-0.2	0.3	1,051,818	1,045,455	1,042,766	1,004,489	4.7
Durable goods industries <sup>2</sup> .....	1,279,679	1,275,522	1,276,988	0.3	-0.1	0.4	1,290,767	1,280,601	1,278,146	1,232,263	4.7
Primary metals.....	37,733	37,789	37,868	-0.1	-0.2	-0.9	38,876	38,744	38,013	40,791	-4.7
Iron and steel mills.....	22,525	22,532	22,516	0.0	0.1	-1.2	23,166	22,963	22,439	23,713	-2.3
Aluminum and nonferrous metals.....	10,667	10,711	10,803	-0.4	-0.9	0.0	11,086	11,118	10,969	12,595	-12.0
Ferrous metal foundries.....	4,541	4,546	4,549	-0.1	-0.1	-1.5	4,624	4,663	4,605	4,483	3.1
Fabricated metal products.....	129,055	129,226	129,499	-0.1	-0.2	-0.3	129,570	127,956	127,268	131,158	-1.2
Machinery.....	140,233	140,460	140,669	-0.2	-0.1	-0.1	141,434	141,916	141,083	137,435	2.9
Construction machinery.....	10,710	10,766	11,208	-0.5	-3.9	-3.4	11,298	11,384	11,612	12,622	-10.5
Mining, oil field, and gas field machinery.....	5,293	5,355	5,326	-1.2	0.5	0.3	5,293	5,355	5,326	5,023	5.4
Industrial machinery.....	12,551	12,649	12,597	-0.8	0.4	2.9	12,626	12,758	12,791	10,865	16.2
Photographic equipment.....	4,067	3,996	3,887	1.8	2.8	0.5	4,097	4,093	3,856	3,585	14.3
Ventilation, heating, air-conditioning, and refrigeration equipment.....	13,676	13,445	13,466	1.7	-0.2	0.3	13,947	13,530	13,434	11,085	25.8
Metalworking machinery.....	9,978	10,046	10,011	-0.7	0.3	-0.2	9,991	10,228	9,912	10,520	-5.0
Turbines, generators, and other power transmission equipment.....	31,843	31,979	31,951	-0.4	0.1	-0.6	31,843	31,979	31,951	32,439	-1.8
Material handling equipment.....	19,344	19,342	19,293	0.0	0.3	0.7	19,514	19,636	19,535	18,004	8.4
Computers and electronic products <sup>2</sup> .....	134,674	134,161	134,215	0.4	0.0	-0.1	135,700	134,250	134,374	134,529	0.9
Computers.....	1,314	1,298	1,304	1.2	-0.5	1.6	1,314	1,298	1,304	1,312	0.2
Nondefense communications equipment.....	17,330	17,364	17,418	-0.2	-0.3	0.1	17,556	17,531	17,520	17,893	-1.9
Defense communications equipment.....	226	234	238	-3.4	-1.7	-2.9	241	249	249	279	-13.6
Electronic components.....	17,057	17,128	17,247	-0.4	-0.7	-1.0	17,140	17,356	17,496	17,964	-4.6
Nondefense search and navigation equipment.....	30,815	30,669	30,581	0.5	0.3	0.1	30,816	30,601	30,518	29,371	4.9
Defense search and navigation equipment.....	35,879	35,441	35,440	1.2	0.0	-0.1	36,297	35,192	35,278	36,017	0.8
Electromedical, measuring, and control instruments.....	32,053	32,027	31,987	0.1	0.1	0.1	32,336	32,023	32,009	31,693	2.0
Electrical equipment, appliances, and components.....	43,403	43,329	43,110	0.2	0.5	-0.3	43,749	43,671	43,137	41,578	5.2
Electric lighting equipment.....	3,753	3,700	3,673	1.4	0.7	-0.9	3,806	3,718	3,677	3,350	13.6
Household appliances.....	4,764	4,687	4,501	1.6	4.1	0.0	4,748	4,589	4,610	4,503	5.4
Electrical equipment.....	22,235	22,324	22,306	-0.4	0.1	-0.3	22,438	22,641	22,376	21,645	3.7
Transportation equipment.....	781,101	776,990	778,067	0.5	-0.1	0.8	787,909	780,608	781,050	732,323	7.6
Motor vehicle bodies, parts, and trailers.....	35,051	34,996	34,662	0.2	1.0	0.1	36,323	36,551	35,486	37,406	-2.9
Nondefense aircraft and parts.....	534,173	530,145	531,790	0.8	-0.3	0.8	536,135	531,199	532,539	489,867	9.4
Defense aircraft and parts.....	67,746	66,870	66,953	1.3	-0.1	0.6	69,085	67,580	68,208	64,196	7.6
Ships and boats.....	54,911	56,018	56,396	-2.0	-0.7	1.0	57,212	57,013	56,195	54,209	5.5
Furniture and related products.....	11,354	11,405	11,346	-0.4	0.5	0.2	11,403	11,294	11,007	12,203	-6.6

<sup>1</sup> Estimates of shipments and new orders are for the duration of the period, while estimates of unfilled orders and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes.

<sup>2</sup> Data on unfilled orders are not available for the semiconductor industry. Estimates and percent changes for unfilled orders exclude semiconductor industry data.

Note: Estimates of manufacturers' shipments, inventories and orders are subject to survey error and revision. One major component of survey error is nonsampling error, which includes errors of coverage, response, and nonreporting. Since the survey panel is not a probability sample, estimates of sampling error cannot be calculated. For further details on survey design, methodology, and data limitations see

<<https://www.census.gov/manufacturing/m3/>>.

Source: U.S. Census Bureau, Manufacturers' Shipments, Inventories, and Orders (M3) Survey, Benchmark Report, May 12, 2023. Information on data sources and methodology can be found on our website at

<[www.census.gov/manufacturing/m3/how\\_the\\_data\\_are\\_collected/index.html](http://www.census.gov/manufacturing/m3/how_the_data_are_collected/index.html)>.

The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data (Project No. P-6000307, Disclosure Review Board (DRB) approval number: CDBRB-FY23-0294).

**Table 4. Value of Manufacturers' Inventories for Industry Groups<sup>1</sup>**  
January 2023 - March 2023

[Estimates are shown in millions of dollars and are based on data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

Industry	Seasonally Adjusted						Not Seasonally Adjusted				
	Monthly			Percent Change			Monthly				Percent Change Mar. 2023/ 2022
	Mar. 2023	Feb. 2023	Jan. 2023	Feb. - Mar.	Jan. - Feb.	Dec. - Jan.	Mar. 2023	Feb. 2023	Jan. 2023	Mar. 2022	
All manufacturing industries <sup>2</sup> .....	853,732	859,843	860,359	-0.7	-0.1	0.1	853,755	861,700	857,451	836,408	2.1
Excluding transportation <sup>2</sup> .....	694,664	695,895	696,733	-0.2	-0.1	0.0	695,498	698,165	695,428	675,600	2.9
Excluding defense <sup>2</sup> .....	824,737	830,852	831,353	-0.7	-0.1	0.0	824,795	832,811	828,646	808,595	2.0
With unfilled orders .....	417,164	421,487	421,440	-1.0	0.0	0.2	417,251	421,982	419,601	408,084	2.2
Durable goods industries <sup>2</sup> .....	516,982	521,701	521,279	-0.9	0.1	0.2	517,074	523,637	519,556	505,094	2.4
Wood products .....	16,178	16,247	16,326	-0.4	-0.5	-0.7	16,577	16,766	16,685	16,935	-2.1
Nonmetallic mineral products .....	16,865	16,895	16,865	-0.2	0.2	0.3	17,121	17,155	16,895	15,809	8.3
Primary metals .....	46,597	46,817	46,859	-0.5	-0.1	-0.4	46,633	47,163	47,128	47,205	-1.2
Iron and steel mills .....	27,219	27,338	27,397	-0.4	-0.2	0.3	27,223	27,545	27,774	28,017	-2.8
Aluminum and nonferrous metals .....	16,275	16,387	16,362	-0.7	0.2	-1.5	16,243	16,434	16,225	16,228	0.1
Ferrous metal foundries .....	3,103	3,092	3,100	0.4	-0.3	0.6	3,167	3,184	3,129	2,960	7.0
Fabricated metal products .....	64,810	64,720	64,929	0.1	-0.3	-0.1	65,064	64,908	64,856	64,219	1.3
Machinery .....	93,899	93,585	93,209	0.3	0.4	0.5	94,856	94,290	92,438	85,773	10.6
Farm machinery .....	5,904	5,894	5,891	0.2	0.1	0.4	6,104	6,235	6,025	5,941	2.7
Construction machinery .....	9,353	9,380	9,402	-0.3	-0.2	1.6	9,605	9,508	9,333	8,349	15.0
Mining, oil field, and gas field machinery .....	5,814	5,821	5,763	-0.1	1.0	3.1	5,750	5,920	5,727	4,946	16.3
Industrial machinery .....	11,112	11,111	11,114	0.0	0.0	-1.1	11,447	11,031	10,569	10,344	10.7
Photographic equipment .....	1,469	1,446	1,445	1.6	0.1	0.5	1,428	1,473	1,449	1,354	5.5
Ventilation, heating, air-conditioning, and refrigeration equipment .....	9,224	9,183	9,153	0.4	0.3	0.1	9,713	9,500	9,166	7,993	21.5
Metalworking machinery .....	7,463	7,399	7,358	0.9	0.6	1.0	7,364	7,285	7,267	6,787	8.5
Turbines, generators, and other power transmission equipment .....	11,840	11,765	11,703	0.6	0.5	1.2	11,857	11,819	11,622	10,655	11.3
Material handling equipment .....	7,901	7,878	7,770	0.3	1.4	0.8	7,833	7,780	7,667	6,896	13.6
Computers and electronic products <sup>2</sup> .....	55,268	55,354	55,458	-0.2	-0.2	-0.3	54,480	55,414	55,450	53,156	2.5
Computers .....	1,992	1,957	2,062	1.8	-5.1	-1.7	1,896	1,868	1,943	1,984	-4.4
Computer storage devices .....	643	624	596	3.0	4.7	-3.4	585	633	583	616	-5.0
Other peripheral equipment .....	1,030	1,028	999	0.2	2.9	-1.1	1,006	1,063	991	891	22.9
Nondefense communications equipment .....	4,420	4,425	4,467	-0.1	-0.9	-0.2	4,304	4,403	4,380	4,205	2.4
Defense communications equipment .....	610	613	607	-0.5	1.0	0.3	610	613	607	604	1.0
Audio and video equipment .....	862	858	821	0.5	4.5	0.5	868	843	798	798	8.8
Electronic components .....	10,866	11,101	11,247	-2.1	-1.3	-1.5	10,864	11,262	11,587	11,419	-4.9
Nondefense search and navigation equipment .....	4,165	4,179	4,144	-0.3	0.8	-0.5	4,105	4,157	4,151	3,826	7.3
Defense search and navigation equipment .....	3,346	3,337	3,353	0.3	-0.5	0.3	3,347	3,374	3,357	3,362	-0.4
Electromedical, measuring and control instruments .....	19,072	18,992	18,937	0.4	0.3	0.2	18,877	18,836	18,671	17,861	5.7
Electrical equipment, appliances, and components .....	26,048	25,875	25,760	0.7	0.4	-0.6	26,228	26,279	25,894	24,358	7.7
Electric lighting equipment .....	2,545	2,557	2,553	-0.5	0.2	-0.2	2,512	2,584	2,606	2,456	2.3
Household appliances .....	3,614	3,568	3,504	1.3	1.8	-5.2	3,627	3,618	3,447	3,553	2.1
Electrical equipment .....	9,588	9,493	9,490	1.0	0.0	0.1	9,599	9,754	9,684	8,479	13.2
Batteries .....	1,841	1,831	1,849	0.5	-1.0	-0.5	1,970	1,773	1,734	1,959	0.6
Transportation equipment .....	159,068	163,948	163,626	-3.0	0.2	0.7	158,257	163,535	162,023	160,808	-1.6
Automobiles .....	5,639	5,721	5,665	-1.4	1.0	-0.4	5,444	5,754	5,683	5,548	-1.9
Light trucks and utility vehicles .....	9,368	9,719	9,581	-3.6	1.4	0.3	9,150	9,893	9,213	9,239	-1.0
Heavy duty trucks .....	2,966	2,908	2,889	2.0	0.7	-0.2	2,978	2,995	2,864	2,842	4.8
Motor vehicle bodies, parts, and trailers .....	35,152	35,346	35,373	-0.5	-0.1	0.5	35,321	35,528	35,690	34,596	2.1
Nondefense aircraft and parts .....	73,298	77,756	77,639	-5.7	0.2	0.1	72,793	77,012	76,368	77,889	-6.5
Defense aircraft and parts .....	14,062	13,924	13,979	1.0	-0.4	1.3	13,986	13,943	13,928	13,670	2.3
Ships and boats .....	4,563	4,709	4,706	-3.1	0.1	7.6	4,593	4,561	4,565	4,371	5.1
Furniture and related products .....	10,517	10,509	10,554	0.1	-0.4	-0.5	10,390	10,512	10,658	10,107	2.8
Miscellaneous durable goods .....	27,732	27,751	27,693	-0.1	0.2	0.2	27,468	27,615	27,529	26,724	2.8
Nondurable goods industries .....	336,750	338,142	339,080	-0.4	-0.3	0.0	336,681	338,063	337,895	331,314	1.6
Food products .....	72,588	72,430	72,411	0.2	0.0	0.5	71,785	72,784	72,702	68,490	4.8
Grain and oilseed milling .....	7,975	8,017	7,949	-0.5	0.9	0.3	8,113	8,335	8,156	7,773	4.4
Dairy products .....	10,855	10,759	10,765	0.9	-0.1	0.7	10,968	10,740	10,590	10,146	8.1
Meat, poultry, and seafood products .....	13,372	13,383	13,426	-0.1	-0.3	0.0	13,323	13,494	13,275	13,072	1.9
Beverage and tobacco products .....	31,406	31,072	30,983	1.1	0.3	-0.2	31,513	31,520	31,450	30,439	3.5
Beverages .....	27,698	27,359	27,302	1.2	0.2	-0.1	27,711	27,621	27,577	26,518	4.5
Tobacco .....	3,708	3,713	3,681	-0.1	0.9	-1.0	3,802	3,899	3,873	3,921	-3.0
Textile mills .....	3,624	3,619	3,625	0.1	-0.2	-1.4	3,602	3,616	3,642	3,501	2.9
Textile products .....	3,804	3,805	3,831	0.0	-0.7	-1.3	3,789	3,840	3,880	3,832	-1.1
Apparel .....	2,292	2,285	2,302	0.3	-0.7	-1.2	2,172	2,198	2,245	1,890	14.9
Leather and allied products .....	1,321	1,325	1,332	-0.3	-0.5	-2.6	1,299	1,302	1,333	1,099	18.2
Paper products .....	18,431	18,439	18,372	0.0	0.4	-0.1	18,362	18,541	18,477	17,964	2.2
Pulp, paper, and paperboard mills .....	5,694	5,682	5,664	0.2	0.3	-0.1	5,744	5,751	5,682	5,535	3.8
Paperboard containers .....	6,980	6,985	6,963	-0.1	0.3	0.5	6,915	7,040	7,073	6,594	4.9
Printing .....	6,986	7,101	7,131	-1.6	-0.4	-0.1	6,935	7,101	7,105	7,032	-1.4
Petroleum and coal products .....	47,648	50,023	51,709	-4.7	-3.3	1.0	47,634	48,406	49,497	50,529	-5.7
Petroleum refineries .....	40,465	42,899	44,660	-5.7	-3.9	1.0	40,397	41,213	42,424	43,969	-8.1
Chemical products .....	113,804	113,402	112,834	0.4	0.5	-0.2	114,529	113,786	112,898	112,449	1.8
Pesticides, fertilizers, and other agricultural chemicals .....	5,940	5,946	5,856	-0.1	1.5	-2.3	6,281	6,334	6,188	6,086	3.2
Pharmaceuticals and medicines .....	48,117	47,609	47,237	1.1	0.8	1.5	48,263	47,174	47,228	47,286	2.1
Paints, coatings, and adhesives .....	5,910	5,958	5,976	-0.8	-0.3	-0.2	6,064	6,088	6,015	5,483	10.6
Plastics and rubber products .....	34,846	34,641	34,550	0.6	0.3	-0.6	35,061	34,969	34,666	34,089	2.9

<sup>1</sup> Estimates of shipments and new orders are for the duration of the period, while estimates of unfilled orders and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes.

<sup>2</sup> Estimates of inventories for the semiconductor industry data are included in computers and electronic products, and all other applicable aggregate totals.

Note: Estimates of manufacturers' shipments, inventories and orders are subject to survey error and revision. One major component of survey error is nonsampling error, which includes errors of coverage, response, and nonreporting. Since the survey panel is not a probability sample, estimates of sampling error cannot be calculated. For further details on survey design, methodology, and data limitations see <<https://www.census.gov/manufacturing/m3/>>.

Source: U.S. Census Bureau, Manufacturers' Shipments, Inventories, and Orders (M3) Survey, Benchmark Report, May 12, 2023. Information on data sources and methodology can be found on our website at <[www.census.gov/manufacturing/m3/how\\_the\\_data\\_are\\_collected/index.html](https://www.census.gov/manufacturing/m3/how_the_data_are_collected/index.html)>.

The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data (Project No. P-6000307, Disclosure Review Board (DRB) approval number: CDBRB-FY23-0294).

**Table 5. Value of Manufacturers' Shipments, New Orders, Unfilled Orders, and Total Inventories for**

**Topical Series<sup>1, 2</sup>**

**January 2023 - March 2023**

[Estimates are shown in millions of dollars and are based on data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

Industry	Seasonally Adjusted						Not Seasonally Adjusted						
	Monthly			Percent Change			Monthly				Year to date		Percent Change <sup>6</sup> 2023/ 2022
	Mar. 2023	Feb. 2023	Jan. 2023	Feb. - Mar.	Jan. - Feb.	Dec. - Jan.	Mar. 2023	Feb. 2023	Jan. 2023	Mar. 2022	2023	2022	
<b>SHIPMENTS</b>													
All manufacturing industries.....	574,998	578,124	581,720	-0.5	-0.6	0.7	612,862	535,019	540,816	607,719	1,688,697	1,627,643	3.8
Construction materials and supplies.....	61,886	62,000	62,225	-0.2	-0.4	-0.1	64,006	55,545	55,088	64,443	174,639	173,938	0.4
Information technology.....	24,388	24,285	24,358	0.4	-0.3	0.9	26,747	21,716	21,096	25,941	69,559	67,618	2.9
Computers and related products.....	1,965	1,928	1,945	1.9	-0.9	4.0	2,099	1,511	1,739	1,723	5,349	4,395	21.7
Motor vehicle and parts.....	61,047	61,127	61,443	-0.1	-0.5	0.4	70,491	58,888	55,883	65,552	185,262	168,174	10.2
Capital goods.....	94,298	92,516	93,289	1.9	-0.8	-0.8	105,563	85,275	81,914	96,750	272,752	253,094	7.8
Nondefense capital goods <sup>3</sup> .....	81,460	79,537	80,110	2.4	-0.7	-0.9	91,281	72,637	70,938	83,326	234,856	217,565	7.9
Excluding aircraft.....	73,321	73,623	73,850	-0.4	-0.3	1.1	80,887	68,564	66,569	77,658	216,020	204,705	5.5
Defense capital goods <sup>4</sup> .....	12,838	12,979	13,179	-1.1	-1.5	-0.7	14,282	12,638	10,976	13,424	37,896	35,529	6.7
Consumer goods.....	243,700	248,675	251,714	-2.0	-1.2	1.3	254,363	228,178	236,659	259,541	719,200	690,465	4.2
Consumer durable goods.....	44,738	44,647	45,332	0.2	-1.5	0.2	51,487	42,056	39,917	48,630	133,460	122,709	8.8
Consumer nondurable goods.....	198,962	204,028	206,382	-2.5	-1.1	1.6	202,876	186,122	196,742	210,911	585,740	567,756	3.2
<b>NEW ORDERS</b>													
All manufacturing industries <sup>5</sup> .....	573,809	571,265	581,049	0.4	-1.7	0.0	618,458	532,423	542,609	614,653	1,693,490	1,655,878	2.3
Construction materials and supplies.....	62,037	61,886	62,019	0.2	-0.2	-0.3	65,862	56,080	55,965	66,249	177,907	178,330	-0.2
Information technology.....	25,076	24,447	24,393	2.6	0.2	0.0	28,451	22,218	21,194	27,274	71,863	69,307	3.7
Computers and related products <sup>5</sup> .....	1,981	1,922	1,966	3.1	-2.2	5.4	2,115	1,505	1,760	1,725	5,380	4,380	22.8
Motor vehicle and parts.....	61,102	61,461	61,465	-0.6	0.0	0.6	70,263	59,953	56,428	65,633	186,644	169,675	10.0
Capital goods.....	97,755	90,496	98,883	8.0	-8.5	-4.9	113,243	84,690	87,261	105,571	285,194	285,896	-0.2
Nondefense capital goods <sup>3</sup> .....	84,793	77,659	84,527	9.2	-8.1	-6.3	95,628	72,745	76,071	89,415	244,444	249,806	-2.1
Excluding aircraft.....	72,653	73,468	73,619	-1.1	-0.2	0.9	80,391	70,055	69,979	79,164	220,425	213,641	3.2
Defense capital goods <sup>4</sup> .....	12,962	12,837	14,356	1.0	-10.6	4.2	17,615	11,945	11,190	16,156	40,750	36,090	12.9
Consumer goods.....	243,669	248,837	251,634	-2.1	-1.1	1.2	254,437	228,351	236,760	259,496	719,548	690,645	4.2
Consumer durable goods.....	44,707	44,809	45,252	-0.2	-1.0	-0.3	51,561	42,229	40,018	48,585	133,808	122,889	8.9
Consumer nondurable goods.....	198,962	204,028	206,382	-2.5	-1.1	1.6	202,876	186,122	196,742	210,911	585,740	567,756	3.2
<b>UNFILLED ORDERS</b>													
All manufacturing industries <sup>5</sup> .....	1,279,679	1,275,522	1,276,988	0.3	-0.1	0.4	1,290,767	1,280,601	1,278,146	1,232,263	(X)	(X)	4.7
Construction materials and supplies.....	100,559	100,408	100,522	0.2	-0.1	-0.2	101,015	99,159	98,624	99,644	(X)	(X)	1.4
Information technology.....	134,335	133,647	133,485	0.5	0.1	0.0	135,414	133,710	133,208	132,230	(X)	(X)	2.4
Computers and related products <sup>5</sup> .....	1,314	1,298	1,304	1.2	-0.5	1.6	1,314	1,298	1,304	1,312	(X)	(X)	0.2
Motor vehicle and parts.....	35,051	34,996	34,662	0.2	1.0	0.1	36,323	36,551	35,486	37,406	(X)	(X)	-2.9
Capital goods.....	939,849	936,392	938,412	0.4	-0.2	0.6	946,328	938,648	939,233	891,831	(X)	(X)	6.1
Nondefense capital goods <sup>3</sup> .....	735,033	731,700	733,578	0.5	-0.3	0.6	738,232	733,885	733,777	687,946	(X)	(X)	7.3
Excluding aircraft.....	273,167	273,835	273,990	-0.2	-0.1	-0.1	275,085	275,581	274,090	271,614	(X)	(X)	1.3
Defense capital goods <sup>4</sup> .....	204,816	204,692	204,834	0.1	-0.1	0.6	208,096	204,763	205,456	203,885	(X)	(X)	2.1
Consumer goods.....	12,078	12,109	11,947	-0.3	1.4	-0.7	12,226	12,152	11,979	12,575	(X)	(X)	-2.8
Consumer durable goods.....	12,078	12,109	11,947	-0.3	1.4	-0.7	12,226	12,152	11,979	12,575	(X)	(X)	-2.8
<b>TOTAL INVENTORIES</b>													
All manufacturing industries.....	853,732	859,843	860,359	-0.7	-0.1	0.1	853,755	861,700	857,451	836,408	(X)	(X)	2.1
Construction materials and supplies.....	92,902	92,835	93,031	0.1	-0.2	-0.1	94,260	94,155	93,549	91,119	(X)	(X)	3.4
Information technology.....	46,236	46,055	45,963	0.4	0.2	0.0	45,711	45,995	45,535	43,568	(X)	(X)	4.9
Computers and related products.....	3,665	3,609	3,657	1.6	-1.3	-1.8	3,487	3,564	3,517	3,491	(X)	(X)	-0.1
Motor vehicle and parts.....	53,125	53,694	53,508	-1.1	0.3	0.3	52,893	54,170	53,450	52,225	(X)	(X)	1.3
Capital goods.....	244,657	248,587	248,145	-1.6	0.2	0.5	244,124	248,219	245,387	237,194	(X)	(X)	2.9
Nondefense capital goods <sup>3</sup> .....	220,846	224,752	224,288	-1.7	0.2	0.2	220,272	224,505	221,680	214,340	(X)	(X)	2.8
Excluding aircraft.....	161,342	160,766	160,361	0.4	0.3	0.3	161,259	161,263	159,097	149,869	(X)	(X)	7.6
Defense capital goods <sup>4</sup> .....	23,811	23,835	23,857	-0.1	-0.1	2.8	23,852	23,714	23,707	22,854	(X)	(X)	4.4
Consumer goods.....	257,819	259,687	260,582	-0.7	-0.3	0.4	256,269	258,564	258,779	253,138	(X)	(X)	1.2
Consumer durable goods.....	42,642	43,092	42,763	-1.0	0.8	-0.6	41,944	43,355	42,445	41,330	(X)	(X)	1.5
Consumer nondurable goods.....	215,177	216,595	217,819	-0.7	-0.6	0.6	214,325	215,209	216,334	211,808	(X)	(X)	1.2

X Not Applicable

<sup>1</sup> Estimates of shipments and new orders are for the duration of the period, while estimates of unfilled orders and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes.

<sup>2</sup> Topical series are regroupings of the separate industry categories.

<sup>3</sup> Nondefense capital goods industries include: small arms and ordnance; farm machinery and equipment; construction machinery; mining, oil, and gas field machinery; industrial machinery; vending, laundry, and other machinery; photographic equipment; metalworking machinery; turbines and generators; other power transmission equipment; pumps and compressors; material handling equipment; all other machinery; electronic computers; computer storage devices; other computer peripheral equipment; communications equipment; search and navigation equipment; electromedical, measuring, and control instruments; electrical equipment; other electrical equipment, appliances, and components; heavy duty trucks; aircraft; railroad rolling stock; ships and boats; office and institutional furniture; and medical equipment and supplies.

<sup>4</sup> Defense capital goods industries include: small arms and ordnance; communications equipment; aircraft; missiles, space vehicles, and parts; ships and boats; and search and navigation equipment.

<sup>5</sup> Estimates and percent changes exclude semiconductor industry data.

<sup>6</sup> Based on year-to-date for shipments and new orders, but on same month prior year for unfilled orders and inventories.

Note: Estimates of manufacturers' shipments, inventories and orders are subject to survey error and revision. One major component of survey error is nonsampling error, which includes errors of coverage, response, and nonreporting. Since the survey panel is not a probability sample, estimates of sampling error cannot be calculated. For further details on survey design, methodology, and data limitations see <<https://www.census.gov/manufacturing/m3/>>.

Source: U.S. Census Bureau, Manufacturers' Shipments, Inventories, and Orders (M3) Survey, Benchmark Report, May 12, 2023. Information on data sources and methodology can be found on our website at

<[www.census.gov/manufacturing/m3/how\\_the\\_data\\_are\\_collected/index.html](https://www.census.gov/manufacturing/m3/how_the_data_are_collected/index.html)>.

The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data (Project No. P-6000307, Disclosure Review Board (DRB) approval number: CBDRB-FY23-0294).



**Table 6. Value of Manufacturers' Inventories, by Stage of Fabrication, by Industry Group<sup>1</sup>**  
**January 2023 - March 2023**

[Estimates are shown in millions of dollars and are based on data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

Industry	Seasonally Adjusted						Not Seasonally Adjusted				
	Monthly			Percent Change			Monthly				Percent Change Mar. 2023/ 2022
	Mar. 2023	Feb. 2023	Jan. 2023	Feb. - Mar.	Jan. - Feb.	Dec. - Jan.	Mar. 2023	Feb. 2023	Jan. 2023	Mar. 2022	
<b>MATERIALS AND SUPPLIES</b>											
All manufacturing industries.....	316,788	317,245	318,076	-0.1	-0.3	-0.1	316,297	317,212	318,553	305,716	3.5
Durable goods industries.....	196,750	196,519	196,709	0.1	-0.1	0.4	196,210	196,194	196,896	186,796	5.0
Wood products.....	7,813	7,756	7,789	0.7	-0.4	0.7	7,844	7,950	7,985	7,748	1.2
Nonmetallic mineral products.....	7,707	7,715	7,655	-0.1	0.8	1.2	7,746	7,750	7,640	6,851	13.1
Primary metals.....	19,257	18,925	18,828	1.8	0.5	0.4	18,986	18,851	18,792	18,893	0.5
Fabricated metal products.....	24,578	24,592	24,783	-0.1	-0.8	-1.0	24,505	24,519	24,864	25,718	-4.7
Machinery.....	40,229	40,374	40,389	-0.4	0.0	1.0	40,277	40,159	40,222	36,185	11.3
Computers and electronic products.....	26,416	26,392	26,351	0.1	0.2	0.8	25,993	26,206	26,296	23,911	8.7
Electrical equipment, appliances, and components.....	12,660	12,553	12,491	0.9	0.5	0.0	12,706	12,689	12,596	11,322	12.2
Transportation equipment.....	42,824	43,025	43,306	-0.5	-0.6	0.1	43,033	42,983	43,316	41,765	3.0
Furniture and related products.....	5,435	5,396	5,372	0.7	0.4	0.4	5,446	5,438	5,461	5,170	5.3
Miscellaneous products.....	9,831	9,791	9,745	0.4	0.5	1.7	9,674	9,649	9,724	9,233	4.8
Nondurable goods industries.....	120,038	120,726	121,367	-0.6	-0.5	-0.8	120,087	121,018	121,657	118,920	1.0
Food products.....	26,627	26,605	26,633	0.1	-0.1	0.5	26,375	26,645	26,843	25,530	3.3
Beverage and tobacco products.....	6,391	6,285	6,392	1.7	-1.7	-1.2	6,513	6,469	6,690	6,436	1.2
Textiles.....	1,454	1,456	1,454	-0.1	0.1	-0.2	1,450	1,449	1,451	1,398	3.7
Textile products.....	1,732	1,717	1,717	0.9	0.0	-0.3	1,722	1,723	1,736	1,666	3.4
Apparel.....	616	618	631	-0.3	-2.1	-0.5	597	602	627	600	-0.5
Leather and allied products.....	406	408	421	-0.5	-3.1	-0.9	399	401	419	357	11.8
Paper products.....	9,725	9,736	9,722	-0.1	0.1	0.0	9,671	9,797	9,804	9,292	4.1
Printing.....	3,607	3,695	3,706	-2.4	-0.3	-2.1	3,589	3,701	3,712	3,659	-1.9
Petroleum and coal products.....	14,138	14,659	15,222	-3.6	-3.7	-3.0	14,120	14,323	14,621	15,266	-7.5
Chemical products.....	39,685	39,776	39,756	-0.2	0.1	-1.2	40,019	40,046	39,939	39,295	1.8
Plastics and rubber products.....	15,657	15,771	15,713	-0.7	0.4	0.0	15,632	15,862	15,815	15,421	1.4
<b>WORK IN PROCESS</b>											
All manufacturing industries.....	237,974	243,029	242,946	-2.1	0.0	-0.1	237,754	242,729	240,402	236,408	0.6
Durable goods industries.....	174,134	178,575	178,632	-2.5	0.0	-0.7	174,002	178,411	176,860	177,176	-1.8
Wood products.....	1,843	1,855	1,860	-0.6	-0.3	-11.5	1,891	1,902	1,897	2,211	-14.5
Nonmetallic mineral products.....	1,643	1,634	1,621	0.6	0.8	-0.9	1,699	1,679	1,628	1,632	4.1
Primary metals.....	12,482	12,917	13,044	-3.4	-1.0	-1.6	12,509	12,957	12,933	13,210	-5.3
Fabricated metal products.....	16,777	16,728	16,791	0.3	-0.4	1.3	16,879	16,759	16,723	15,749	7.2
Machinery.....	24,816	24,250	24,068	2.3	0.8	-2.3	25,186	24,521	23,629	23,374	7.8
Computers and electronic products.....	13,928	14,093	14,231	-1.2	-1.0	-1.4	13,934	14,304	14,449	15,188	-8.3
Electrical equipment, appliances, and components.....	4,528	4,530	4,507	0.0	0.5	-3.8	4,538	4,566	4,483	4,457	1.8
Transportation equipment.....	91,868	96,337	96,223	-4.6	0.1	-0.1	91,193	95,502	94,875	95,528	-4.5
Furniture and related products.....	1,464	1,472	1,518	-0.5	-3.0	-0.6	1,445	1,482	1,536	1,432	0.9
Miscellaneous products.....	4,785	4,759	4,769	0.5	-0.2	-1.2	4,728	4,739	4,707	4,395	7.6
Nondurable goods industries.....	63,840	64,454	64,314	-1.0	0.2	1.7	63,752	64,318	63,542	59,232	7.6
Food products.....	7,951	7,950	7,811	0.0	1.8	0.4	7,793	8,164	8,136	7,841	-0.6
Beverage and tobacco products.....	11,024	10,863	10,742	1.5	1.1	-0.3	11,026	11,085	11,093	10,529	4.7
Textiles.....	587	583	588	0.7	-0.9	-3.9	582	582	587	620	-6.1
Textile products.....	473	470	479	0.6	-1.9	-1.2	473	479	488	481	-1.7
Apparel.....	275	274	278	0.4	-1.4	-2.5	269	267	271	261	3.1
Leather and allied products.....	133	132	127	0.8	3.9	-1.6	137	134	128	139	-1.4
Paper products.....	1,655	1,653	1,644	0.1	0.5	0.4	1,652	1,639	1,635	1,668	-1.0
Printing.....	1,153	1,177	1,197	-2.0	-1.7	-2.4	1,132	1,181	1,184	1,325	-14.6
Petroleum and coal products.....	16,707	17,469	17,995	-4.4	-2.9	1.9	16,942	17,090	16,705	13,883	22.0
Chemical products.....	20,028	20,003	19,592	0.1	2.1	4.6	19,863	19,771	19,451	18,488	7.4
Plastics and rubber products.....	3,854	3,880	3,861	-0.7	0.5	-1.2	3,883	3,926	3,864	3,997	-2.9
<b>FINISHED GOODS</b>											
All manufacturing industries.....	298,970	299,569	299,337	-0.2	0.1	0.5	299,704	301,759	298,496	294,284	1.8
Durable goods industries.....	146,098	146,607	145,938	-0.3	0.5	1.0	146,862	149,032	145,800	141,122	4.1
Wood products.....	6,522	6,636	6,677	-1.7	-0.6	1.2	6,842	6,914	6,803	6,976	-1.9
Nonmetallic mineral products.....	7,515	7,546	7,589	-0.4	-0.6	-0.4	7,676	7,726	7,627	7,326	4.8
Primary metals.....	14,858	14,975	14,987	-0.8	-0.1	-0.2	15,138	15,355	15,403	15,102	0.2
Fabricated metal products.....	23,455	23,400	23,355	0.2	0.2	-0.2	23,680	23,630	23,269	22,752	4.1
Machinery.....	28,854	28,961	28,752	-0.4	0.7	2.0	29,393	29,610	28,587	26,214	12.1
Computers and electronic products.....	14,924	14,869	14,876	0.4	0.0	-1.1	14,553	14,904	14,705	14,057	3.5
Electrical equipment, appliances, and components.....	8,860	8,792	8,762	0.8	0.3	0.4	8,984	9,024	8,815	8,579	4.7
Transportation equipment.....	24,376	24,586	24,097	-0.9	2.0	4.7	24,031	25,050	23,832	23,515	2.2
Furniture and related products.....	3,618	3,641	3,664	-0.6	-0.6	-1.8	3,499	3,592	3,661	3,505	-0.2
Miscellaneous products.....	13,116	13,201	13,179	-0.6	0.2	-0.3	13,066	13,227	13,098	13,096	-0.2
Nondurable goods industries.....	152,872	152,962	153,399	-0.1	-0.3	0.0	152,842	152,727	152,696	153,162	-0.2
Food products.....	38,010	37,875	37,967	0.4	-0.2	0.4	37,617	37,975	37,723	35,119	7.1
Beverage and tobacco products.....	13,991	13,924	13,849	0.5	0.5	0.3	13,974	13,966	13,667	13,474	3.7
Textiles.....	1,583	1,580	1,583	0.2	-0.2	-1.6	1,570	1,585	1,604	1,483	5.9
Textile products.....	1,599	1,618	1,635	-1.2	-1.0	-2.2	1,594	1,638	1,656	1,685	-5.4
Apparel.....	1,401	1,393	1,393	0.6	0.0	-1.2	1,306	1,329	1,347	1,029	26.9
Leather and allied products.....	782	785	784	-0.4	0.1	-3.6	763	767	786	603	26.5
Paper products.....	7,051	7,050	7,006	0.0	0.6	-0.3	7,039	7,105	7,038	7,004	0.5
Printing.....	2,226	2,229	2,228	-0.1	0.0	4.7	2,214	2,219	2,209	2,048	8.1
Petroleum and coal products.....	16,803	17,895	18,492	-6.1	-3.2	3.6	16,572	16,993	18,171	21,380	-22.5
Chemical products.....	54,091	53,623	53,486	0.9	0.3	-1.2	54,647	53,969	53,508	54,666	0.0
Plastics and rubber products.....	15,335	14,990	14,976	2.3	0.1	-1.1	15,546	15,181	14,987	14,671	6.0

<sup>1</sup> Estimates of shipments and new orders are for the duration of the period, while estimates of unfilled orders and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes.

Note: Estimates of manufacturers' shipments, inventories and orders are subject to survey error and revision. One major component of survey error is nonsampling error, which includes errors of coverage, response, and nonreporting. Since the survey panel is not a probability sample, estimates of sampling error cannot be calculated. For further details on survey design, methodology, and data limitations see <<https://www.census.gov/manufacturing/m3/>>.

Source: U.S. Census Bureau, Manufacturers' Shipments, Inventories, and Orders (M3) Survey, Benchmark Report, May 12, 2023. Information on data sources and methodology can be found on our website at <[www.census.gov/manufacturing/m3/how\\_the\\_data\\_are\\_collected/index.html](https://www.census.gov/manufacturing/m3/how_the_data_are_collected/index.html)>.

The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data (Project No. P-6000307, Disclosure Review Board (DRB) approval number: CDBRB-FY23-0294).

**Table 7. Ratios of Manufacturers' Inventories to Shipments and Unfilled Orders  
to Shipments, by Industry Group<sup>3</sup>**

January 2023 - March 2023

[Based on Seasonally Adjusted data from the Manufacturers' Shipments, Inventories, and Orders Survey.]

Industry	Inventory/Shipments ratio			Unfilled Orders/Shipments ratio <sup>1</sup>		
	Mar. 2023	Feb. 2023	Jan. 2023	Mar. 2023	Feb. 2023	Jan. 2023
All manufacturing industries <sup>2</sup> .....	1.48	1.49	1.48	(X)	(X)	(X)
Durable goods industries <sup>2</sup> .....	1.85	1.88	1.87	6.58	6.64	6.63
Wood products.....	1.20	1.21	1.21	(X)	(X)	(X)
Nonmetallic mineral products.....	1.29	1.28	1.26	(X)	(X)	(X)
Primary metals.....	1.73	1.75	1.74	1.40	1.41	1.41
Fabricated metal products.....	1.83	1.83	1.84	3.74	3.75	3.77
Machinery.....	2.53	2.50	2.49	4.14	4.12	4.14
Computers and electronic products <sup>3</sup> .....	1.88	1.88	1.88	6.04	5.99	6.04
Electrical equipment, appliances, and components.....	1.84	1.86	1.82	3.40	3.43	3.35
Transportation equipment.....	1.79	1.89	1.87	13.73	14.21	14.15
Furniture and related products.....	1.52	1.52	1.51	1.91	1.91	1.88
Miscellaneous products.....	1.92	1.92	1.90	(X)	(X)	(X)
Nondurable goods industries.....	1.14	1.13	1.12	(X)	(X)	(X)
Food products.....	0.90	0.90	0.91	(X)	(X)	(X)
Beverage and tobacco products.....	1.83	1.85	1.85	(X)	(X)	(X)
Textiles.....	1.71	1.68	1.67	(X)	(X)	(X)
Textile products.....	1.89	1.86	1.88	(X)	(X)	(X)
Apparel.....	2.74	2.66	2.64	(X)	(X)	(X)
Leather and allied products.....	2.65	2.62	2.53	(X)	(X)	(X)
Paper products.....	1.05	1.05	1.05	(X)	(X)	(X)
Printing.....	0.95	0.96	0.97	(X)	(X)	(X)
Petroleum and coal products.....	0.74	0.71	0.71	(X)	(X)	(X)
Chemical products.....	1.46	1.46	1.46	(X)	(X)	(X)
Plastics and rubber products.....	1.41	1.40	1.39	(X)	(X)	(X)

(X) Not Applicable

<sup>1</sup> Estimates of shipments and new orders are for the duration of the period, while estimates of unfilled orders and total inventories are for the end of the period. Not seasonally adjusted estimates of shipments and new orders include adjusted data for non-calendar reporters. Seasonally adjusted estimates include concurrent adjustments for holiday and trading-day differences, where appropriate, as well as seasonal variation, based on the results of the latest annual review of the model parameters. Estimates are not adjusted for price changes.

<sup>2</sup> Excludes the following industries with no unfilled orders: Wood products; nonmetallic mineral products; medical equipment and supplies; office supplies; other miscellaneous manufacturing; cutlery and handtools; farm and garden machinery; computer storage and peripheral devices; audio and video equipment; manufacturing and reproducing magnetic and optical media; batteries; automobiles; light trucks and utility vehicles; heavy duty trucks; and miscellaneous furniture.

<sup>3</sup> Unfilled orders to shipments ratio excludes semiconductor manufacturing.

Note: Estimates of manufacturers' shipments, inventories and orders are subject to survey error and revision. One major component of survey error is nonsampling error, which includes errors of coverage, response, and nonreporting. Since the survey panel is not a probability sample, estimates of sampling error cannot be calculated. For further details on survey design, methodology, and data limitations see <<https://www.census.gov/manufacturing/m3/>>.

Source: U.S. Census Bureau, Manufacturers' Shipments, Inventories, and Orders (M3) Survey, Benchmark Report, May 12, 2023. Information on data sources and methodology can be found on our website at <[www.census.gov/manufacturing/m3/how\\_the\\_data\\_are\\_collected/index.html](https://www.census.gov/manufacturing/m3/how_the_data_are_collected/index.html)>.

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