## Manufacturing $\mathrm{PMI}^{\circledR}$ at 61.2\%

## May 2021 Manufacturing ISM ${ }^{\circ}$ Report On Business ${ }^{\circ}$

(Tempe, Arizona) - Economic activity in the manufacturing sector grew in May, with the overall economy notching a 12th consecutive month of growth, say the nation's supply executives in the latest Manufacturing ISM ${ }^{\oplus}$ Report On Business ${ }^{\circ}$.

The report was issued today by Timothy R. Fiore, CPSM, C.P.M., Chair of the Institute for Supply Management ${ }^{\oplus}\left(\mathrm{ISM}^{\ominus}\right)$ Manufacturing Business Survey Committee:
"The May Manufacturing PMI ${ }^{\bullet}$ registered 61.2 percent, an increase of 0.5 percentage point from the April reading of 60.7 percent. This figure indicates expansion in the overall economy for the 12th month in a row after contraction in April 2020. The New Orders Index registered 67 percent, increasing 2.7 percentage points from the April reading of 64.3 percent. The Production Index registered 58.5 percent, a decrease of 4 percentage points compared to the April reading of 62.5 percent. The Backlog of Orders Index registered 70.6 percent, 2.4 percentage points higher compared to the April reading of 68.2 percent. The Employment Index registered 50.9 percent; 4.2 percentage points lower than the April reading of 55.1 percent. The Supplier Deliveries Index registered 78.8 percent, up 3.8 percentage points from the April figure of 75 percent. The Inventories Index registered 50.8 percent, 4.3 percentage points higher than the April reading of 46.5 percent. The Prices Index registered 88 percent, down 1.6 percentage points compared to the April reading of 89.6 percent. The New Export Orders Index registered 55.4 percent, an increase of 0.5 percentage point compared to the April reading of 54.9 percent. The Imports Index registered 54 percent, a 1.8-percentage point increase from the April reading of 52.2 percent."

Fiore continues, "The manufacturing economy continued expansion in May. Business Survey Committee panelists reported that their companies and suppliers continue to struggle to meet increasing levels of demand. Record-long lead times, wide-scale shortages of critical basic materials, rising commodities prices and difficulties in transporting products are continuing to affect all segments of the manufacturing economy. Worker absenteeism, short-term shutdowns due to part shortages, and difficulties in filling open positions continue to be issues that limit manufacturing-growth potential. Optimistic panel sentiment increased, with 36 positive comments for every cautious comment, compared to an 11-to-1 ratio in April. Demand expanded, with the (1) New Orders Index growing at a strong level, supported by the New Export Orders Index continuing to expand, (2) Customers' Inventories Index hitting another all-time low and (3) Backlog of Orders Index continuing at a recordhigh level. Consumption (measured by the Production and Employment indexes) indicated slowing expansion, posting a combined 8.2-percentage point decrease to the Manufacturing $\mathrm{PMI}^{\circ}$ calculation. The Employment Index expanded for the sixth straight month, but panelists continue to note significant difficulties in attracting and retaining labor at their companies' and suppliers' facilities. Consumption was clearly limited due to labor issues and supply constraints as demand remains very high. Inputs expressed as supplier deliveries, inventories, and imports - continued to support input-driven constraints to production expansion, at higher rates compared to April, due to continued trouble in supplier deliveries. Inputs positively contributed to the $\mathrm{PMI}^{\circ}$ calculation, by a combined 8.1 percentage points. Importation of items slightly improved in the period. (The Inventories and Supplier Deliveries indexes directly factor into the $\mathrm{PMI}^{\circledR}$; the Imports Index does not.) The Prices Index expanded for the 12th consecutive month, indicating continued supplier pricing power and scarcity of supply chain goods.
"All of the six biggest manufacturing industries - Computer \& Electronic Products; Fabricated Metal Products; Food, Beverage \& Tobacco Products; Chemical Products; Transportation Equipment; and Petroleum \& Coal Products, in that order - registered moderate to strong growth in May.
"Manufacturing performed well for the 12th straight month, with demand, consumption and inputs registering strong growth compared to April. Panelists companies and their supply chains continue to struggle to respond to strong demand due to the difficulty in hiring and retaining direct labor. Record backlog, customer inventories and raw material lead times are being reported. The manufacturing recovery has transitioned from first addressing demand headwinds, to now overcoming labor obstacles across the entire value chain," says Fiore.

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

## WHAT RESPONDENTS ARE SAYING

- "Supplier performance - deliveries, quality, it's all suffering. Demand is high, and we are struggling to find employees to help us keep up." [Computer \& Electronic Products]
- "Changes in currency exchange rates favorably contributed to our quarterly performance. Continued strong consumer demand for our high-quality products also provided increased sales." [Chemical Products]
- "Ongoing component shortages are driving dual sourcing and longer-term supply plans to be implemented." [Transportation Equipment]
- "Difficulty finding workers at the factory and warehouse level is not only impacting our production, but suppliers' as well: Spot shortages and delays are common due to an inability to staff lines. Delays at the port continue to strain inventory levels." [Food, Beverage \& Tobacco Products]
- "[A] lack of qualified candidates to fill both open office and shop positions is having a negative impact on production throughput. Challenges mounting for meeting delivery dates to customers due to material and services shortages and protracted lead times. This situation does not look to improve until possibly the fourth quarter of 2021 or beyond." [Fabricated Metal Products]
- "Labor shortages impacting internal and supplier production. Logistics performance is terrible." [Electrical Equipment, Appliances \& Components]
- "Business is good, but labor and raw materials are becoming very problematic, driving increases in costs." [Furniture \& Related Products]
- "The continued global supply chain tightness and raw material shortages from the Gulf (winter storms) make it less likely that any business can recover this year. Demand is strong, but what
good is that if you cannot get the materials needed to produce your finished goods?" [Nonmetallic Mineral Products]
- "Seeing a high demand and backlog of orders." [Plastics \& Rubber Products]
- "Very busy, but still experiencing labor shortages." [Primary Metals]

Manufacturing at a Glance
May 2021

| Index | Series <br> Index May | Series <br> Index Apr | Percentage Point Change | Direction | Rate of Change | Trend* <br> (Months) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Manufacturing PMI ${ }^{\circ}$ | 61.2 | 60.7 | +0.5 | Growing | Faster | 12 |
| New Orders | 67.0 | 64.3 | +2.7 | Growing | Faster | 12 |
| Production | 58.5 | 62.5 | -4.0 | Growing | Slower | 12 |
| Employment | 50.9 | 55.1 | -4.2 | Growing | Slower | 6 |
| Supplier Deliveries | 78.8 | 75.0 | +3.8 | Slowing | Faster | 63 |
| Inventories | 50.8 | 46.5 | +4.3 | Growing | From Contracting | 1 |
| Customers' Inventories | 28.0 | 28.4 | -0.4 | Too Low | Faster | 56 |
| Prices | 88.0 | 89.6 | -1.6 | Increasing | Slower | 12 |
| Backlog of Orders | 70.6 | 68.2 | +2.4 | Growing | Faster | 11 |
| New Export Orders | 55.4 | 54.9 | +0.5 | Growing | Faster | 11 |
| Imports | 54.0 | 52.2 | +1.8 | Growing | Faster | 11 |
| OVERALL ECONOMY |  |  |  | Growing | Faster | 12 |
| Manufacturing Sect |  |  |  | Growing | Faster | 12 |

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

## Commodities Up in Price

Aluminum (12); Aluminum Products (2); Brass; Coatings (2); Copper (12); Copper Products (3); Corn; Corrugate (8); Corrugated Boxes (7); Diesel (5); Electrical Components (6); Electronic Components (6); Epoxy Resin; Fabricated Metal Components; Foam Products (3); Freight (7); High-Density Polyethylene (HDPE) (5); Hydrochloric Acid; Labor - Temporary; Linerboard; Low-Density Polyethylene; Lubricants (2); Lumber (11); Medium-Density Fiberboard (MDF); Natural Gas (2); Ocean Freight (6); Packaging Supplies (6); Paper; Paper Products (6); Plastic Containers; Plastic Resins (9); Polyethylene (4); Polyethylene Terephthalate (PET) Products; Polypropylene (11); Precious Metals (2); Resin-Based Products (4); Rubber Products (4); Semiconductors (4); Solvents; Soybean Products (8); Steel (10); Steel — Carbon (6); Steel — Cold Rolled (9); Steel — Galvanized; Steel — Hot Rolled (9); Steel — Scrap; Steel — Stainless (7); Steel Bars; Steel Drums; Steel Products (9); Stainless Steel Components; Wire Harnesses; Wood for Pallets (2); and Wood — Pallets (Finished Product) (6).

## Commodities Down in Price

## Acetone.

## Commodities in Short Supply

Acrylates; Aluminum (2); Aluminum Products; Coatings; Corrugated Boxes (7); Electrical Components (8); Electronic Components (6); Foam Products (3); Labor - Temporary; Lumber (3); Medium-Density Fiberboard (MDF); Nylon Fiber (2); Ocean Freight (2); Plastic Containers; Plastic Products (4); Plastic Resins — Other (3); Polycarbonates; Polyethylene Terephthalate (PET) Products; Polypropylene (2); Polyvinyl Chloride (PVC) Resin; Printed Circuit Boards; Printed Circuit Board Assemblies; Semiconductors (6); Steel (6); Steel — Cold Rolled; Steel — Galvanized; Steel — Hot Rolled (7); Steel — Stainless (3); Steel Bars; Steel Products (4); Steel Tubing; and Wood - Pallets (2).

Note: The number of consecutive months the commodity is listed is indicated after each item.

## Manufacturing PMI ${ }^{\circ}$

Manufacturing grew in May, as the Manufacturing $\mathrm{PMI}^{\bullet}$ registered 61.2 percent, 0.5 percentage point higher than the April reading of 60.7 percent. "The Manufacturing $\mathrm{PMI}^{\circ}$ continued to indicate strong sector expansion and U.S. economic growth in May. All five subindexes that directly factor into the Manufacturing PMI ${ }^{\bullet}$ were in growth territory. All of the six biggest manufacturing industries expanded, in the following order: Computer \& Electronic Products; Fabricated Metal Products; Food, Beverage \& Tobacco Products; Chemical Products; Transportation Equipment; and Petroleum \& Coal Products. The New Orders and Production indexes continued to expand at strong levels. The Supplier Deliveries Index continued to reflect suppliers' difficulties in maintaining delivery rates, due to a lack of direct labor, transportation challenges and increased demand. All 10 subindexes were positive for the period; a reading of 'too low' for Customers' Inventories Index is considered a positive for future production," 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 Manufacturing $\mathrm{PMI}^{\bullet}$ above 43.1 percent, over a period of time, generally indicates an expansion of the overall economy. Therefore, the May Manufacturing $\mathrm{PMI}^{\circledR}$ indicates the overall economy grew in May for the 12th consecutive month following contraction in April 2020. "The past relationship between the Manufacturing PMI ${ }^{\bullet}$ and the overall economy indicates that the Manufacturing PMI ${ }^{\bullet}$ for May (61.2 percent) corresponds to a 5.2-percent increase in real gross domestic product (GDP) on an annualized basis," says Fiore.

THE LAST 12 MONTHS

## Month Manufacturing PMI ${ }^{\circ}$

May 202161.2

Apr 202160.7
Mar 202164.7

Feb 202160.8

Jan 202158.7

Dec 202060.5

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Month
Manufacturing
PMI \({ }^{\circ}\)
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Nov 202057.7

## Month Manufacturing PMI ${ }^{\circ}$

Oct 202058.8
Sep 202055.7
Aug 202055.6
Jul 202053.7
Jun 202052.2
Average for 12 months - 58.4
High - 64.7
Low-52.2

## New Orders

ISM ${ }^{\circ}$ 's New Orders Index registered 67 percent in May, up 2.7 percentage points compared to the 64.3 percent reported in April. This indicates that new orders grew for the 12th consecutive month. "All of the six largest manufacturing sectors - Computer \& Electronic Products; Chemical Products; Fabricated Metal Products; Food, Beverage \& Tobacco Products; Petroleum \& Coal Products; and Transportation Equipment - expanded in this order, at strong levels," says Fiore. A New Orders Index above 52.8 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, the 16 that reported growth in new orders in May — in the following order - are: Nonmetallic Mineral Products; Furniture \& Related Products; Electrical Equipment, Appliances \& Components; Paper Products; Primary Metals; Computer \& Electronic Products; Plastics \& Rubber Products; Machinery; Chemical Products; Textile Mills; Fabricated Metal Products; Food, Beverage \& Tobacco Products; Wood Products; Petroleum \& Coal Products; Transportation Equipment; and Miscellaneous Manufacturing. The only industry reporting a decline in new orders in May is Printing \& Related Support Activities.

| New Orders \% Higher \% Same \% Lower Net | Index |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| May 2021 | 46.9 | 43.1 | 10.0 | +36.967 .0 |
| Apr 2021 | 48.7 | 43.4 | 7.9 | +40.864 .3 |
| Mar 2021 | 45.3 | 49.2 | 5.5 | +39.868 .0 |
| Feb 2021 | 42.4 | 51.2 | 6.4 | +36.064 .8 |
| Production |  |  |  |  |

The Production Index registered 58.5 percent in May, 4 percentage points lower than the April reading of 62.5 percent, indicating growth for the 12th consecutive month. "Five (Fabricated Metal Products; Computer \& Electronic Products; Chemical Products; Food, Beverage \& Tobacco Products; and

Transportation Equipment) of the top six industries expanded at strong levels. The index registered its lowest reading since the full recovery began in June 2020 when it registered 56 percent. Lack of direct labor and raw materials were constraints to production growth," says Fiore. An index above 52.1 percent, over time, is generally consistent with an increase in the Federal Reserve Board's Industrial Production figures.

The 13 industries reporting growth in production during the month of May — listed in order - are: Nonmetallic Mineral Products; Furniture \& Related Products; Plastics \& Rubber Products; Primary Metals; Machinery; Wood Products; Fabricated Metal Products; Computer \& Electronic Products; Chemical Products; Food, Beverage \& Tobacco Products; Miscellaneous Manufacturing; Transportation Equipment; and Electrical Equipment, Appliances \& Components. The two industries reporting decreased production in May are: Printing \& Related Support Activities; and Paper Products.

## Production \% Higher \% Same \% Lower Net Index

| May 2021 | 39.2 | 43.6 | 17.2 | +22.058 .5 |
| :--- | :--- | :--- | :--- | :--- |
| Apr 2021 | 44.3 | 44.3 | 11.4 | +32.962 .5 |
| Mar 2021 | 43.0 | 48.9 | 8.1 | +34.968 .1 |
| Feb 2021 | 36.8 | 51.7 | 11.6 | +25.263 .2 |

## Employment

ISM ${ }^{\circ}$ ’s Employment Index registered 50.9 percent in May, 4.2 percentage points lower than the April reading of 55.1 percent. "The Employment Index grew for the sixth month in a row. Of the six big manufacturing sectors, only two (Fabricated Metal Products; and Food, Beverage \& Tobacco Products) expanded. Continued strong new-order levels, low customer inventories and expanding backlogs continue to indicate employment strength; however, survey panelists' companies continue to struggle to meet labor-management plans. Panelists' comments indicate an overwhelming majority of their companies are hiring or attempting to hire, with more than 50 percent of them expressing difficulty in doing so," says Fiore. 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, the nine industries reporting employment growth in May - in the following order - are: Electrical Equipment, Appliances \& Components; Textile Mills; Primary Metals; Furniture \& Related Products; Plastics \& Rubber Products; Fabricated Metal Products; Miscellaneous Manufacturing; Machinery; and Food, Beverage \& Tobacco Products. The three industries reporting a decrease in employment in May are: Printing \& Related Support Activities; Nonmetallic Mineral Products; and Chemical Products.

| Employment \% Higher \% Same \% Lower Net |  |  |  |  |  | Index |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| May 2021 | 20.8 | 61.1 | 18.0 | +2.8 | 50.9 |  |
| Apr 2021 | 21.2 | 67.9 | 10.9 | +10.3 | 55.1 |  |
| Mar 2021 | 23.9 | 69.0 | 7.2 | +16.7 | 59.6 |  |
| Feb 2021 | 19.2 | 68.5 | 12.3 | +6.9 | 54.4 |  |

## Supplier Deliveries*

The delivery performance of suppliers to manufacturing organizations was slower in May, as the Supplier Deliveries Index registered 78.8 percent. This is 3.8 percentage points higher than the 75 percent reported in April and the highest reading since April 1974, when the index registered 82.1 percent. Five (Computer \& Electronic Products; Food, Beverage \& Tobacco Products; Fabricated Metal Products; Transportation Equipment; and Chemical Products) of the six top manufacturing industries reported slowing deliveries. "Deliveries slowed at a faster rate compared to the previous month. The Supplier Deliveries Index reflects difficulties suppliers continue to experience in meeting customer demand, including (1) hiring challenges, (2) longer raw materials lead times and higher prices, as well as product shortages, and (3) limited transportation availability. Supplier labor, materials and transportation constraints are not expected to diminish in the second quarter, putting further strain on panelists' production plans and raw-materials inventory accounts. Production material lead times are at the highest level since January 1987 when we began recording lead times," says Fiore. A reading below 50 percent indicates faster deliveries, while a reading above 50 percent indicates slower deliveries.

Of the 18 industries, 16 reported slower supplier deliveries in May, listed in the following order: Apparel, Leather \& Allied Products; Printing \& Related Support Activities; Nonmetallic Mineral Products;
Computer \& Electronic Products; Textile Mills; Food, Beverage \& Tobacco Products; Machinery; Fabricated Metal Products; Furniture \& Related Products; Paper Products; Plastics \& Rubber Products; Miscellaneous Manufacturing; Electrical Equipment, Appliances \& Components; Transportation Equipment; Chemical Products; and Primary Metals. No industries reported faster supplier deliveries in May.

| Supplier Deliveries \% Slower \% Same \% Faster Net |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Index |  |  |  |  |
| May 2021 | 58.9 | 39.7 | 1.4 | +57.578 .8 |
| Apr 2021 | 53.9 | 42.2 | 3.9 | +50.075 .0 |
| Mar 2021 | 54.9 | 43.5 | 1.6 | +53.376 .6 |
| Feb 2021 | 45.4 | 53.1 | 1.5 | +43.972 .0 |
| Inventories |  |  |  |  |

The Inventories Index registered 50.8 percent in May, 4.3 percentage points higher than the 46.5 percent reported for April. The Inventories Index moved back into growth territory after contracting for
one month. "Inventories remain unstable due to ongoing supplier constraints. In May, supplier delivery rates were not able to keep up with new-order and production levels, causing a lack of expansion of the Inventories Index and a constraint on panelists' companies production levels," says Fiore. An Inventories Index greater than 44.5 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 eight industries reporting higher inventories in May - in the following order - are: Furniture \& Related Products; Textile Mills; Food, Beverage \& Tobacco Products; Primary Metals; Chemical Products; Computer \& Electronic Products; Fabricated Metal Products; and Transportation Equipment. The seven industries reporting a decrease in inventories in May - listed in order - are: Apparel, Leather \& Allied Products; Printing \& Related Support Activities; Nonmetallic Mineral Products; Paper Products; Miscellaneous Manufacturing; Machinery; and Electrical Equipment, Appliances \& Components.

## Inventories \% Higher \% Same \% Lower Net Index

| May 2021 | 23.8 | 54.1 | 22.2 | +1.650 .8 |
| :--- | :--- | :--- | :--- | :--- |
| Apr 2021 | 18.2 | 58.3 | 23.5 | -5.346 .5 |
| Mar 2021 | 22.4 | 58.4 | 19.2 | +3.250 .8 |
| Feb 2021 | 19.8 | 63.1 | 17.1 | +2.749 .7 |

## Customers' Inventories*

ISM ${ }^{\circ}$ 's Customers' Inventories Index registered 28 percent in May, 0.4 percentage point lower than the 28.4 percent reported for April, indicating that customers' inventory levels were considered too low. "Customers' inventories are too low for the 56th consecutive month, a positive for future production growth. For the third consecutive month, this subindex has registered its lowest reading since it was established in January 1997. For 10 straight months, the Customers' Inventories Index has been at historically low levels," says Fiore.

None of the 18 industries reported higher customers' inventories in May. The 16 industries reporting customers' inventories as too low during May - listed in order — are: Wood Products; Primary Metals; Textile Mills; Apparel, Leather \& Allied Products; Fabricated Metal Products; Computer \& Electronic Products; Transportation Equipment; Chemical Products; Machinery; Plastics \& Rubber Products; Paper Products; Food, Beverage \& Tobacco Products; Furniture \& Related Products; Electrical Equipment, Appliances \& Components; Nonmetallic Mineral Products; and Miscellaneous Manufacturing.

## Customers' Inventories \% Reporting \% Too High \% About Right \% Too Low Net Index

| May 2021 | 79 | 4.6 | 46.8 | 48.6 | -44.028 .0 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Apr 2021 | 80 | 3.7 | 49.4 | 46.9 | -43.228 .4 |
| Mar 2021 | 79 | 5.3 | 49.2 | 45.5 | -40.229 .9 |
| Feb 2021 | 79 | 4.8 | 55.4 | 39.8 | -35.032 .5 |

## Prices*

The ISM ${ }^{\bullet}$ Prices Index registered 88 percent, a decrease of 1.6 percentage points compared to the April reading of 89.6 percent, indicating raw materials prices increased for the 12th consecutive month. In the last four months, the index has been at its highest levels since July 2008, the last of five straight months over 80 percent, when it registered 90.4 percent. "Virtually all basic and intermediate manufacturing materials are experiencing price increases as a result of product scarcity and the dynamics of supply and demand," says Fiore. A Prices Index above 52.7 percent, over time, is generally consistent with an increase in the Bureau of Labor Statistics (BLS) Producer Price Index for Intermediate Materials.

In May, 17 industries reported paying increased prices for raw materials, in the following order: Apparel, Leather \& Allied Products; Furniture \& Related Products; Textile Mills; Nonmetallic Mineral Products; Food, Beverage \& Tobacco Products; Machinery; Electrical Equipment, Appliances \& Components; Fabricated Metal Products; Primary Metals; Computer \& Electronic Products; Paper Products; Miscellaneous Manufacturing; Transportation Equipment; Plastics \& Rubber Products; Wood Products; Chemical Products; and Petroleum \& Coal Products. No industries reported lower prices in May.

## Prices \% Higher \% Same \% Lower Net Index

| May 202177.1 | 21.6 | 1.2 | +75.988 .0 |
| :--- | :--- | :--- | :--- |
| Apr 2021 80.1 | 19.1 | 0.9 | +79.289 .6 |
| Mar 2021 71.6 | 27.9 | 0.5 | +71.185 .6 |
| Feb 202173.1 | 25.7 | 1.2 | +71.986 .0 |

## Backlog of Orders*

ISM ${ }^{\oplus \prime}$ s Backlog of Orders Index registered 70.6 percent in May, a 2.4 -percentage point increase compared to the 68.2 percent reported in April, indicating order backlogs expanded for the 11th straight month. May's reading is the highest since reporting for this subindex began in January 1993. "Backlogs expanded at faster rates in May, indicating 11 months of new-order intakes more than fully offsetting production outputs. Five (Fabricated Metal Products; Transportation Equipment; Chemical Products; Food, Beverage \& Tobacco Products; and Computer \& Electronic Products) of the six big industry sectors reported that backlogs expanded strongly," says Fiore.

The 15 industries reporting growth in order backlogs in May, in the following order, are: Apparel, Leather \& Allied Products; Nonmetallic Mineral Products; Machinery; Plastics \& Rubber Products; Primary Metals; Paper Products; Wood Products; Furniture \& Related Products; Fabricated Metal Products; Transportation Equipment; Chemical Products; Food, Beverage \& Tobacco Products; Electrical Equipment, Appliances \& Components; Miscellaneous Manufacturing; and Computer \& Electronic Products. No industry reported lower order backlogs in May.

| Backlog of Orders \% Reporting \% Higher \% Same \% Lower Net |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| May 2021 | 91 | 49.1 | 42.9 | 8.0 | +41.170 .6 |
| Apr 2021 | 89 | 44.4 | 47.6 | 8.0 | +36.468 .2 |
| Mar 2021 | 91 | 43.1 | 48.8 | 8.1 | +35.067 .5 |
| Feb 2021 | 91 | 38.5 | 51.0 | 10.5 | +28.064 .0 |

## New Export Orders*

ISM ${ }^{\circ}$ 's New Export Orders Index registered 55.4 percent in May, up 0.5 percentage point compared to the April reading of 54.9 percent. "The New Export Orders Index grew for the 11th consecutive month, and at a faster rate. Of the six big industry sectors, four (Transportation Equipment; Fabricated Metal Products; Chemical Products; and Computer \& Electronic Products) expanded. New export orders were again a positive factor to the growth in the New Orders Index," says Fiore.

The eight industries reporting growth in new export orders in May — in the following order — are: Nonmetallic Mineral Products; Miscellaneous Manufacturing; Transportation Equipment; Electrical Equipment, Appliances \& Components; Fabricated Metal Products; Machinery; Chemical Products; and Computer \& Electronic Products. The only industry reporting a decrease in new export orders in May is Wood Products. Seven industries reported no change in exports in May as compared to April.

New Export Orders \% Reporting \% Higher \% Same \% Lower Net Index

| May 2021 | 74 | 16.8 | 77.2 | 6.0 | +10.855 .4 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Apr 2021 | 72 | 16.3 | 77.1 | 6.5 | +9.8 | 54.9 |
| Mar 2021 | 76 | 16.7 | 75.6 | 7.7 | +9.0 | 54.5 |
| Feb 2021 | 73 | 20.5 | 73.4 | 6.1 | +14.4 | 57.2 |

## Imports*

ISM ${ }^{\circ}$ 's Imports Index registered 54 percent in May, an increase of 1.8 percentage points compared to the 52.2 percent reported for April. "Imports expanded for the 11th consecutive month, at a faster rate compared to April, reflecting continuing increases in U.S. factory demand and some amount of throughput improvement in ports of entry. Overland-transport challenges and container shortages continue to persist across the global supply chain. Imports will continue to be challenged through the third quarter of 2021," says Fiore.

The 11 industries reporting growth in imports in May — in the following order — are: Wood Products; Nonmetallic Mineral Products; Furniture \& Related Products; Textile Mills; Chemical Products; Machinery; Plastics \& Rubber Products; Miscellaneous Manufacturing; Transportation Equipment; Fabricated Metal Products; and Computer \& Electronic Products. The three industries reporting a decrease in imports in May are: Paper Products; Primary Metals; and Food, Beverage \& Tobacco Products.

Imports \% Reporting \% Higher \% Same \% Lower Net Index

| May 202185 | 20.6 | 66.8 | 12.7 | +7.9 | 54.0 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Apr 2021 84 | 16.3 | 71.9 | 11.8 | +4.5 | 52.2 |
| Mar 2021 87 | 19.9 | 73.6 | 6.5 | +13.4 | 56.7 |
| Feb 2021 85 | 21.0 | 70.3 | 8.7 | +12.3 | 56.1 |

*The Supplier Deliveries, 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 one day to 148 days.
Average lead time for production materials increased in May by six days to 85 days - the highest figure since ISM ${ }^{\circledR}$ began collecting this data in 1987. Average lead time for Maintenance, Repair and Operating (MRO) Supplies decreased in May by three days to 42 days.

## Percent Reporting

Capital Expenditures Hand-to-Mouth 30 Days 60 Days 90 Days 6 Months 1 Year + Average Days

| May 2021 | 21 | 5 | 11 | 12 | 31 | 20 | 148 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Apr 2021 | 21 | 5 | 7 | 16 | 32 | 19 | 147 |
| Mar 2021 | 23 | 4 | 9 | 17 | 26 | 21 | 145 |
| Feb 2021 | 23 | 6 | 8 | 15 | 29 | 19 | 142 |

Percent Reporting
Production Materials Hand-to-Mouth 30 Days 60 Days 90 Days 6 Months 1 Year + Average Days

| May 2021 | 11 | 23 | 25 | 23 | 13 | 5 | 85 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Apr 2021 | 10 | 25 | 25 | 26 | 10 | 4 | 79 |
| Mar 2021 | 11 | 27 | 27 | 20 | 12 | 3 | 75 |
| Feb 2021 | 11 | 31 | 27 | 20 | 9 | 2 | 67 |

## Percent Reporting

MRO Supplies Hand-to-Mouth 30 Days 60 Days 90 Days 6 Months 1 Year + Average Days

| May 2021 | 28 | 39 | 18 | 10 | 5 | 0 | 42 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

# MRO Supplies Hand-to-Mouth 30 Days 60 Days 90 Days 6 Months 1 Year + Average Days 

| Apr 2021 | 29 | 37 | 16 | 13 | 4 | 1 | 45 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Mar 2021 | 31 | 36 | 19 | 10 | 4 | 0 | 40 |
| Feb 2021 | 33 | 37 | 16 | 11 | 3 | 0 | 38 |

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 May 2021.

The data presented herein is obtained from a survey of manufacturing supply executives based on information they have collected within their respective organizations. ISM ${ }^{\circ}$ 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 ${ }^{\circ}$ Report On Business ${ }^{\circ}$ 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. According to the BEA estimates for 2018 GDP (released October 29, 2019), the six largest manufacturing subsectors are: Computer \& Electronic Products; Chemical Products; Transportation Equipment Manufacturing; Food, Beverage \& Tobacco Products; Petroleum \& Coal Products; and Fabricated Metal Products. 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 (Manufacturing PMI', New Orders, Production, Employment and Inventories) 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 Manufacturing $\mathrm{PMI}^{\circ}$ 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 Manufacturing PMI reading above 50 percent indicates that the manufacturing economy is generally expanding; below 50 percent indicates that it is generally declining. A Manufacturing PMI ${ }^{\circ}$ above 43.1 percent, over a period of time, indicates that the overall economy, or gross domestic product (GDP), is generally expanding; below 43.1 percent, it is generally declining. The distance from 50 percent or 43.1 percent is indicative of the extent of the expansion or decline. With some of the indicators within this report, ISM ${ }^{\circ}$ 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 ${ }^{\circ}$ survey is sent out to Manufacturing 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 ${ }^{\text {b }}$ 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. ISM ${ }^{\circ}$ 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 ${ }^{\circ}$ Report On Business ${ }^{\circ}$ 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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## About Institute for Supply Management ${ }^{\circ}$

Institute for Supply Management ${ }^{\circ}$ (ISM ${ }^{\circ}$ ) 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 ${ }^{\circ}$, its highly regarded certification programs and the ISM Mastery Model ${ }^{\circ}$. This report has been issued by the association since 1931, except for a fouryear interruption during World War II.

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

The next Manufacturing ISM ${ }^{\bullet}$ Report On Business ${ }^{\circ}$ featuring June 2021 data will be released at 10:00 a.m. ET on Thursday, July 1, 2021.
*Unless the New York Stock Exchange is closed.

