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July 2018 Manufacturing ISM® Report On Business®

PMI® at 58.1%

New Orders, Production, and Employment Growing

Supplier Deliveries Slowing at Slower Rate; Backlog Growing

Raw Materials Inventories Growing; Customers' Inventories Too Low

Prices Increasing at Slower Rate; Exports and Imports Growing

(Tempe, Arizona) — Economic activity in the manufacturing sector expanded in July, and the overall economy grew for the 111th consecutive month, say the nation's supply executives in the latest Manufacturing ISM® Report On Business®.

The report was issued today by Timothy R. Fiore, CPSM, C.P.M., Chair of the Institute for Supply Management® (ISM®) Manufacturing Business Survey Committee: "The July PMI® registered 58.1 percent, a decrease of 2.1 percentage points from the June reading of 60.2 percent. The New Orders Index registered 60.2 percent, a decrease of 3.3 percentage points from the June reading of 63.5 percent. The Production Index registered 58.5 percent, a 3.8 percentage point decrease compared to the June reading of 62.3 percent. The Employment Index registered 56.5 percent, an increase of 0.5 percentage point from the June reading of 56 percent. The Supplier Deliveries Index registered 62.1 percent, a 6.1 percentage point decrease from the June reading of 68.2 percent. The Inventories Index registered 53.3 percent, an increase of 2.5 percentage points from the June reading of 50.8 percent. The Prices Index registered 73.2 percent in July, a 3.6 percentage point decrease from the June reading of 76.8 percent, indicating higher raw materials prices for the 29th consecutive month.

"Comments from the panel reflect continued expanding business strength. Demand remains strong, with the New Orders Index at 60 percent or above for the 15th straight month, and the Customers' Inventories Index remaining low. The Backlog of Orders Index continued to expand, but at lower levels. Production and employment continues to expand in spite of labor and material shortages. Inputs — expressed as supplier deliveries, inventories and imports — had expansion increases, due primarily to negative supply chain issues, but at easing levels compared to the prior month. Lead-time extensions, steel and aluminum disruptions, supplier labor issues, and transportation difficulties continue. Export orders expanded, but at lower levels. Price pressure remains strong, but the index softened for the second straight month. Demand remains robust, but the nation's employment resources and supply chains continue to struggle. Respondents are again overwhelmingly concerned about how tariff-related activity, including reciprocal tariffs, will continue to affect their business," says Fiore.

Of the 18 manufacturing industries, 17 reported growth in July, in the following order: Textile Mills; Electrical Equipment, Appliances & Components; Apparel, Leather & Allied Products; Computer & Electronic Products; Petroleum & Coal Products; Paper Products; Printing & Related Support Activities; Nonmetallic Mineral Products; Machinery; Plastics & Rubber Products; Miscellaneous Manufacturing; Fabricated Metal Products; Food, Beverage & Tobacco Products; Furniture & Related Products; Chemical Products; Wood Products; and Transportation Equipment. The only industry reporting a decrease in July is Primary Metals.

## What respondents are saying

"Global demand is still strong. Working on contingency plans for the Chinese tariffs. We will probably onshore most of that material. Labor availability is becoming an issue." (Computer & Electronic Products)

"As a result of new tariffs on materials to/from China, we are taking measures to move impacted materials ahead of effective dates, which in some cases is resulting in holding higher inventories." (Chemical Products)

"Steel cost increases are causing a lot of negotiations. The increases are real and will affect costs beginning in the third quarter of 2018." (Electrical Equipment, Appliances & Components)

"Reviewing the business case for importing manufactured parts from China, as new tariffs will lead to increased costs that we will pass along to our domestic customers." (Transportation Equipment)

"Corn and soybean meal costs are reducing. Labor continues to be a struggle to fill open positions." (Food, Beverage & Tobacco Products)

"The steel tariffs are a concern to us. We have already seen steel prices increase due to the threat of the tariffs and are seeing kickback from our customers due to the higher prices. We are concerned that the end customer will go to off shore to purchase the finished product." (Fabricated Metal Products)

"Business is moving along at a brisk pace, outperforming the annual plan year-to-date (calendar year financials). However, internationally, nationally and locally, we are finding many manufacturers behind

schedule due to capacity constraints. They are stating their order intake is heavy and/or they cannot find qualified employees to get all the work done." (Machinery)

"Tariffs are [resulting in] customs inspection-time increases on imported raw materials from China. Logistics seems to be improving, but we are seeing a [continuing] tight chemical bulk tanker market." (Plastics & Rubber Products)

"Our customer demand is high, but supply of aluminum is tight. Also, tariffs are negatively affecting our bottom line, as we are unable to pass increases to all of our customers. Plus, we are seeing increases in our construction costs because of the steel price increases. Labor market is extremely tight for professional personnel, plant technicians and support associates." (Primary Metals)

"The so-called trade war is now taking its toll on business activity, resulting in substantial reductions to new export orders. China has all but stopped taking orders, causing inventories to build up in the U.S. Domestic business is steady. However, it is too small to carry the load that export markets have retreated from. As a result, we will be meeting as a corporation next week to recast our second-half sales and revenue projections." (Wood Products)

# Manufacturing at a Glance July 2018

Index	Series Index Jul	Series Index Jun	Percentage Point Change	Direction	Rate of Change	Trend* (Months)
PMI®	58.1	60.2	-2.1	Growing	Slower	23
New Orders	60.2	63.5	-3.3	Growing	Slower	31
Production	58.5	62.3	-3.8	Growing	Slower	23
Employment	56.5	56.0	0.5	Growing	Faster	22
Supplier Deliveries	62.1	68.2	-6.1	Slowing	Slower	22
Inventories	53.3	50.8	2.5	Growing	Faster	7
Customers' Inventories	39.4	39.7	-0.3	Too Low	Faster	22
Prices	73.2	76.8	-3.6	Increasing	Slower	29
Backlog of Orders	54.7	60.1	-5.4	Growing	Slower	18
New Export Orders	55.3	56.3	-1.0	Growing	Slower	29

Index	Series Index Jul	Series Index Jun	Percentage Point Change	Direction	Rate of Change	Trend* (Months)
Imports	54.7	59.0	-4.3	Growing	Slower	18
OVERALL ECONOMY	(			Growing	Slower	111
Manufacturing Sect	or			Growing	Slower	23

Manufacturing ISM® Report On Business® data is seasonally adjusted for the New Orders, Production, Employment and Supplier Deliveries Indexes.

## COMMODITIES REPORTED UP/DOWN IN PRICE AND IN SHORT SUPPLY

## Commodities Up in Price

Aluminum (21); Aluminum Based Products (3); Capacitors (2); Caustic Soda (13); Chemicals; Copper\* (9); Corrugate (22); Corrugated Boxes (2); Diesel (2); Fabricated Metal Products; Freight (6); Hydraulic Valves (2); Lumber; Machine Components; Natural Gas (2); Nylon (2); Paper (3); Resistors; Silicone Fluids; Solvents (2); Steel; Steel — Galvanized (2); Steel — Hot Rolled (20); Steel — Stainless (4); and Steel Based Products (3).

Commodities Down in Price

Copper\*.

**Commodities in Short Supply** 

Aluminum (3); Capacitors (13); Electrical Components (4); Electronic Components (3); Fabricated Metal Products; Freight (3); Integrated Circuits; Memory; Nylon; Resistors (9); and Steel Based Products (3).

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

July 2018 Manufacturing Index Summaries

#### PMI<sup>®</sup>

Manufacturing expanded in July as the PMI® registered 58.1 percent, a decrease of 2.1 percentage points from the June reading of 60.2 percent. "This indicates strong growth in manufacturing for the 23rd consecutive month, led by continued expansion in new orders, production and employment. Inventories are expanding at a faster rate as a result of supplier deliveries improving compared to the

<sup>\*</sup>Number of months moving in current direction.

prior month," 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® above 43.2 percent, over a period of time, generally indicates an expansion of the overall economy. Therefore, the July PMI® indicates growth for the 111th consecutive month in the overall economy and the 23rd straight month of growth in the manufacturing sector. "The past relationship between the PMI® and the overall economy indicates that the PMI® for July (58.1 percent) corresponds to a 4.6-percent increase in real gross domestic product (GDP) on an annualized basis."

# The Last 12 Months

Month	PMI®
Jul 2018	58.1
Jun 2018	60.2
May 2018	58.7
Apr 2018	57.3
Mar 2018	59.3
Feb 2018	60.8
Month	PMI®
Jan 2018	59.1
Dec 2017	59.3
Dec 2017 Nov 2017	59.3 58.2
Nov 2017	58.2
Nov 2017 Oct 2017	58.2 58.5

#### **New Orders**

ISM®'s New Orders Index registered 60.2 percent in July, which is a decrease of 3.3 percentage points when compared to the 63.5 percent reported for June, indicating growth in new orders for the 31st consecutive month. "New orders expansion continued at high levels, with the index at or above 60 percent for the 15th straight month. Customer inventories remain too low," says Fiore. A New Orders Index above 52.4 percent, over time, is generally consistent with an increase in the Census Bureau's series on manufacturing orders (in constant 2000 dollars).

Sixteen of 18 industries reported growth in new orders in July, listed in the following order: Printing & Related Support Activities; Apparel, Leather & Allied Products; Plastics & Rubber Products; Electrical Equipment, Appliances & Components; Computer & Electronic Products; Textile Mills; Machinery; Furniture & Related Products; Petroleum & Coal Products; Chemical Products; Paper Products; Fabricated Metal Products; Primary Metals; Transportation Equipment; Miscellaneous Manufacturing; and Food, Beverage & Tobacco Products. No industry reported a decrease in new orders in July.

New Orders	% Higher	% Same	% Lower	Net	Index
Jul 2018	29.0	60.1	10.9	+18.1	60.2
Jun 2018	39.7	53.0	7.3	+32.5	63.5
May 2018	37.5	56.3	6.2	+31.3	63.7
Apr 2018	42.4	49.5	8.1	+34.3	61.2

## Production

ISM®'s Production Index registered 58.5 percent in July, which is a decrease of 3.8 percentage points when compared to the 62.3 percent reported for June, indicating growth in production for the 23rd consecutive month. "Production expansion continues. Labor constraints throughout the supply chain and transportation difficulties continue to limit full production potential," says Fiore. An index above 51.5 percent, over time, is generally consistent with an increase in the Federal Reserve Board's Industrial Production figures.

The 15 industries reporting growth in production during the month of July — listed in order — are: Electrical Equipment, Appliances & Components; Apparel, Leather & Allied Products; Wood Products; Textile Mills; Petroleum & Coal Products; Computer & Electronic Products; Furniture & Related Products; Nonmetallic Mineral Products; Chemical Products; Fabricated Metal Products; Machinery; Miscellaneous Manufacturing; Paper Products; Food, Beverage & Tobacco Products; and Plastics & Rubber Products. The only industry reporting a decrease in production in July is Primary Metals.

Production	% Higher	% Same	% Lower	Net	Index
Jul 2018	31.5	52.6	15.9	+15.6	58.5
Jun 2018	38.7	51.0	10.3	+28.4	62.3
May 2018	35.8	55.2	8.9	+26.9	61.5
Apr 2018	33.6	58.5	8.0	+25.6	57.2

## **Employment**

ISM®'s Employment Index registered 56.5 percent in July, an increase of 0.5 percentage point when compared to the June reading of 56 percent. This indicates growth in employment in July for the 22nd consecutive month. "Employment maintained a modestly strong level of expansion and supported production growth during the month. Respondents continued to note labor-market issues as a constraint to their production and their suppliers' production capacity," 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, the 13 reporting employment growth in July — listed in order — are: Apparel, Leather & Allied Products; Textile Mills; Miscellaneous Manufacturing; Electrical Equipment, Appliances & Components; Computer & Electronic Products; Food, Beverage & Tobacco Products; Petroleum & Coal Products; Nonmetallic Mineral Products; Machinery; Fabricated Metal Products; Paper Products; Transportation Equipment; and Chemical Products. The two industries reporting a decrease in employment in July are: Primary Metals; and Plastics & Rubber Products.

Employment	% Higher	% Same	% Lower	Net	Index
Jul 2018	27.1	61.2	11.7	+15.4	56.5
Jun 2018	29.0	59.6	11.3	+17.7	56.0
May 2018	27.6	61.2	11.3	+16.3	56.3
Apr 2018	23.1	66.8	10.2	+12.9	54.2

## **Supplier Deliveries**

The delivery performance of suppliers to manufacturing organizations slowed in July, as the Supplier Deliveries Index registered 62.1 percent. This is 6.1 percentage points lower than the 68.2 percent reported for June. "This is the 22nd straight month of slowing supplier deliveries, and although the index

has shown a decline, the quantity of respondents reporting faster supplier deliveries compared to the prior month is minimal," says Fiore. A reading below 50 percent indicates faster deliveries, while a reading above 50 percent indicates slower deliveries.

The 15 industries reporting slower supplier deliveries in July — listed in order — are: Machinery; Apparel, Leather & Allied Products; Paper Products; Computer & Electronic Products; Textile Mills; Nonmetallic Mineral Products; Furniture & Related Products; Fabricated Metal Products; Food, Beverage & Tobacco Products; Petroleum & Coal Products; Plastics & Rubber Products; Electrical Equipment, Appliances & Components; Miscellaneous Manufacturing; Chemical Products; and Transportation Equipment. The only industry reporting faster supplier deliveries in July is Primary Metals.

Supplier Deliveries	% Slower	% Same	% Faster	Net	Index
Jul 2018	28.5	67.8	3.7	+24.8	62.1
Jun 2018	38.7	58.9	2.4	+36.3	68.2
May 2018	29.9	65.7	4.4	+25.5	62.0
Apr 2018	25.6	71.3	3.2	+22.4	61.1

## Inventories\*

The Inventories Index registered 53.3 percent in July, which is an increase of 2.5 percentage points when compared to the 50.8 percent reported for June, indicating growth in raw materials inventories. "Inventories are expanding again due to supplier delivery performance improvement in spite of longer lead times and continued disruptions in the transportation sector," says Fiore. An Inventories Index greater than 43 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 12 industries reporting higher inventories in July — listed in order — are: Textile Mills; Printing & Related Support Activities; Nonmetallic Mineral Products; Petroleum & Coal Products; Electrical Equipment, Appliances & Components; Paper Products; Plastics & Rubber Products; Miscellaneous Manufacturing; Chemical Products; Food, Beverage & Tobacco Products; Transportation Equipment; and Fabricated Metal Products. The four industries reporting lower inventories in July are: Apparel, Leather & Allied Products; Computer & Electronic Products; Machinery; and Primary Metals.

Inventories	% Higher	% Same	% Lower	Net	Index
Jul 2018	22.3	61.9	15.8	+6.5	53.3
Jun 2018	20.7	60.2	19.1	+1.6	50.8

Inventories	% Higher	% Same	% Lower	Net	Index
May 2018	17.7	65.1	17.3	+0.4	50.2
Apr 2018	20.4	65.0	14.6	+5.8	52.9

#### Customers' Inventories\*

ISM®'s Customers' Inventories Index registered 39.4 percent in July, which is 0.3 percentage point lower than the 39.7 percent reported for June, indicating that customers' inventory levels were still considered too low. "Customers' inventory levels are too low for the 22nd consecutive month, which continues to support an overall positive environment for production output growth in the near term," says Fiore.

Only three manufacturing industries reported customers' inventories as too high during the month of July: Apparel, Leather & Allied Products; Wood Products; and Furniture & Related Products. The 11 industries reporting customers' inventories as too low during July — listed in order — are: Nonmetallic Mineral Products; Computer & Electronic Products; Paper Products; Food, Beverage & Tobacco Products; Machinery; Fabricated Metal Products; Transportation Equipment; Plastics & Rubber Products; Electrical Equipment, Appliances & Components; Chemical Products; and Miscellaneous Manufacturing.

Customers' Inventories	% Reporting	% Too High	% About Right	% Too Low	Net	Index
Jul 2018	79	4.8	69.2	26.0	-21.2	39.4
Jun 2018	79	5.3	68.9	25.8	-20.6	39.7
May 2018	80	7.3	64.5	28.2	-20.9	39.6
Apr 2018	87	9.7	69.2	21.1	-11.4	44.3

#### Prices\*

The ISM® Prices Index registered 73.2 percent in July, a decrease of 3.6 percentage points from the June reading of 76.8 percent, indicating an increase in raw materials prices for the 29th consecutive month. In July, 54.6 percent of respondents reported paying higher prices, 8.1 percent reported paying lower prices, and 37.3 percent of supply executives reported paying the same prices as in June. "The price increases across all industry sectors continue. The Business Survey Committee noted price increases in metals (all steels, steel components, aluminum and copper), chemicals, corrugate, freight, electronic components, fuels, and wood products. Shortages continue in aluminum, electronics components, steel-based products, electrical components and freight," says Fiore. 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.

Seventeen of the 18 industries reported paying increased prices for raw materials in July, in the following order: Apparel, Leather & Allied Products; Textile Mills; Fabricated Metal Products; Machinery; Furniture & Related Products; Petroleum & Coal Products; Paper Products; Electrical Equipment, Appliances & Components; Plastics & Rubber Products; Computer & Electronic Products; Miscellaneous Manufacturing; Primary Metals; Printing & Related Support Activities; Nonmetallic Mineral Products; Chemical Products; Transportation Equipment; and Food, Beverage & Tobacco Products. No manufacturing industries reported paying less during the month of July.

Prices	% Higher	% Same	% Lower	Net	Index
Jul 2018	54.6	37.3	8.1	+46.5	73.2
Jun 2018	56.9	39.9	3.3	+53.6	76.8
May 2018	62.2	34.7	3.1	+59.1	79.5
Apr 2018	61.2	36.2	2.6	+58.6	79.3

## Backlog of Orders\*

ISM®'s Backlog of Orders Index registered 54.7 percent in July, which is 5.4 percentage points lower than the 60.1 percent reported in June, indicating growth in order backlogs for the 18th consecutive month. "Backlog expansion continued during the period, but at lower expansion levels. Continued low levels of customer inventory and strong new order expansion support production requirements in the near term," says Fiore.

The 10 industries reporting growth in order backlogs in July — listed in order — are: Apparel, Leather & Allied Products; Textile Mills; Machinery; Computer & Electronic Products; Electrical Equipment, Appliances & Components; Fabricated Metal Products; Plastics & Rubber Products; Paper Products; Chemical Products; and Miscellaneous Manufacturing. The three industries reporting a decrease in order backlogs during July are: Primary Metals; Food, Beverage & Tobacco Products; and Furniture & Related Products.

Backlog of Orders*	% Reporting	% Higher	% Same	% Lower	Net	Index
Jul 2018	87	24.0	61.3	14.7	+9.3	54.7
Jun 2018	90	32.8	54.6	12.6	+20.2	60.1
May 2018	89	34.8	57.5	7.7	+27.1	63.5

Backlog of Orders*	% Reporting	% Higher	% Same	% Lower	Net	Index
Apr 2018	88	32.3	59.3	8.3	+24.0	62.0

#### **New Export Orders\***

ISM®'s New Export Orders Index registered 55.3 percent in July, a decrease of 1 percentage point when compared to the 56.3 percent reported for June, indicating growth in new export orders for the 29th consecutive month. "Five of the six big industry sectors continued to expand export activity during the period," says Fiore.

The seven industries reporting growth in new export orders in July — listed in order — are: Petroleum & Coal Products; Nonmetallic Mineral Products; Computer & Electronic Products; Fabricated Metal Products; Food, Beverage & Tobacco Products; Machinery; and Chemical Products. The five industries reporting a decrease in new export orders in July are: Wood Products; Primary Metals; Paper Products; Plastics & Rubber Products; and Transportation Equipment. Six industries reported no change in new export orders in July.

New Export Orders*	% Reporting	% Higher	% Same	% Lower	Net	Index
Jul 2018	78	18.1	74.3	7.6	+10.5	55.3
Jun 2018	79	15.8	81.1	3.1	+12.6	56.3
May 2018	79	17.3	76.5	6.2	+11.2	55.6
Apr 2018	79	18.6	78.2	3.2	+15.4	57.7

## Imports\*

ISM®'s Imports Index registered 54.7 percent in July, a decrease of 4.3 percentage points when compared to the 59 percent reported for June, indicating that imports grew in July for the 18th consecutive month. "Imports continued to expand, but at a lower level compared to the prior month," says Fiore.

The 11 industries reporting growth in imports during the month of July — listed in order — are: Apparel, Leather & Allied Products; Textile Mills; Chemical Products; Fabricated Metal Products; Nonmetallic Mineral Products; Machinery; Food, Beverage & Tobacco Products; Computer & Electronic Products; Transportation Equipment; Plastics & Rubber Products; and Miscellaneous Manufacturing. The two industries reporting a decrease in imports during July are: Petroleum & Coal Products; and Primary Metals.

Imports	% Reporting	% Higher	% Same	% Lower	Net	Index
Jul 2018	82	19.4	70.6	10.0	+9.4	54.7
Jun 2018	85	24.3	69.3	6.4	+17.9	59.0
May 2018	85	17.1	74.0	8.9	+8.2	54.1
Apr 2018	86	21.6	72.4	6.0	+15.6	57.8

<sup>\*</sup>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 six days in July to 137 days. Average lead time for Production Materials was unchanged at 69 days. Average lead time for Maintenance, Repair and Operating (MRO) Supplies increased by four days to 35 days.

## **Percent Reporting**

Capital Expenditures	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Jul 2018	23	7	9	15	28	18	137
Jun 2018	21	7	9	17	26	20	143
May 2018	19	6	10	19	27	19	143
Apr 2018	21	5	10	21	21	22	145
Production Materials	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Jul 2018	11	37	23	18	7	4	69
Jun 2018	11	33	29	16	7	4	69
May 2018	13	30	26	20	7	4	70
Apr 2018	10	35	28	17	7	3	67

MRO Supplies	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Jul 2018	37	41	13	6	2	1	35
Jun 2018	36	43	14	5	2	0	31
May 2018	32	44	16	7	1	0	33
Apr 2018	35	41	15	7	2	0	35

## **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 July 2018.

The data presented herein is obtained from a survey of manufacturing supply executives based on information they have collected within their respective organizations. ISM® 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® Report On Business® 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. Beginning in January 2018, 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 (PMI®, 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 PMI® 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® 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 extent of the expansion or decline. With some of the indicators within this report, ISM® has indicated the departure point between expansion and decline of comparable government series, as determined by regression analysis. The Manufacturing ISM® Report On Business® 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® 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® 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® Report On Business® 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.

## ISM ROB Content

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