Economic activity in the manufacturing sector contracted in January for the third consecutive month following a 28 -month period of growth, say the nation's supply executives in the latest Manufacturing ISM ${ }^{\circledR}$ Report On Business ${ }^{\circledR}$.

The January Manufacturing $\mathrm{PM}{ }^{\circledR}$ registered 47.4 percent, 1 percentage point lower than the seasonally adjusted 48.4 percent in December. The New Orders Index remained in contraction territory at 42.5 percent, 2.6 percentage points lower than the seasonally adjusted figure of 45.1 percent recorded in December. The Production Index reading of 48 percent is a 0.6 -percentage point decrease compared to December's seasonally adjusted figure of 48.6 percent. The Prices Index registered 44.5 percent, up 5.1 percentage points compared to the December figure of 39.4 percent. The Backlog of Orders Index registered 43.4 percent, 2 percentage points higher than the December reading of 41.4 percent. The Employment Index continued in expansion territory ( 50.6 percent, down 0.2 percentage point from December's seasonally adjusted 50.8 percent) after emerging from contraction territory (48.9 percent, seasonally adjusted) in November.

The two manufacturing industries that reported growth in January are: Miscellaneous Manufacturing ${ }^{\ddagger}$; and Transportation Equipment. Of the six biggest manufacturing industries, one - Transportation Equipment registered growth in January. ISM
$\ddagger$ Miscellaneous Manufacturing (products such as medical office supplies).

## MANUFACTURING

## PMI at 47.4\%

The U.S. manufacturing sector contracted in January, as the Manufacturing $\mathrm{PM}{ }^{\circledR}$ registered 47.4 percent, 1 percentage point below the seasonally adjusted reading of 48.4 percent recorded in December. This is the third month of slow contraction and the continuation of a downward trend that began in June 2022. Of the five subindexes that directly factor into the Manufacturing PM1 ${ }^{\oplus}$, two (Employment and
 Inventories) were in growth territory; however, both slowed compared to December. The PM ${ }^{\circledR}$ registered its lowest level since May 2020, when the index registered a seasonally adjusted 43.5 percent.

Manufacturing at a Glance

| INDEX | Jan <br> Index | Dec <br> Index | \% Point <br> Change | Direction | Rate of <br> Change | Trend <br> (months) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Manufacturing PMI | 47.4 | 48.4 | -1.0 | Contracting | Faster | 3 |
| New Orders | 42.5 | 45.1 | -2.6 | Contracting | Faster | 5 |
| Production | 48.0 | 48.6 | -0.6 | Contracting | Faster | 2 |
| Employment | 50.6 | 50.8 | -0.2 | Growing | Slower | 2 |
| Supplier Deliveries | 45.6 | 45.1 | +0.5 | Faster | Slower | 4 |
| Inventories | 50.2 | 52.3 | -2.1 | Growing | Slower | 18 |
| Customers' Inventories | 47.4 | 48.2 | -0.8 | Too Low | Faster | 76 |
| Prices | 44.5 | 39.4 | +5.1 | Decreasing | Slower | 4 |
| Backlog of Orders | 43.4 | 41.4 | +2.0 | Contracting | Slower | 4 |
| New Export Orders | 49.4 | 46.2 | +3.2 | Contracting | Slower | 6 |
| Imports | 47.8 | 45.1 | +2.7 | Contracting | Slower | 3 |
| Overall Economy |  |  |  | Contracting | Faster | $\mathbf{2}$ |
| Manufacturing Sector |  |  |  | Contracting | Faster | $\mathbf{3}$ |

*Number of months moving in current direction. Manufacturing ISM ${ }^{\oplus}$ Report On Business ${ }^{\oplus}$ data has been seasonally adjusted for the New Orders, Production, Employment and Inventories indexes. Indexes reflect newly released seasonal adjustment factors.

## Commodities Reported

Commodities Up in Price: Aluminum*; Copper (2); Copper Products; Electrical Components (3); Freight* (2); Packaging Materials; Portland Cement; Steel — Carbon; Steel — Hot Rolled; Steel — Scrap; and Steel Products*. Commodities Down in Price: Aluminum (9)*; Aluminum Products (2); Coconut Products; Corrugate (2); Corrugated Boxes; Crude Oil (2); Diesel (2); Freight* (3); High Density Polyethylene (HDPE) Resin; Lumber; Methanol; Natural Gas (2); Ocean Freight (5); Petroleum Based Products; Plastic Based Products; Plastic Resins (8); Polyethylene Terephthalate (PET); Polypropylene (6); Polyvinyl Chloride (PVC); Solvents; Steel (9); Steel Bars; and Steel Products (7)*. Commodities in Short Supply: Bearings (2); Electrical Components (28); Electronic Components (26); Hydraulic Components (9); Semiconductors (26); Steel — Stainless; and Steel Products.


## Inventories

The Inventories Index registered 50.2 percent. Of 18 manufacturing industries, the nine reporting higher inventories in January - in the following order - are: Printing \& Related Support Activities; Miscellaneous Manufacturing $\ddagger$; Nonmetallic Mineral Products; Paper Products; Electrical Equipment, Appliances \& Components; Transportation Equipment; Plastics \& Rubber Products; Food, Beverage \& Tobacco Products; and Computer \& Electronic Products.

## New Orders

ISM's New Orders Index registered 42.5 percent. None of the 18 manufacturing industries reported growth in new orders in January. Seventeen industries reported a decline in new orders in January, in the following order: Wood Products; Textile Mills; Apparel, Leather \& Allied Products; Paper Products; Nonmetallic Mineral Products; Electrical Equipment, Appliances \& Components; Furniture \& Related Products; Plastics \& Rubber Products; Primary Metals; Fabricated Metal Products; Machinery; Petroleum \& Coal Products; Food, Beverage \& Tobacco Products; Miscellaneous Manufacturing $\ddagger$; Chemical Products; Computer \& Electronic Products; and Transportation Equipment.

## Production

The Production Index registered 48 percent. The only industry reporting growth in production during the month of January is Computer \& Electronic Products. The 14 industries reporting a decrease in production in January - in the following order - are: Textile Mills; Nonmetallic Mineral Products; Printing \& Related Support Activities; Paper Products; Plastics \& Rubber Products; Wood Products; Primary Metals; Furniture \& Related Products; Electrical Equipment, Appliances \& Components; Food, Beverage \& Tobacco Products; Machinery; Miscellaneous Manufacturing $\ddagger$; Transportation Equipment; and Chemical Products.

## Employment

ISM's Employment Index registered 50.6 percent. Of 18 manufacturing industries, five reported employment growth in January: Nonmetallic Mineral Products; Machinery; Plastics \& Rubber Products; Transportation Equipment; and Fabricated Metal Products.

## Supplier Deliveries

The delivery performance of suppliers to manufacturing organizations was faster for a fourth straight month in January, as the Supplier Deliveries Index registered 45.6 percent. Two of 18 manufacturing industries reported slower supplier deliveries in January: Textile Mills; and Petroleum \& Coal Products.
$\ddagger$ Miscellaneous Manufacturing (products such as medical equipment and supplies, jewelry, sporting goods, toys and office supplies).

$\ddagger$ Miscellaneous Manufacturing (products such as medical equipment and supplies, jewelry, sporting goods, toys and office supplies).

## Customers' Inventories

ISM's Customers' Inventories Index registered 47.4 percent. Seven industries reported customers' inventories as too high in January, in the following order: Apparel, Leather \& Allied Products; Paper Products; Plastics \& Rubber Products; Furniture \& Related Products; Electrical Equipment, Appliances \& Components; Primary Metals; and Chemical Products.

## Prices

The ISM Prices Index registered 44.5 percent. In January, four industries reported paying increased prices for raw materials: Fabricated Metal Products; Miscellaneous Manufacturing $\ddagger$; Computer \& Electronic Products; and Machinery.

## Backlog of Orders

ISM's Backlog of Orders Index registered 43.4 percent. Two industries reported growth in order backlogs in January: Food, Beverage \& Tobacco Products; and Chemical Products. Fourteen industries reported lower backlogs in January, in the following order: Textile Mills; Paper Products; Wood Products; Printing \& Related Support Activities; Furniture \& Related Products; Electrical Equipment, Appliances \& Components; Nonmetallic Mineral Products; Primary Metals; Plastics \& Rubber Products; Fabricated Metal Products; Machinery; Transportation Equipment; Computer \& Electronic Products; and Miscellaneous Manufacturing $\ddagger$

## New Export Orders

ISM's New Export Orders Index registered 49.4 percent. Four industries reported growth in new export orders in January: Nonmetallic Mineral Products; Wood Products; Printing \& Related Support Activities; and Fabricated Metal Products.

## Imports

ISM's Imports Index registered 47.8 percent. The eight industries reporting an increase in import volumes in January - in the following order - are: Textile Mills; Paper Products; Printing \& Related Support Activities; Primary Metals; Nonmetallic Mineral Products; Food, Beverage \& Tobacco Products; Transportation Equipment; and Miscellaneous Manufacturing $\neq$.

## About This Report

DO NOT CONFUSE THIS NATIONAL REPORT with the various regional purchasing reports released across the country. The national report's information reflects the entire U.S., while the regional reports contain primarily regional data from their local vicinities. Also, the information in the regional reports is not used in calculating the results of the national report.

The data presented herein is obtained from a survey of manufacturing and services supply executives based on information they have collected within their respective organizations. ISM ${ }^{\ominus}$ makes no representation, other than that stated within this release, regarding the individual company data collection procedures. The data should be compared to all other economic data sources when used in decision-making.

## Data and Method of Presentation

The Manufacturing ISM ${ }^{\circledR}$ Report On Business ${ }^{\oplus}$ is based on data compiled from purchasing and supply executives nationwide. The composition of the Manufacturing Business Survey Committee is stratified according to the North American Industry Classification System (NAICS) and each of the following NAICS-based industry's contribution to gross domestic product (GDP): Food, Beverage \& Tobacco Products; Textile Mills; Apparel, Leather \& Allied Products; Wood Products; Paper Products; Printing \& Related Support Activities; Petroleum \& Coal Products; Chemical Products; Plastics \& Rubber Products; Nonmetallic Mineral Products; Primary Metals; Fabricated Metal Products; Machinery; Computer \& Electronic Products; Electrical Equipment, Appliances \& Components; Transportation Equipment; Furniture \& Related Products; and Miscellaneous Manufacturing (products such as medical equipment and supplies, jewelry, sporting goods, toys and office supplies). The data are weighted based on each industry's contribution to GDP. According to the BEA estimates for 2021 GDP (released December 22, 2022), the six largest manufacturing subsectors are: Computer \& Electronic Products; Chemical Products; Transportation Equipment; Petroleum \& Coal Products; Food, Beverage \& Tobacco Products; and Machinery.

The Services ISM ${ }^{\oplus}$ Report On Business ${ }^{\circledR}$ (formerly the Non-Manufacturing ISM ${ }^{\circledR}$ Report On Business ${ }^{\ominus}$ ) is based on data compiled from purchasing and supply executives nationwide. Membership of the Services Business Survey Committee (formerly Non-Manufacturing Business Survey Committee) is diversified by NAICS, based on each industry's contribution to gross domestic product (GDP). The Services Business Survey Committee responses are divided into the following NAICS code categories: Agriculture, Forestry, Fishing \& Hunting; Mining; Utilities; Construction; Wholesale Trade; Retail Trade; Transportation \& Warehousing; Information; Finance \& Insurance; Real Estate, Rental \& Leasing; Professional, Scientific \& Technical Services; Management of Companies \& Support Services; Educational Services; Health Care \& Social Assistance; Arts, Entertainment \& Recreation; Accommodation \& Food Services; Public Administration; and Other Services (services such as Equipment \& Machinery Repairing; Promoting or Administering Religious Activities; Grantmaking; Advocacy; and Providing Dry-Cleaning \& Laundry Services, Personal Care Services, Death Care Services, Pet Care Services, Photofinishing Services, Temporary Parking Services, and Dating Services). The data are weighted based on each industry's contribution to GDP. According to the BEA estimates for 2021 GDP (released December 22, 2022), the six largest services sectors are: Real Estate, Rental \& Leasing; Government; Professional, Scientific, \& Technical Services; Health Care \& Social Assistance; Information; and Finance \& Insurance.

Survey responses reflect the change, if any, in the current month compared to the previous month. Responses are raw data and are never changed. The diffusion index includes the percent of positive responses plus one-half of those responding the same (considered positive).

The resulting single index number for those meeting the criteria for seasonal adjustments (for Manufacturing: New Orders, Production, Employment, and Inventories) (for Services: Business Activity, New Orders, Employment and Prices) is then seasonally adjusted to allow for the effects of repetitive intra-year variations resulting primarily from normal differences in weather conditions, various institutional arrangements, and differences attributable to non-moveable holidays. The remaining indexes have not indicated significant seasonality. All seasonal adjustment factors are subject annually to relatively minor changes when conditions warrant them.

The Manufacturing $\mathrm{PM}^{( }{ }^{\text {i }}$ is a composite index based on the diffusion indexes of five of the indexes with equal weights: New Orders (seasonally adjusted), Production (seasonally adjusted), Employment (seasonally adjusted), Supplier Deliveries, and Inventories (seasonally adjusted). The Services $\mathrm{PM}{ }^{\oplus}$ is a composite index based on the diffusion indexes for four of the indicators with equal weights: Business Activity (seasonally adjusted), New Orders (seasonally adjusted), Employment (seasonally adjusted) and Supplier Deliveries.

Diffusion indexes have the properties of leading indicators and are convenient summary measures showing the prevailing direction of change and the scope of change.

A Manufacturing $\mathrm{PM}^{\oplus}$ reading above 50 percent indicates that the manufacturing economy is generally expanding; below 50 percent indicates that it is generally declining. A Manufacturing PMI ${ }^{\oplus}$ above 48.7 percent, over a period of time, indicates that the overall economy, or gross domestic product (GDP), is generally expanding; below 48.7 percent, it is generally declining.

The distance from 50 percent or 48.7 percent is indicative of the extent of the expansion or decline. A Services $\mathrm{PMI}^{\oplus}$ reading above 50 percent indicates that the services economy is generally expanding; below 50 percent indicates that it is generally declining. A Services $\mathrm{PM}^{\circ}$ above 49.9 percent, over time, indicates that the overall economy, or gross domestic produc (GDP), is generally expanding; below 49.9 percent, it is generally declining. The distance from 50 percent or 49.9 percent is indicative of the strength of the expansion or decline. With some of the indicators within the Manufacturing ISM ${ }^{\circledR}$ Report On Business ${ }^{\oplus}$, ISM ${ }^{\oplus}$ has indicated the departure point between expansion and decline of comparable government series, as determined by regression analysis.

The Report On Business ${ }^{\oplus}$ surveys are sent out to Manufacturing and Services Business Survey Committee respondents the first part of each month. Respondents are asked to report on information for the current month for U.S. operations only. ISM ${ }^{\circledR}$ receives survey responses throughout most of any given month, with the majority of respondents generally waiting until late in the month to submit responses to give the most accurate picture of current business activity.

The industries reporting growth, as indicated in the monthly reports, are listed in the order of most growth to least growth. For the industries reporting contraction or decreases, those are listed in the order of the highest level of contraction/decrease to the least level of contraction/ decrease.

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## About Institute for Supply Management

Institute for Supply Management ${ }^{\oplus}\left(\right.$ ISM $^{\oplus}$ ) serves supply management professionals in more than 90 countries. Its 50,000 members around the world manage about US $\$ 1$ trillion in corporate and government supply chain procurement annually. Founded in 1915 as the first supply management institute in the world, ISM is committed to advancing the practice of supply management to drive value and competitive advantage for its members, contributing to a prosperous and sustainable world. ISM leads the profession through the ISM ${ }^{\oplus}$ Report On Business ${ }^{\circledR}$, its highly regarded certification programs and the ISM Advance ${ }^{\text {m" }}$ Digital Platform. This report has been issued by the association since 1931, except for a four-year interruption during World War II.

