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# May 2016 Manufacturing ISM ${ }^{\circledR}$ Report On Business ${ }^{\circledR}$ 

$\mathrm{PMI}^{\ominus}$ at 51.3\%

DO NOT CONFUSE THIS NATIONAL REPORT with the various regional purchasing reports released across the country. The national report's information reflects the entire United States, 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 May 2016.
$\mathrm{PMI}^{\circledR}$ at $51.3 \%$

New Orders and Production Growing
Employment and Inventories Contracting
Supplier Deliveries Slower
(Tempe, Arizona) - Economic activity in the manufacturing sector expanded in May for the third consecutive month, while the overall economy grew for the 84th consecutive month, say the nation's supply executives in the latest Manufacturing ISM ${ }^{\oplus}$ Report On Business ${ }^{\ominus}$.

The report was issued today by Bradley J. Holcomb, CPSM, CPSD, chair of the Institute for Supply Management ${ }^{\oplus}\left(\right.$ ISM $\left.^{\oplus}\right)$ Manufacturing Business Survey Committee. "The May PMI ${ }^{\oplus}$ registered 51.3 percent, an increase of 0.5 percentage point from the April reading of 50.8 percent. The New Orders Index registered 55.7 percent, a decrease of 0.1 percentage point from the April reading of 55.8 percent. The Production Index registered 52.6 percent, 1.6 percentage points lower than the April reading of 54.2 percent. The Employment Index registered 49.2 percent, the same reading as in April. Inventories of raw materials registered 45 percent, a decrease of 0.5 percentage point from the April reading of 45.5 percent. The Prices Index registered 63.5 percent, an increase of 4.5 percentage
points from the April reading of 59 percent, indicating higher raw materials prices for the third consecutive month. Manufacturing registered growth in May for the third consecutive month, as 14 of our 18 industries reported an increase in new orders in May (down from 15 in April), and 12 of our 18 industries reported an increase in production in May (down from 15 in April)."

Of the 18 manufacturing industries, 12 are reporting growth in May in the following order: Wood Products; Textile Mills; Printing \& Related Support Activities; Fabricated Metal Products; Paper Products; Plastics \& Rubber Products; Computer \& Electronic Products; Miscellaneous Manufacturing; Electrical Equipment, Appliances \& Components; Food, Beverage \& Tobacco Products; Machinery; and Primary Metals. The six industries reporting contraction in May — listed in order — are: Apparel, Leather \& Allied Products; Petroleum \& Coal Products; Transportation Equipment; Nonmetallic Mineral Products; Chemical Products; and Furniture \& Related Products.

## WHAT RESPONDENTS ARE SAYING ...

- "Business conditions remain strong with the exception of South America. Continued expectation for a strong year even with the headwinds of currency and economic slowdown." (Food, Beverage \& Tobacco Products)
- "Consistent sales growth in greater China, North Asia, Southeast Asia, Canada and Mexico. Flat for the Americas and Europe." (Chemical Products)
- "Slowdown in Chinese economy causing low orders." (Computer \& Electronic Products)
- "Continued brisk order flow for our business." (Fabricated Metal Products)
- "Steady to slightly up production rates vs. prior month." (Machinery)
- "Business is still good, but slowing." (Transportation Equipment)
- "Business conditions are stable; demand is steady for our products." (Miscellaneous Manufacturing)
- "Our business remains to be strong, but many of my suppliers are telling me their business is flat." (Plastics \& Rubber Products)
- "Oil \& Gas continues to struggle to meet cost controls required in the new low-oil price environment." (Petroleum \& Coal Products)
- "Market is improving steadily in both orders and pricing." (Wood Products)

| MANUFACTURING AT A GLANCE <br> MAY 2016 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Index | Series <br> Index <br> May | Series <br> Index <br> Apr | Percentage <br> Point <br> Change | Direction | Rate of Change | Trend* <br> (Months) |
| PMI ${ }^{\text {® }}$ | 51.3 | 50.8 | +0.5 | Growing | Faster | 3 |
| New Orders | 55.7 | 55.8 | -0.1 | Growing | Slower | 5 |
| Production | 52.6 | 54.2 | -1.6 | Growing | Slower | 5 |
| Employment | 49.2 | 49.2 | 0.0 | Contracting | Same | 6 |
| Supplier Deliveries | 54.1 | 49.1 | +5.0 | Slower | From <br> Faster | 1 |
| Inventories | 45.0 | 45.5 | -0.5 | Contracting | Faster | 11 |
| Customers' Inventories | 50.0 | 46.0 | +4.0 | Unchanged | From <br> Too Low | 1 |
| Prices | 63.5 | 59.0 | +4.5 | Increasing | Faster | 3 |
| Backlog of Orders | 47.0 | 50.5 | -3.5 | Contracting | From Growing | 1 |
| New Export Orders | 52.5 | 52.5 | 0.0 | Growing | Same | 3 |
| Imports | 50.0 | 50.0 | 0.0 | Unchanged | Same | 2 |
| OVERALL ECONOMY |  |  |  | Growing | Faster | 84 |
| Manufacturing Sector |  |  |  | Growing | Faster | 3 |

Manufacturing ISM ${ }^{\oplus}$ Report On Business ${ }^{\oplus}$ data is seasonally adjusted for 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
Aluminum (4); \#1 Bundle Scrap (2); Copper (3); Corn; Crude Oil; Diesel (2); Electric Components; Gasoline; HDPE Resin (2); Oil (2); Petroleum Based Products; Polypropylene (4); Silver; Stainless Steel (2); Steel (5); Steel — Cold Rolled (2); Steel — Hot Rolled (4); and Structural Steel Tubing.

Commodities Down in Price
Corrugated Boxes.
Commodities in Short Supply
None.
Note: The number of consecutive months the commodity is listed is indicated after each item.

## MAY 2016 MANUFACTURING INDEX SUMMARIES

## PMI ${ }^{\oplus}$

Manufacturing expanded in May as the $\mathrm{PMI}^{\oplus}$ registered 51.3 percent, an increase of 0.5 percentage point from the April reading of 50.8 percent, indicating growth in manufacturing for the third consecutive month, following five consecutive months of contraction in manufacturing. A reading above 50 percent indicates that the manufacturing economy is generally expanding; below 50 percent indicates that it is generally contracting.

A PMI ${ }^{\oplus}$ above 43.2 percent, over a period of time, generally indicates an expansion of the overall economy. Therefore, the May PMI ${ }^{\ominus}$ indicates growth for the 84th consecutive month in the overall economy, while indicating growth in the manufacturing sector for the third consecutive month.
Holcomb stated, "The past relationship between the $\mathrm{PMI}^{\oplus}$ and the overall economy indicates that the average $\mathrm{PMI}^{\oplus}$ for January through May ( 50.3 percent) corresponds to a 2.2 percent increase in real gross domestic product (GDP) on an annualized basis. In addition, if the $\mathrm{PMI}^{\oplus}$ for May (51.3 percent) is annualized, it corresponds to a 2.6 percent increase in real GDP annually."

THE LAST 12 MONTHS

| Month | PMI $^{\text {® }}$ | Month | PMI $^{\text {® }}$ |
| :--- | :--- | :--- | :--- |
| May 2016 | 51.3 | Nov 2015 | 48.4 |
| Apr 2016 | 50.8 | Oct 2015 | 49.4 |
| Mar 2016 | 51.8 | Sep 2015 | 50.0 |
| Feb 2016 | 49.5 | Aug 2015 | 51.0 |
| Jan 2016 | 48.2 | Jul 2015 | 51.9 |
| Dec 2015 | 48.0 | Jun 2015 | 53.1 |
| Average for 12 months - 50.3 <br> High - 53.1 <br> Low - 48.0 |  |  |  |

New Orders
ISM ${ }^{\circledR}$ 's New Orders Index registered 55.7 percent in May, which is a decrease of 0.1 percentage point when compared to the 55.8 percent reported for April, indicating growth in new orders for the fifth consecutive month. A New Orders Index above 52.2 percent, over time, is generally consistent with an increase in the Census Bureau's series on manufacturing orders (in constant 2000 dollars).

The 14 industries reporting growth in new orders in May - listed in order — are: Textile Mills; Printing \& Related Support Activities; Wood Products; Miscellaneous Manufacturing; Primary Metals; Fabricated Metal Products; Food, Beverage \& Tobacco Products; Computer \& Electronic Products; Plastics \& Rubber Products; Machinery; Electrical Equipment, Appliances \& Components; Chemical Products; Paper Products; and Nonmetallic Mineral Products. The four industries reporting a decrease in new orders during May are: Apparel, Leather \& Allied Products; Transportation Equipment; Petroleum \& Coal Products; and Furniture \& Related Products.

| New <br> Orders | $\%$ <br> Better | $\%$ <br> Same | Worse | Net | Index |
| :--- | :---: | :---: | :---: | :---: | :---: |
| May 2016 | 32 | 51 | 17 | +15 | 55.7 |
| Apr 2016 | 38 | 45 | 17 | +21 | 55.8 |
| Mar 2016 | 32 | 56 | 12 | +20 | 58.3 |
| Feb 2016 | 25 | 56 | 19 | +6 | 51.5 |

Production
ISM ${ }^{\oplus}$ 's Production Index registered 52.6 percent in May, which is a decrease of 1.6 percentage points when compared to the 54.2 percent reported for April, indicating growth in production in May for the
fifth consecutive month. An index above 51.3 percent, over time, is generally consistent with an increase in the Federal Reserve Board's Industrial Production figures.

The 12 industries reporting growth in production during the month of May - listed in order - are: Wood Products; Primary Metals; Paper Products; Fabricated Metal Products; Textile Mills; Printing \& Related Support Activities; Petroleum \& Coal Products; Electrical Equipment, Appliances \& Components; Miscellaneous Manufacturing; Food, Beverage \& Tobacco Products; Computer \& Electronic Products; and Machinery. The six industries reporting a decrease in production during May — listed in order — are: Apparel, Leather \& Allied Products; Transportation Equipment; Nonmetallic Mineral Products; Chemical Products; Furniture \& Related Products; and Plastics \& Rubber Products.

| Production | Better <br> Pame | \% <br> Sarse | Net | Index |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| May 2016 | 29 | 52 | 19 | +10 | 52.6 |
| Apr 2016 | 35 | 52 | 13 | +22 | 54.2 |
| Mar 2016 | 28 | 61 | 11 | +17 | 55.3 |
| Feb 2016 | 24 | 59 | 17 | +7 | 52.8 |

Employment
ISM ${ }^{\otimes}$ ’s Employment Index registered 49.2 percent in May, the same reading as reported for April, indicating contraction in employment for the sixth consecutive month. An Employment Index above 50.6 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, in May, the 10 industries reporting employment growth — listed in order - are: Textile Mills; Wood Products; Printing \& Related Support Activities; Electrical Equipment, Appliances \& Components; Plastics \& Rubber Products; Paper Products; Primary Metals; Miscellaneous Manufacturing; Machinery; and Computer \& Electronic Products. The six industries reporting a decrease in employment in May - listed in order - are: Apparel, Leather \& Allied Products; Petroleum \& Coal Products; Nonmetallic Mineral Products; Chemical Products; Fabricated Metal Products; and Furniture \& Related Products.

| Employment | \% <br> Higher | \% <br> \%ame | Lower | Net | Index |
| :--- | :---: | :---: | :---: | :---: | :---: |
| May 2016 | 20 | 62 | 18 | +2 | 49.2 |
| Apr 2016 | 24 | 57 | 19 | +5 | 49.2 |
| Mar 2016 | 15 | 66 | 19 | -4 | 48.1 |
| Feb 2016 | 15 | 67 | 18 | -3 | 48.5 |

Supplier Deliveries
The delivery performance of suppliers to manufacturing organizations was slower in May as the Supplier Deliveries Index registered 54.1 percent, which is 5 percentage points higher than the 49.1 percent reported for April. A reading below 50 percent indicates faster deliveries, while a reading above 50 percent indicates slower deliveries.

The six industries reporting slower supplier deliveries in May - listed in order - are: Plastics \& Rubber Products; Machinery; Fabricated Metal Products; Food, Beverage \& Tobacco Products; Computer \& Electronic Products; and Transportation Equipment. The two industries reporting faster supplier deliveries during May are: Primary Metals; and Chemical Products. Ten industries reported no change in supplier deliveries in May compared to April.

| Supplier <br> Deliveries | $\%$ <br> Slower | $\%$ <br> Same | \% |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Master 2016 | 13 | 82 | 5 | +8 | 54.1 |
| Apr 2016 | 8 | 85 | 7 | +1 | 49.1 |
| Mar 2016 | 6 | 90 | 4 | +2 | 50.2 |
| Feb 2016 | 7 | 87 | 6 | +1 | 49.7 |

Inventories*
The Inventories Index registered 45 percent in May, which is a decrease of 0.5 percentage point when compared to the 45.5 percent reported for April, indicating raw materials inventories are contracting in May for the 11 th consecutive month at a faster rate than in April. An Inventories Index greater than 42.8 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 four industries reporting higher inventories in May are: Apparel, Leather \& Allied Products; Wood Products; Computer \& Electronic Products; and Fabricated Metal Products. The 13 industries reporting lower inventories in May — listed in order - are: Primary Metals; Textile Mills; Transportation Equipment; Machinery; Electrical Equipment, Appliances \& Components; Petroleum \& Coal Products; Furniture \& Related Products; Food, Beverage \& Tobacco Products; Nonmetallic Mineral Products; Chemical Products; Miscellaneous Manufacturing; Plastics \& Rubber Products; and Printing \& Related Support Activities.

| Inventories |  | $\begin{gathered} \% \\ \text { Same } \end{gathered}$ | \% | Net | Inde |
| :---: | :---: | :---: | :---: | :---: | :---: |
| May 2016 | 14 | 62 | 24 | -10 | 45.0 |
| Apr 2016 | 15 | 61 | 24 | -9 | 45.5 |
| Mar 2016 | 15 | 64 | 21 | -6 | 47.0 |
| Feb 2016 | 13 | 64 | 23 | -10 | 45.0 |

Customers' Inventories*
ISM ${ }^{\oplus}$ 's Customers' Inventories Index registered 50 percent in May, which is an increase of 4 percentage points when compared to the 46 percent reported for April, indicating that customers' inventory levels are unchanged in May relative to April.

The seven manufacturing industries reporting customers' inventories as being too high during the month of May — listed in order - are: Apparel, Leather \& Allied Products; Furniture \& Related Products; Transportation Equipment; Chemical Products; Fabricated Metal Products; Food, Beverage \& Tobacco Products; and Miscellaneous Manufacturing. The seven industries reporting customers' inventories as too low during May — listed in order - are: Textile Mills; Electrical Equipment, Appliances \& Components; Plastics \& Rubber Products; Computer \& Electronic Products; Paper Products; Machinery; and Primary Metals.

| Customers Inventories | \% <br> Reporting | $\begin{aligned} & \% \text { Too } \\ & \text { High } \end{aligned}$ | $\begin{gathered} \text { \% About } \\ \text { Right } \end{gathered}$ | $\begin{gathered} \% \text { Too } \\ \text { Low } \end{gathered}$ | Net | Index |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| May 2016 | 60 | 16 | 68 | 16 | 0 | 50.0 |
| Apr 2016 | 57 | 12 | 68 | 20 | -8 | 46.0 |
| Mar 2016 | 59 | 15 | 68 | 17 | -2 | 49.0 |
| Feb 2016 | 62 | 11 | 72 | 17 | -6 | 47.0 |

Prices*
The $\mathrm{ISM}^{\oplus}$ Prices Index registered 63.5 percent in May, which is an increase of 4.5 percentage points when compared to the 59 percent reported for April, indicating an increase in raw materials for the third consecutive month. In May, 34 percent of respondents reported paying higher prices, 7 percent reported paying lower prices, and 59 percent of supply executives reported paying the same prices as in April. A Prices Index above 52.4 percent, over time, is generally consistent with an increase in the Bureau of Labor Statistics (BLS) Producer Price Index for Intermediate Materials.

Of the 18 manufacturing industries, the 13 industries that reported paying increased prices for its raw materials in May - listed in order — are: Fabricated Metal Products; Plastics \& Rubber Products; Apparel, Leather \& Allied Products; Primary Metals; Electrical Equipment, Appliances \&

Components; Machinery; Food, Beverage \& Tobacco Products; Paper Products; Transportation Equipment; Chemical Products; Furniture \& Related Products; Miscellaneous Manufacturing; and Computer \& Electronic Products. The three industries reporting paying lower prices during the month of May are: Wood Products; Petroleum \& Coal Products; and Textile Mills.

| Prices | \% <br> Higher | \% <br> Same | Lower | Net | Index |
| :--- | :---: | :---: | :---: | :---: | :---: |
| May 2016 | 34 | 59 | 7 | +27 | 63.5 |
| Apr 2016 | 28 | 62 | 10 | +18 | 59.0 |
| Mar 2016 | 16 | 71 | 13 | +3 | 51.5 |
| Feb 2016 | 9 | 59 | 32 | -23 | 38.5 |

Backlog of Orders*
ISM ${ }^{\oplus}$ ’s Backlog of Orders Index registered 47 percent in May, a decrease of 3.5 percentage points when compared to the April reading of 50.5 percent, indicating contraction in order backlogs. Of the 85 percent of respondents who reported their backlog of orders, 17 percent reported greater backlogs, 23 percent reported smaller backlogs, and 60 percent reported no change from April.

The six industries reporting an increase in order backlogs in May - listed in order - are: Textile Mills; Printing \& Related Support Activities; Plastics \& Rubber Products; Furniture \& Related Products; Fabricated Metal Products; and Electrical Equipment, Appliances \& Components. The 10 industries reporting a decrease in order backlogs during May - listed in order - are: Apparel, Leather \& Allied Products; Primary Metals; Transportation Equipment; Miscellaneous Manufacturing; Chemical Products; Food, Beverage \& Tobacco Products; Computer \& Electronic Products; Machinery; Nonmetallic Mineral Products; and Paper Products.

| Backlog of <br> Orders | $\%$ <br> Reporting | $\%$ <br> Greater | $\%$ <br> Same | $\%$ <br> Less | Net | Index |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| May 2016 | 85 | 17 | 60 | 23 | -6 | 47.0 |
| Apr 2016 | 87 | 24 | 53 | 23 | +1 | 50.5 |
| Mar 2016 | 89 | 21 | 60 | 19 | +2 | 51.0 |
| Feb 2016 | 86 | 19 | 59 | 22 | -3 | 48.5 |

New Export Orders*
ISM ${ }^{\otimes}$ 's New Export Orders Index registered 52.5 percent in May, the same reading as in April. This month's reading indicates growth in new export orders for the third consecutive month.

The six industries reporting growth in new export orders in May - listed in order - are: Wood Products; Food, Beverage \& Tobacco Products; Miscellaneous Manufacturing; Paper Products;

Transportation Equipment; and Computer \& Electronic Products. The six industries reporting a decrease in new export orders during May - listed in order - are: Primary Metals; Nonmetallic Mineral Products; Chemical Products; Fabricated Metal Products; Machinery; and Plastics \& Rubber Products. Six industries reported no change in new export orders in May compared to April.

| New Export <br> Orders | \% <br> Reporting | \% Higher | \% <br> Oame | \% <br> Lower | Nett Index |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| May 2016 | 75 | 15 | 75 | 10 | +5 | 52.5 |
| Apr 2016 | 78 | 16 | 73 | 11 | +5 | 52.5 |
| Mar 2016 | 77 | 15 | 74 | 11 | +4 | 52.0 |
| Feb 2016 | 76 | 11 | 71 | 18 | -7 | 46.5 |

Imports*
ISM ${ }^{\oplus}$ 's Imports Index registered 50 percent in May, the same reading as in April, indicating that imports in May are unchanged from April.

The six industries reporting growth in imports during the month of May - listed in order - are: Nonmetallic Mineral Products; Computer \& Electronic Products; Food, Beverage \& Tobacco Products; Fabricated Metal Products; Machinery; and Furniture \& Related Products. The seven industries reporting a decrease in imports during May - listed in order - are: Primary Metals; Transportation Equipment; Petroleum \& Coal Products; Chemical Products; Plastics \& Rubber Products; Miscellaneous Manufacturing; and Printing \& Related Support Activities.

| Imports | \% <br> Reporting | \% Higher | \% <br> Same | \%ower | Net Index |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| May 2016 | 83 | 14 | 72 | 14 | 0 | 50.0 |
| Apr 2016 | 79 | 14 | 72 | 14 | 0 | 50.0 |
| Mar 2016 | 81 | 10 | 79 | 11 | -1 | 49.5 |
| Feb 2016 | 81 | 10 | 78 | 12 | -2 | 49.0 |

* 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 increased in May by 7 days to 127 days. Average lead time for Production Materials increased by 4 days to 63 days. Average lead time for Maintenance, Repair and Operating (MRO) Supplies increased by 1 day to 30 days.

| Percent Reporting |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Capital <br> Expenditures | Hand- <br> to- <br> Mouth | $\begin{gathered} 30 \\ \text { Days } \end{gathered}$ | sider | $\left\lvert\, \begin{gathered} 90 \\ \text { saysI } \end{gathered}\right.$ | $\begin{gathered} 6 \\ \text { Months } \end{gathered}$ | $\left\|\begin{array}{c} 1 \\ \text { Year }+ \end{array}\right\|$ | $\begin{gathered} \text { Average } \\ \text { Days } \\ \hline \end{gathered}$ |
| May 2016 | 24 | 8 | 12 | 15 | 25 | 16 | 127 |
| Apr 2016 | 23 | 8 | 9 | 23 | 24 | 13 | 120 |
| Mar 2016 | 26 | 5 | 14 | 16 | 25 | 14 | 121 |
| Feb 2016 | 22 | 7 | 12 | 21 | 22 | 16 | 127 |
|  |  |  |  |  |  |  |  |
| Production <br> Materials | Hand- <br> to- <br> Mouth | $\begin{gathered} 30 \\ \text { Days } \\ \hline \end{gathered}$ | $\begin{gathered} 60 \\ \text { SDays } \\ \hline \end{gathered}$ | $\left\lvert\, \begin{gathered} 90 \\ \text { Says } \end{gathered}\right.$ | $\begin{gathered} 6 \\ \text { Months } \end{gathered}$ | $\begin{array}{\|c\|} 1 \\ \text { Seart } \\ \hline \end{array}$ | $\begin{array}{\|c} \text { Average } \\ \text { Days } \\ \hline \end{array}$ |
| May 2016 | 16 | 35 | 24 | 15 | 7 | 3 | 63 |
| Apr 2016 | 15 | 37 | 21 | 18 | 8 | 1 | 59 |
| Mar 2016 | 15 | 34 | 25 | 16 | 8 | 2 | 62 |
| Feb 2016 | 14 | 39 | 25 | 14 | 6 | 2 | 58 |
|  |  |  |  |  |  |  |  |
| MRO <br> Supplies | Hand- <br> to- <br> Mouth | $\begin{array}{\|c\|} \hline 30 \\ \hline \text { Days } \\ \hline \end{array}$ | $\begin{gathered} 60 \\ \text { Says } \\ \hline \end{gathered}$ | $\left\lvert\, \begin{gathered} 90 \\ \text { Says } \\ \hline \end{gathered}\right.$ | $\begin{gathered} 6 \\ \text { Months } \end{gathered}$ | $\begin{gathered} 1 \\ \text { sear+ } \\ \hline \end{gathered}$ | $\begin{array}{\|c} \text { Average } \\ \text { Days } \\ \hline \end{array}$ |
| May 2016 | 41 | 37 | 14 | 7 | 1 | 0 | 30 |
| Apr 2016 | 37 | 41 | 15 | 7 | 0 | 0 | 29 |
| Mar 2016 | 42 | 37 | 15 | 5 | 1 | 0 | 29 |
| Feb 2016 | 43 | 37 | 16 | 3 | 1 | 0 | 27 |

## About This Report

The data presented herein is obtained from a survey of manufacturing 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 decisionmaking.

Data and Method of Presentation
The Manufacturing ISM ${ }^{\ominus}$ Report On Business ${ }^{\ominus}$ is based on data compiled from purchasing and supply executives nationwide. Membership of the Manufacturing Business Survey Committee is diversified by NAICS, based on each industry's contribution to gross domestic product (GDP).

Manufacturing Business Survey Committee responses are divided into the following NAICS code categories: 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).

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 ( $\mathrm{PMI}^{\oplus}$, 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. A PMI reading above 50 percent indicates that the manufacturing economy is generally expanding; below 50 percent indicates that it is generally declining. A PMI ${ }^{\oplus}$ above 43.2 percent, over a period of time, indicates that the overall economy, or gross domestic product (GDP), is generally expanding; below 43.2 percent, it is generally declining. The distance from 50 percent or 43.2 percent is indicative of the strength of the expansion or decline. With some of the indicators within this report, ISM $^{\ominus}$ has indicated the departure point between expansion and decline of comparable government series, as determined by regression analysis.

The Manufacturing ISM ${ }^{\oplus}$ Report On Business ${ }^{\oplus}$ 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. ISM ${ }^{\oplus}$ 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 ${ }^{\oplus}$ 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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