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## November 2019 Manufacturing ISM ${ }^{\circledR}$ Report On Business ${ }^{\circledR}$

$\mathrm{PMI}^{\circledR}$ at $48.1 \%$

GDP Growing at 1.5\%

New Orders, Production, and Employment Contracting
Supplier Deliveries Slowing from Faster; Backlog Contracting
Raw Materials Inventories Contracting; Customers' Inventories Too Low

Prices Decreasing; Exports and Imports Contracting
(Tempe, Arizona) - Economic activity in the manufacturing sector contracted in November, and the overall economy grew for the 127th consecutive month, say the nation's supply executives in the latest Manufacturing ISM ${ }^{\circledR}$ Report On Business ${ }^{\circledR}$.

The report was issued today by Timothy R. Fiore, CPSM, C.P.M., Chair of the Institute for Supply Management ${ }^{\circledR}\left(\mathrm{ISM}^{\circledR}\right)$ Manufacturing Business Survey Committee: "The November $\mathrm{PMI}^{\circledR}$ registered 48.1 percent, a decrease of 0.2 percentage point from the October reading of 48.3 percent. The New Orders Index registered 47.2 percent, a decrease of 1.9 percentage points from the October reading of 49.1 percent. The Production Index registered 49.1 percent, up 2.9 percentage points compared to the October reading of 46.2 percent. The Backlog of Orders Index registered 43 percent, down 1.1 percentage points compared to the October reading of 44.1 percent. The Employment Index registered 46.6 percent, a 1.1-percentage point decrease from the October reading of 47.7 percent. The Supplier

Deliveries Index registered 52 percent, a 2.5-percentage point increase from the October reading of 49.5 percent. The Inventories Index registered 45.5 percent, a decrease of 3.4 percentage points from the October reading of 48.9 percent. The Prices Index registered 46.7 percent, a 1.2-percentage point increase from the October reading of 45.5 percent. The New Export Orders Index registered 47.9 percent, a 2.5 -percentage point decrease from the October reading of 50.4 percent. The Imports Index registered 48.3 percent, a 3-percentage point increase from the October reading of 45.3 percent.
"Comments from the panel were consistent with the previous month, with sentiment improving compared to October. November was the fourth consecutive month of $\mathrm{PMI}^{\circledR}$ contraction, at a faster rate compared to the prior month. Demand contracted, with the New Orders Index contracting faster, the Customers' Inventories Index remaining at 'too low' levels and the Backlog of Orders Index contracting for the seventh straight month (and at a faster rate). The New Export Orders Index returned to contraction territory, likely contributing to the faster contraction of the New Orders Index. Consumption (measured by the Production and Employment indexes) contracted, due primarily to lack of demand, but contributed positively (a combined 1.8-percentage point increase) to the $\mathrm{PMI}^{\circledR}$ calculation. Inputs expressed as supplier deliveries, inventories and imports - were again lower in November, due primarily to contraction in inventories that was partially offset by supplier deliveries returning to 'slowing.' This resulted in a combined 0.9-percentage point decrease in the Supplier Deliveries and Inventories indexes. Imports contraction softened. Overall, inputs indicate (1) supply chains are meeting demand and (2) companies are less confident that materials received will be consumed in a reasonable time period. Prices decreased for the sixth consecutive month, at a slower rate."
"Global trade remains the most significant cross-industry issue. Among the six big industry sectors, Food, Beverage \& Tobacco Products remains the strongest, while Fabricated Metal Products is the weakest. Overall, sentiment this month is neutral regarding near-term growth," says Fiore.

Of the 18 manufacturing industries, five reported growth in November: Apparel, Leather \& Allied Products; Food, Beverage \& Tobacco Products; Paper Products; Miscellaneous Manufacturing; and Computer \& Electronic Products. The 13 industries reporting contraction in November - listed in order - are: Wood Products; Printing \& Related Support Activities; Furniture \& Related Products; Textile Mills; Fabricated Metal Products; Transportation Equipment; Primary Metals; Plastics \& Rubber Products; Petroleum \& Coal Products; Nonmetallic Mineral Products; Machinery; Chemical Products; and Electrical Equipment, Appliances \& Components.

## WHAT RESPONDENTS ARE SAYING

"Business level is similar to October." (Computer \& Electronic Products)
"Chemical industry has been slow globally, but the curve seems to be flattening." (Chemical Products)
"Economic uncertainty continues. Our outlook on future business is cautious, yet positive." (Transportation Equipment)
"Economy is holding up. Business is staying constant. The same challenges persist - foreign exchange, trade uncertainty and trend changes [for example, sugar reduction]." (Food, Beverage \& Tobacco Products)
"Slowdown in business has us revising our 2020-21 capital spend." (Petroleum \& Coal Products)
"The order book continues to shrink below our forecast levels. We're unsure at this point how much of the slowdown is tied to certain events [like the General Motors strike], year-end inventory reductions by customers, or a worsening economy. We don't expect clarity on this until early 2020, when we expect to either see restocking orders [a good sign] or not [a bad sign]." (Fabricated Metal Products)
"Demand has stabilized for the last half of [the fourth quarter], and production will be stable for the rest of this year." (Machinery)
"Heading into the holiday season, we are seeing the backlog decrease as new orders for 2020 seem lighter than in past years." (Plastics \& Rubber Products)
"Markets have downshifted further. The continued confusion surrounding China trade has kept export markets on edge. Profits are elusive. Cash-flow planning is paramount. The general economy is slowing down." (Wood Products)
"Incoming orders and production have ticked back up. Tariffs are still a question." (Furniture \& Related Products)

Manufacturing at a Glance
November 2019



Manufacturing ISM ${ }^{\circledR}$ Report On Business ${ }^{\circledR}$ data is seasonally adjusted for the New Orders, Production, Employment and Supplier Deliveries Indexes.
*Number of months moving in current direction.

Commodities reported up/down in price and in short supply

Commodities Up in Price

Steel — Hot Rolled*; and Steel — Stainless (2).

## Commodities Down in Price

Aluminum (8); Base Oils; Caustic Soda (2); Freight (2); Polypropylene; Steel (5); Steel — Hot Rolled* (4); Steel — Scrap (2); and Steel Products (11).

Commodities in Short Supply

Electrical Components (2).

Note: The number of consecutive months the commodity is listed is indicated after each item. *Indicates both up and down in price.

November 2019 Manufacturing Index Summaries

## PMI ${ }^{\circledR}$

Manufacturing contracted in November, as the $\mathrm{PMI}^{\oplus}$ registered 48.1 percent, a decrease of 0.2 percentage point from the October reading of 48.3 percent. "The $\mathrm{PMI}{ }^{\circledR}$ contracted for the fourth straight month, at faster levels compared to October. This marks eight straight months of softening or contraction in manufacturing. All but one (Supplier Deliveries) of the $\mathrm{PMI}^{\otimes}$ subindexes registered at levels associated with contraction. For the third straight month, two of the six big industries expanded, and four contracted," says Fiore. A reading above 50 percent indicates that the manufacturing economy is generally expanding; below 50 percent indicates that it is generally contracting.

A PMI ${ }^{\circledR}$ above 42.9 percent, over a period of time, generally indicates an expansion of the overall economy. Therefore, the November PMI® indicates growth for the 127th consecutive month in the overall economy, and the fourth month of contraction following 35 straight months of growth in the manufacturing sector. "The past relationship between the $\mathrm{PMI}^{\oplus}$ and the overall economy indicates that the $\mathrm{PMI}^{\circledR}$ for November ( 48.1 percent) corresponds to a 1.5-percent increase in real gross domestic product (GDP) on an annualized basis," says Fiore.

The Last 12 Months

| Month | PMI® |
| :--- | :---: |
| Nov 2019 | 48.1 |
| Oct 2019 | 48.3 |
| Sep 2019 | 47.8 |
| Aug 2019 | 49.1 |
| Jul 2019 | 51.2 |
| Jun 2019 | 51.7 |
| Month | PMI® |
| May 2019 | 52.1 |
| Apr 2019 | 52.8 |
| Mar 2019 | 55.3 |


| Month | $\mathrm{PMI}^{\circledR}$ |
| :--- | :---: |
| Feb 2019 | 54.2 |
| Jan 2019 | 56.6 |
| Dec 2018 | 54.3 |
| Average for 12 months - 51.8 |  |
| High - 56.6 |  |
| Low - 47.8 |  |

## New Orders

ISM ${ }^{\circledR>}$ s New Orders Index registered 47.2 percent in November, a decrease of 1.9 percentage points when compared to the 49.1 percent reported for October. This indicates that new orders contracted for the fourth straight month, and at a faster rate. "Of the top six industry sectors, Transportation Equipment again had the biggest drag on the New Orders Index in November. Only one of the top six industry sectors expanded and five contracted, declining from October performance," says Fiore. A New Orders Index above 52.5 percent, over time, is generally consistent with an increase in the Census Bureau's series on manufacturing orders (in constant 2000 dollars).

Of the 18 manufacturing industries, five reported growth in new orders in November: Apparel, Leather \& Allied Products; Electrical Equipment, Appliances \& Components; Paper Products; Food, Beverage \& Tobacco Products; and Miscellaneous Manufacturing. The 12 industries reporting a decline in new orders in November, in the following order, are: Wood Products; Textile Mills; Printing \& Related Support Activities; Furniture \& Related Products; Transportation Equipment; Fabricated Metal Products; Petroleum \& Coal Products; Machinery; Nonmetallic Mineral Products; Plastics \& Rubber Products; Chemical Products; and Computer \& Electronic Products.

| New Orders | \% Higher | \% Same | \% Lower | Net | Index |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Nov 2019 | 20.5 | 48.3 | 31.2 | -10.7 | 47.2 |
| Oct 2019 | 20.5 | 51.0 | 28.5 | -8.0 | 49.1 |
| Sep 2019 | 18.8 | 55.2 | 26.0 | -7.2 | 47.3 |
| Aug 2019 | 17.5 | 56.6 | 25.9 | -8.4 | 47.2 |

[^0]ISM ${ }^{\circledR}$ s Production Index registered 49.1 percent in November, which is 2.9 percentage points higher when compared to the 46.2 percent reported for October, indicating the fourth consecutive month of contraction. "Three of the big six industry sectors expanded and three contracted, an improvement from October," says Fiore. An index above 51.7 percent, over time, is generally consistent with an increase in the Federal Reserve Board's Industrial Production figures.

The seven industries reporting growth in production during the month of November - listed in order are: Apparel, Leather \& Allied Products; Paper Products; Food, Beverage \& Tobacco Products; Petroleum \& Coal Products; Electrical Equipment, Appliances \& Components; Miscellaneous Manufacturing; and Chemical Products. The 11 industries reporting a decrease in production in November - listed in order — are: Nonmetallic Mineral Products; Textile Mills; Printing \& Related Support Activities; Primary Metals; Wood Products; Furniture \& Related Products; Plastics \& Rubber Products; Fabricated Metal Products; Transportation Equipment; Computer \& Electronic Products; and Machinery.

| Production | \% Higher | \% Same | \% Lower | Net | Index |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Nov 2019 | 20.3 | 56.3 | 23.4 | -3.1 | 49.1 |
| Oct 2019 | 20.8 | 49.5 | 29.7 | -8.9 | 46.2 |
| Sep 2019 | 20.3 | 52.5 | 27.2 | -6.9 | 47.3 |
| Aug 2019 | 22.0 | 54.7 | 23.2 | -1.2 | 49.5 |

## Employment

ISM ${ }^{\circledR 〕}$ s Employment Index registered 46.6 percent in November, a decrease of 1.1 percentage points when compared to the October reading of 47.7 percent. This indicates contraction in November for the fourth consecutive month, and at a faster rate. "Three of the six big industry sectors expanded, and three contracted during the period, an improvement from the previous month. Labor force-reduction concerns remained generally constant," says Fiore. An Employment Index above 50.8 percent, over time, is generally consistent with an increase in the Bureau of Labor Statistics (BLS) data on manufacturing employment.

Of the 18 manufacturing industries, five reported employment growth in November: Paper Products; Computer \& Electronic Products; Plastics \& Rubber Products; Food, Beverage \& Tobacco Products; and Chemical Products. The nine industries reporting a decrease in employment in November, in the following order, are: Wood Products; Printing \& Related Support Activities; Petroleum \& Coal Products; Primary Metals; Transportation Equipment; Electrical Equipment, Appliances \& Components; Nonmetallic Mineral Products; Fabricated Metal Products; and Machinery.
Employment \% Higher \% Same Net Index

| Employment | \% Higher | \% Same | \% Lower | Net | Index |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Nov 2019 | 13.9 | 64.9 | 21.2 | -7.3 | 46.6 |
| Oct 2019 | 16.3 | 62.3 | 21.4 | -5.1 | 47.7 |
| Sep 2019 | 14.6 | 62.3 | 23.0 | -8.4 | 46.3 |
| Aug 2019 | 15.0 | 66.0 | 19.0 | -4.0 | 47.4 |

## Supplier Deliveries

The delivery performance of suppliers to manufacturing organizations was slower in November, as the Supplier Deliveries Index registered 52 percent. This is 2.5 percentage points higher than the 49.5 percent reported for October. "Supplier deliveries returned to slower conditions, recording marginal improvement compared to October. There were few comments regarding supply chain constraints, lead-time extensions or shortages," says Fiore. A reading below 50 percent indicates faster deliveries, while a reading above 50 percent indicates slower deliveries.

The seven industries reporting slower supplier deliveries in November — listed in order - are: Textile Mills; Apparel, Leather \& Allied Products; Computer \& Electronic Products; Food, Beverage \& Tobacco Products; Miscellaneous Manufacturing; Fabricated Metal Products; and Transportation Equipment. The four industries reporting faster supplier deliveries in November are: Electrical Equipment, Appliances \& Components; Furniture \& Related Products; Plastics \& Rubber Products; and Machinery. Seven industries reported no change in supplier deliveries performance in November.

| Supplier Deliveries | \% Slower | \% Same | \% Faster | Net | Index |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Nov 2019 | 11.3 | 80.8 | 8.0 | +3.3 | 52.0 |
| Oct 2019 | 10.0 | 80.1 | 9.9 | +0.1 | 49.5 |
| Sep 2019 | 10.8 | 81.0 | 8.2 | +2.6 | 51.1 |
| Aug 2019 | 12.7 | 77.8 | 9.5 | +3.2 | 51.4 |

## Inventories*

The Inventories Index registered 45.5 percent in November, a decrease of 3.4 percentage points from the 48.9 percent reported for October. "The index contracted for the sixth straight month, and at a faster rate reflecting improvement in production output and a continuing effort to match raw-material inputs with new-order receipts," says Fiore. An Inventories Index greater than 44.3 percent, over time, is
generally consistent with expansion in the Bureau of Economic Analysis (BEA) figures on overall manufacturing inventories (in chained 2000 dollars).

The three industries reporting higher inventories in November are: Nonmetallic Mineral Products; Miscellaneous Manufacturing; and Food, Beverage \& Tobacco Products. The 12 industries reporting a decrease in inventories in November — listed in order — are: Apparel, Leather \& Allied Products; Printing \& Related Support Activities; Plastics \& Rubber Products; Textile Mills; Fabricated Metal Products; Paper Products; Petroleum \& Coal Products; Chemical Products; Machinery; Computer \& Electronic Products; Electrical Equipment, Appliances \& Components; and Transportation Equipment.

| Inventories | \% Higher | \% Same | \% Lower | Net | Index |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Nov 2019 | 15.4 | 60.2 | 24.4 | -9.0 | 45.5 |
| Oct 2019 | 19.8 | 58.1 | 22.1 | -2.3 | 48.9 |
| Sep 2019 | 16.3 | 61.3 | 22.5 | -6.2 | 46.9 |
| Aug 2019 | 19.4 | 61.0 | 19.7 | -0.3 | 49.9 |

## Customers' Inventories*

ISM ${ }^{\circledR>}{ }^{\text {s }}$ Customers' Inventories Index registered 45 percent in November, which is 2.8 percentage points lower than the 47.8 percent reported for October, indicating that customers' inventory levels were considered too low. "Customers' inventories are too low for the 38th consecutive month, declining deeper into 'too low' territory, which is positive for future factory output," says Fiore.

No industries reported customers' inventories as too high during the month of November. The 11 industries reporting customers' inventories as too low during November — listed in order — are: Wood Products; Textile Mills; Primary Metals; Nonmetallic Mineral Products; Fabricated Metal Products; Plastics \& Rubber Products; Electrical Equipment, Appliances \& Components; Food, Beverage \& Tobacco Products; Computer \& Electronic Products; Machinery; and Chemical Products. Seven industries reported no change in customer inventories in November.

| Customers' Inventories | \% Reporting | \% Too High | \% About Right | \% Too Low | Net Index |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov 2019 | 76 | 9.7 | 70.6 | 19.7 | -10.0 | 45.0 |
| Oct 2019 | 79 | 15.4 | 64.7 | 19.9 | -4.5 | 47.8 |
| Sep 2019 | 77 | 12.8 | 65.4 | 21.9 | -9.1 | 45.5 |
| Aug 2019 | 79 | 11.9 | 66.0 | 22.0 | -10.1 | 44.9 |

## Prices*

The ISM ${ }^{\circledR}$ Prices Index registered 46.7 percent in November, an increase of 1.2 percentage points from the October reading of 45.5 percent, indicating raw materials prices decreased for the sixth consecutive month. "Prices contracted in November, at a slower rate compared to October. Generally, prices continued to decline. Price stability remains elusive," says Fiore. A Prices Index above 52.5 percent, over time, is generally consistent with an increase in the Bureau of Labor Statistics (BLS) Producer Price Index for Intermediate Materials.

The two industries reporting paying increased prices for raw materials in November are: Computer \& Electronic Products; and Miscellaneous Manufacturing. The 12 industries reporting a decrease in prices for raw materials in November — listed in order - are: Apparel, Leather \& Allied Products; Printing \& Related Support Activities; Furniture \& Related Products; Plastics \& Rubber Products; Primary Metals; Paper Products; Petroleum \& Coal Products; Transportation Equipment; Electrical Equipment, Appliances \& Components; Machinery; Chemical Products; and Fabricated Metal Products.

| Prices | \% Higher | \% Same | \% Lower | Net | Index |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Nov 2019 | 14.6 | 64.2 | 21.3 | -6.7 | 46.7 |
| Oct 2019 | 15.7 | 59.6 | 24.7 | -9.0 | 45.5 |
| Sep 2019 | 16.4 | 66.5 | 17.1 | -0.7 | 49.7 |
| Aug 2019 | 14.9 | 62.2 | 22.9 | -8.0 | 46.0 |

## Backlog of Orders*

ISM ${ }^{\circledR>}$ s Backlog of Orders Index registered 43 percent in November, which is 1.1 percentage point lower than the 44.1 percent reported in October, indicating order backlogs contracted for the seventh consecutive month, at a faster rate in November. "Backlogs remaining at moderate contraction levels continues to weigh negatively on investment in equipment and labor. Four of the six big industry sectors' backlogs contracted during the period," says Fiore.

Four of the 18 industries reported growth in order backlogs in November are: Apparel, Leather \& Allied Products; Food, Beverage \& Tobacco Products; Miscellaneous Manufacturing; and Computer \& Electronic Products. The 11 industries reporting a decrease in order backlogs during November — listed in order - are: Wood Products; Textile Mills; Printing \& Related Support Activities; Furniture \& Related Products; Transportation Equipment; Petroleum \& Coal Products; Fabricated Metal Products;

Machinery; Plastics \& Rubber Products; Chemical Products; and Paper Products.

| Backlog of Orders* | \% Reporting | \% Higher | \% Same | \% Lower | Net | Index |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov 2019 | 90 | 16.2 | 53.7 | 30.1 | -13.9 | 43.0 |
| Oct 2019 | 88 | 16.4 | 55.3 | 28.2 | -11.8 | 44.1 |
| Sep 2019 | 89 | 15.0 | 60.2 | 24.8 | -9.8 | 45.1 |
| Aug 2019 | 87 | 17.9 | 56.8 | 25.3 | -7.4 | 46.3 |

## New Export Orders*

ISM ${ }^{\circledR>}$ s New Export Orders Index registered 47.9 percent in November, a decrease of 2.5 percentage points compared to the October reading of 50.4 percent, indicating that new export orders contracted after growing in October. "The index returned to contraction territory, which contributed negatively to the New Orders Index. Three of the six big industry sectors expanded, and two contracted during the period. Transportation Equipment continues to contract strongly," says Fiore.

The five industries reporting growth in new export orders in November are: Food, Beverage \& Tobacco Products; Computer \& Electronic Products; Paper Products; Miscellaneous Manufacturing; and Chemical Products. The six industries reporting a decrease in new export orders in November — listed in order are: Wood Products; Nonmetallic Mineral Products; Transportation Equipment; Plastics \& Rubber Products; Fabricated Metal Products; and Machinery. Seven industries reported no change in new export orders in November.

| New Export Orders* | \% Reporting | \% Higher | \% Same | \% Lower | Net | Index |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov 2019 | 77 | 11.0 | 73.9 | 15.1 | -4.1 | 47.9 |
| Oct 2019 | 76 | 18.1 | 64.7 | 17.2 | +0.9 | 50.4 |
| Sep 2019 | 77 | 6.3 | 69.6 | 24.2 | -17.9 | 41.0 |
| Aug 2019 | 75 | 10.4 | 65.8 | 23.8 | -13.4 | 43.3 |

## Imports*

ISM ${ }^{\circledR}$ 's Imports Index registered 48.3 percent in November, 3 percentage points higher when compared to the 45.3 percent reported for October, indicating that imports contracted for the fifth consecutive month. "Three of the six big industry sectors contracted, with one expanding during the period. Respondents continued to note a need to place orders in advance of the Lunar New Year season in Asia," says Fiore.

The six industries reporting growth in imports in November - listed in order — are: Wood Products; Furniture \& Related Products; Paper Products; Plastics \& Rubber Products; Computer \& Electronic Products; and Machinery. The nine industries reporting a decrease in imports in November - listed in order — are: Apparel, Leather \& Allied Products; Printing \& Related Support Activities; Textile Mills; Electrical Equipment, Appliances \& Components; Nonmetallic Mineral Products; Transportation Equipment; Miscellaneous Manufacturing; Chemical Products; and Fabricated Metal Products.

| Imports | \% Reporting | \% Higher | \% Same | \% Lower | Net | Index |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Nov 2019 | 82 | 10.3 | 76.1 | 13.6 | -3.3 | 48.3 |
| Oct 2019 | 80 | 6.6 | 77.3 | 16.1 | -9.5 | 45.3 |
| Sep 2019 | 81 | 14.0 | 68.3 | 17.8 | -3.8 | 48.1 |
| Aug 2019 | 81 | 8.5 | 74.9 | 16.5 | -8.0 | 46.0 |

*The Inventories, Customers' Inventories, Prices, Backlog of Orders, New Export Orders and Imports Indexes do not meet the accepted criteria for seasonal adjustments.

## Buying Policy

Average commitment lead time for Capital Expenditures decreased by two days in November to 144 days. Average lead time for Production Materials decreased by two days in November to 61 days. Average lead time for Maintenance, Repair and Operating (MRO) Supplies increased by one day in November to 31 days.

| Percent Reporting |  |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Capital Expenditures | Hand-to-Mouth | 30 Days | 60 Days | 90 Days | 6 Months | 1 Year + Average Days |  |
| Nov 2019 | 20 | 6 | 11 | 16 | 27 | 20 | 144 |
| Oct 2019 | 22 | 5 | 11 | 14 | 27 | 21 | 146 |
| Sep 2019 | 22 | 5 | 9 | 16 | 26 | 22 | 148 |
| Aug 2019 | 21 | 4 | 11 | 18 | 26 | 20 | 144 |

Production Materials Hand-to-Mouth 30 Days 60 Days 90 Days 6 Months 1 Year + Average Days
$\begin{array}{lllllllll}\text { Nov } 2019 & 12 & 36 & 28 & 16 & 6 & 2 & 61\end{array}$

| Production Materials | Hand-to-Mouth | 30 Days | 60 Days | 90 Days | 6 Months | 1 Year + Average Days |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Oct 2019 | 12 | 35 | 24 | 20 | 7 | 2 | 63 |
| Sep 2019 | 11 | 33 | 30 | 18 | 6 | 2 | 63 |
| Aug 2019 | 10 | 35 | 29 | 15 | 9 | 2 | 65 |


| MRO Supplies | Hand-to-Mouth | 30 Days | 60 Days | 90 Days | 6 Months | 1 Year + Average Days |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Nov 2019 | 41 | 36 | 16 | 4 | 3 | 0 | 31 |
| Oct 2019 | 41 | 38 | 15 | 4 | 2 | 0 | 30 |
| Sep 2019 | 40 | 35 | 17 | 6 | 2 | 0 | 32 |
| Aug 2019 | 40 | 34 | 15 | 7 | 3 | 1 | 37 |

## 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 information compiled in this report is for the month of November 2019.

The data presented herein is obtained from a survey of manufacturing supply executives based on information they have collected within their respective organizations. ISM ${ }^{\circledR}$ 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 ${ }^{\circledR}$ 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 NAICSbased 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. Beginning in February 2018 with January 2018 data, computation of the indexes is accomplished utilizing unrounded numbers.

Survey responses reflect the change, if any, in the current month compared to the previous month. For each of the indicators measured (New Orders, Backlog of Orders, New Export Orders, Imports, Production, Supplier Deliveries, Inventories, Customers' Inventories, Employment and Prices), this report shows the percentage reporting each response, the net difference between the number of responses in the positive economic direction (higher, better and slower for Supplier Deliveries) and the negative economic direction (lower, worse and faster for Supplier Deliveries), and the diffusion index. 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 ( $\mathrm{PMI}^{\circledR}$, New Orders, Production, Employment and Supplier Deliveries) 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. All seasonal adjustment factors are subject annually to relatively minor changes when conditions warrant them. The $\mathrm{PMI}^{\circledR}$ 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 (seasonally adjusted), and Inventories.

Diffusion indexes have the properties of leading indicators and are convenient summary measures showing the prevailing direction of change and the scope of change. $\mathrm{A}_{\mathrm{PMI}}{ }^{\circledR}$ reading above 50 percent indicates that the manufacturing economy is generally expanding; below 50 percent indicates that it is generally declining. A $\mathrm{PMI}^{\circledR}$ above 42.9 percent, over a period of time, indicates that the overall economy, or gross domestic product (GDP), is generally expanding; below 42.9 percent, it is generally declining. The distance from 50 percent or 42.9 percent is indicative of the extent of the expansion or decline. With some of the indicators within this report, ISM $^{\circledR}$ has indicated the departure point between expansion and decline of comparable government series, as determined by regression analysis. The Manufacturing ISM ${ }^{\circledR}$ Report On Business ${ }^{\circledR}$ survey is sent out to Manufacturing Business Survey Committee respondents the first part of each month. Respondents are asked to ONLY 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 in order to give the most accurate picture of current business activity. ISM ${ }^{\circledR}$ then compiles the report for release on the first business day of the following month.

The industries reporting growth, as indicated in the Manufacturing ISM ${ }^{\circledR}$ Report On Business ${ }^{\circledR}$ monthly report, 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.

Responses to Buying Policy reflect the percent reporting the current month's lead time, the approximate weighted number of days ahead for which commitments are made for Capital Expenditures; Production

Materials; and Maintenance, Repair and Operating (MRO) Supplies, expressed as hand-to-mouth (five days), 30 days, 60 days, 90 days, six months ( 180 days), a year or more ( 360 days), and the weighted average number of days. These responses are raw data, never revised, and not seasonally adjusted since there is no significant seasonal pattern.

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Institute for Supply Management ${ }^{\circledR}\left(\mathrm{ISM}^{\circledR}\right)$ 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 Report On Business ${ }^{\circledR}$, its highly regarded certification programs and the ISM Mastery Model ${ }^{\circledR}$. This report has been issued by the association since 1931, except for a four-year interruption during World War II.

The full text version of the Manufacturing ISM ${ }^{\circledR}$ Report On Business ${ }^{\circledR}$ is posted on ISM $^{\circledR>}{ }^{\text {s }}$ website at www.ismrob.org on the first business day* of every month after 10:00 a.m. ET.

The next Manufacturing ISM ${ }^{\circledR}$ Report On Business ${ }^{\circledR}$ featuring December 2019 data will be released at 10:00 a.m. ET on Friday, January 3, 2020.
*Unless the New York Stock Exchange is closed.


[^0]:    Production

