

John Bean Technologies (JBT)

\$137.14 (As of 04/12/21)

Price Target (6-12 Months): **\$144.00**

Long Term: 6-12 Months

Zacks Recommendation:
Neutral

(Since: 02/24/21)

Prior Recommendation: Underperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

3-Hold

Zacks Style Scores:

VGM:B

Value: C

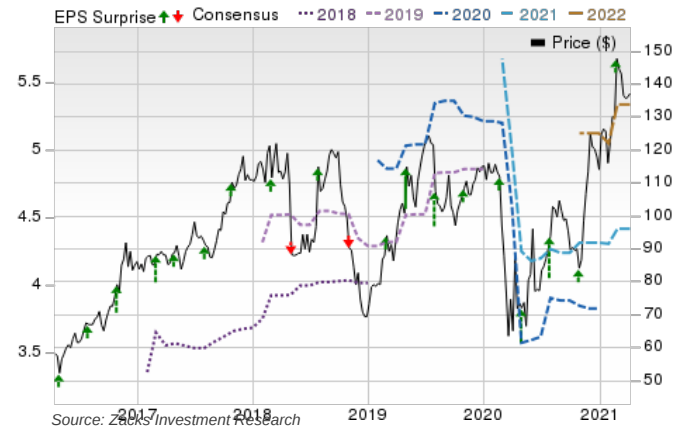
Growth: A

Momentum: C

Summary

John Bean has been witnessing sequential improvement in orders in both segments lately, which is promising. The company projects adjusted earnings per share between \$4.30 and \$4.55 for 2021. The mid-point of the range suggests growth of 12% from 2020. Earnings estimates for the current year have undergone positive revisions lately. The FoodTech segment is gaining from higher demand for packaged food purchases and "eat-at-home" trend amid the pandemic. However, weak foodservice demand remains a woe. In AeroTech, low passenger air travel is impacting mobile equipment demand. However, demand for infrastructure, cargo and military holds promise. Nevertheless, the company's cost-cutting actions will bolster margins. Acquisitions and developing innovative products will also aid growth.

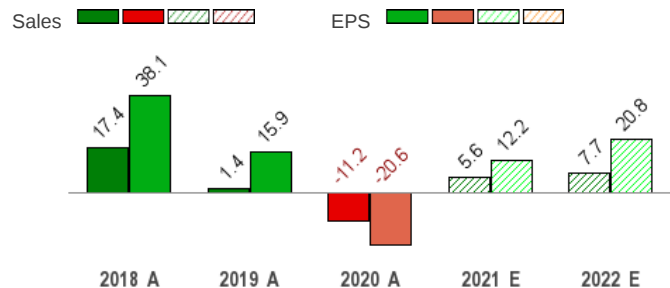
Price, Consensus & Surprise



Data Overview

52-Week High-Low	\$151.64 - \$56.17
20-Day Average Volume (Shares)	172,006
Market Cap	\$4.3 B
Year-To-Date Price Change	20.3%
Beta	1.59
Dividend / Dividend Yield	\$0.40 / 0.3%
Industry	Manufacturing - Thermal Products
Zacks Industry Rank	Top 26% (65 out of 254)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	14.6%
Last Sales Surprise	2.7%
EPS F1 Estimate 4-Week Change	0.0%
Expected Report Date	05/05/2021
Earnings ESP	0.0%
P/E TTM	34.7
P/E F1	31.0
PEG F1	5.6
P/S TTM	2.5

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2022	473 E	509 E	491 E	524 E	1,965 E
2021	421 E	454 E	461 E	497 E	1,824 E
2020	458 A	412 A	419 A	439 A	1,728 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2022	\$1.13 E	\$1.53 E	\$1.34 E	\$1.60 E	\$5.34 E
2021	\$0.77 E	\$1.15 E	\$1.14 E	\$1.37 E	\$4.42 E
2020	\$1.01 A	\$1.09 A	\$0.83 A	\$1.02 A	\$3.94 A

*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and sales estimates, is as of 04/12/2021. The report's text and the analyst-provided price target are as of 04/13/2021.

Overview

John Bean Technologies Corporation is a technology solutions provider to high-value segments of the food and beverage industry globally with a focus on proteins, liquid foods and automated system solutions. The company also supplies customized solutions and services in the air transportation industry.

The company's reportable segments are:

JBT FoodTech (71% of revenues in 2020): The segment designs, manufactures and services technologically sophisticated food processing systems for the preparation of meat, seafood and poultry products, ready-to-eat meals, shelf stable packaged foods, bakery products, juice and dairy products, and fruit and vegetable products.

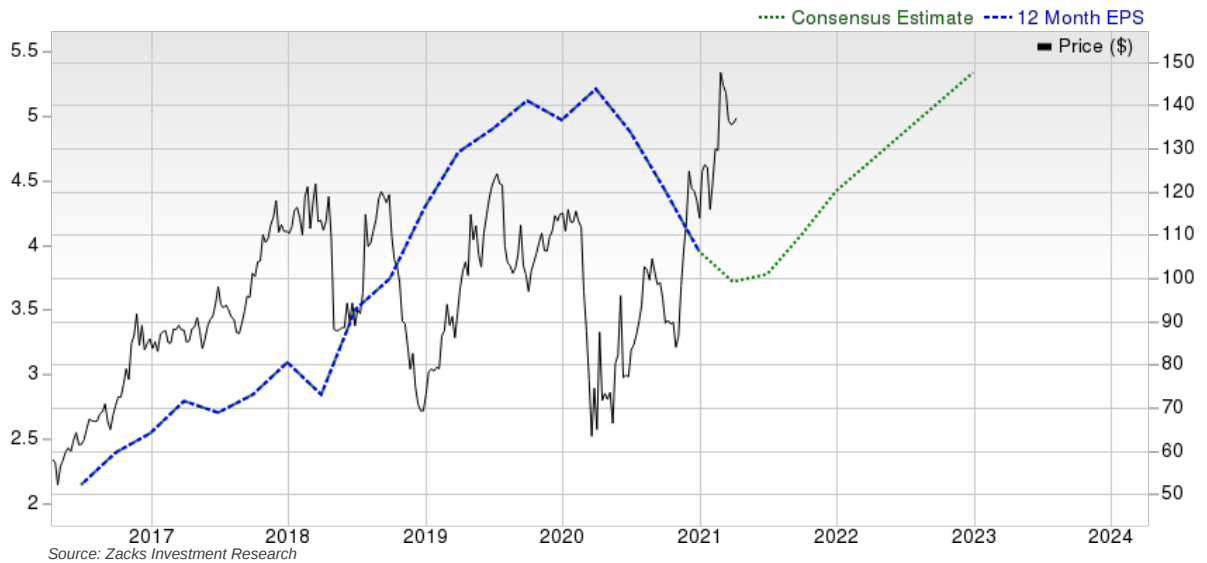
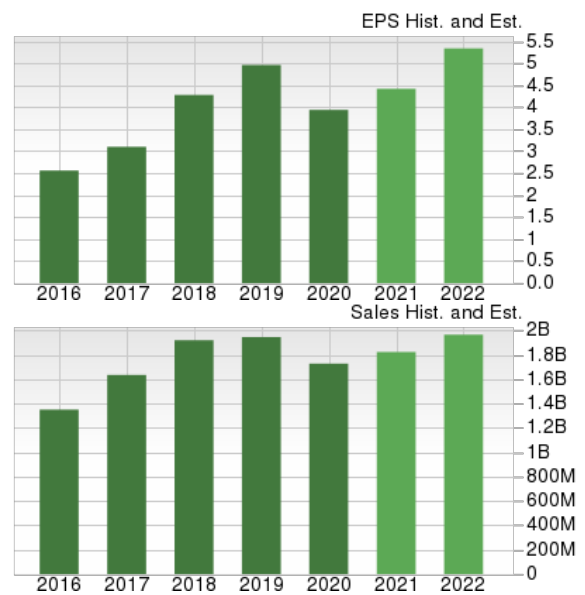
The segment's protein technology offerings include chilling, mixing/grinding, injecting, marinating, tumbling, portioning, packaging, coating, frying, freezing, weighing, X-ray food inspection, and packaging systems for poultry, beef, pork and seafood, ready-to-eat meals, fruits, vegetables, dairy, and bakery products.

The liquid foods portfolio comprises fruit and juice solutions that extract, concentrate and aseptically process citrus, tomato and other fruits, vegetables, and juices. It also includes in-container solutions for the filling, closing and preservation of fruits, vegetables, soups, sauces, dairy, pet food products and ready-to-eat meals.

The segment also provides robotic automated guided vehicle systems for material movement in manufacturing and warehouse facilities. The company also provides aftermarket products, parts, and services for all of its integrated food processing systems and equipment.

JBT AeroTech (39% of revenues in 2018): The segment designs, manufactures and services technologically sophisticated airport ground support and gate equipment. It also provides services for airport authorities; airlines, airfreight, and ground handling companies and defense contractors.

From 2018 to date, the company acquired six businesses — Proseal UK Limited, Columbus, OH-based Prime Equipment Group, Netherlands-based FTNOM, Germany-based Schröder, Oregon-based LEKTRO, Inc. and Denver, NC based MARS Food Processing Solutions.



Reasons To Buy:

- ▲ In fourth-quarter 2020, the company's orders increased 17% sequentially and 2% compared with the prior-year quarter to \$492 million. Total backlog of \$713 million as of the end of the fourth quarter was up 1% year over year. Notably, the company has been witnessing sequential improvement in order levels in both its segments over the past two quarters. Due to the pandemic, the food industry has experienced a surge in retail demand driven by packaged food purchases and positive recovery for certain customers across the food industry, specifically those in the quick service restaurant drive-through businesses and others servicing the sustained "eat-at-home" trend. This is expected to continue in 2021, which bodes well for the FoodTech segment. In AeroTech segment, passenger air travel remains low affecting mobile equipment demand. Nevertheless, demand for infrastructure, cargo and military remain promising.
- ▲ For 2021, John Bean anticipates an increase of 5-8% in revenues for the FoodTech segment. Operating margins are expected between 14% and 15%, and adjusted EBITDA margins in the band of 19.5% to 20%. Both the guidances are higher than the operating margin of 13.9% and EBITDA margin of 19.1% reported by the company in fiscal 2020. The AeroTech segment's revenue growth is expected to be flat to 5% in 2021. Operating margins for 2020 are anticipated between 10.75% and 11.25% compared with operating margin of 11.1% reported in 2020. Adjusted EBITDA margins for the segment is projected in the range of 12.0% to 12.5% compared with EBITDA margin of 12.2% in fiscal 2020. The company projects adjusted earnings per share between \$4.30 and \$4.55 for 2021. The mid-point of the range suggests growth of 12% from 2020.
- ▲ John Bean has been maintaining strong EBITDA margin performance despite significant decline in revenues amid the pandemic. This can be attributed to the company's recent process optimization efforts and JBT Operating System discipline, and rapid implementation of cost-cutting actions. In third-quarter 2020, John Bean implemented a restructuring plan for manufacturing capacity rationalization affecting both FoodTech and AeroTech segments. These restructuring actions are expected generate incremental cost savings of \$5 million during 2021. Also, John Bean's Elevate plan is likely to drive persistent growth and margin expansion. Per the plan, the company is focusing on accelerating development of innovative products and services to provide customers with solutions, which will enhance their yield and productivity.
- ▲ John Bean will now accelerate initiatives that were previously underway to bring automation solutions to the protein market. In addition, Liquid Foods' end products such as juice, canned foods and ready meals continue to witness high retail demand. The protein market has a total estimated market size of \$18 billion. The Liquid food market has a worth of \$8 billion. The company has ample scope to grow in both markets. The company is also capitalizing on its extensive installed base to expand recurring revenue (which accounts for around 40% of its revenues) from aftermarket parts and services, equipment leases, consumables and airport services. This portion of the business has been seeing a CAGR of 9% over the past three years. In fact, it has further room for growth and will contribute to margins. In AeroTech, the company plans to continue developing advanced military product offerings and customer support capabilities to service global military customers.
- ▲ John Bean Technologies has a strategic acquisition program focused on companies that add complementary products, which enable it to offer more comprehensive solutions to customers, and meet strict economic criteria for returns and synergies. The FoodTech segment has completed 15 acquisitions since 2014 for around \$1 billion that have augmented its offerings and technology. The AeroTech segment has completed two buyouts since 2017 for approximately \$60 million, adding to military and electric product offerings. In 2019, the company acquired Proseal UK Limited, a leading provider of tray sealing technology, and Prime Equipment Group, Inc., a manufacturer of turnkey primary and water re-use solutions to the poultry industry. Tray sealing is in sync with the needs of several its FoodTech customers, particularly in the rapidly expanding market for convenience foods. The acquisition of Prime advanced the company's goal of becoming the preferred provider of full-line solutions for poultry customers.
- ▲ In May 2020, the company acquired certain assets and liabilities of MARS Food Processing Solutions, LLC. Mars' proprietary solutions for monitoring and managing the efficiency of poultry processing plants complements John Bean Technologies' existing equipment and solutions and advances its participation in primary poultry processing. The company had total debt of \$525 million as of 2020-end, down from \$699 million on Dec 31, 2019. Available liquidity as of Dec 31, 2020 was \$450 million, consisting of cash and borrowing under its revolving credit facility. The company's total debt to total capital ratio was 0.45 as of Dec 31, 2020, down from 0.55 on Dec 31, 2019. The company is taking actions to maintain liquidity and reduce debt by reducing pension contributions, capital expenditures and operating expenses, and foregoing share repurchases. Further, the company's times interest earned ratio came in at 10.7 at end of the third quarter.
- ▲ John Bean Technologies is poised to perform well, courtesy of growing middle class, increasing protein and value-added food and beverage consumption globally. Rising global population and disposable incomes has led to a shift in dietary habits, primarily increased protein consumption. This is pronounced in emerging markets - Asia, the Middle East, Latin America, and Eastern Europe. This trend is likely to favor the company. Food consumption in Asia is expected to be the biggest contributor to growth. In developed markets, ready-to-eat and convenient food consumption will be a key catalyst.

AeroTech will continue to perform well due to heavy airport infrastructure spending. With air travel projected to double over the next 20 years, the company can capitalize on this demand. Also, labor constraints are leading to increased automation adoption among its customers. Food manufacturing, particularly, has 30% lower compensation rates and harsher work environment compared to traditional manufacturing. This in turn will boost the company's revenues.

John Bean will gain from improvement in order levels in both its segments and cost reduction actions. Development of innovative products and acquisitions to augment product offerings will aid growth.

Reasons To Sell:

- ▼ John Bean expects the seasonal factors to impact first-quarter 2021 and anticipates revenues between \$400 million and \$425 million. The mid-point of the range indicates a year-over-year decline of 10%. The FoodTech segment's revenues for the ongoing quarter are projected between \$300 million and \$315 million. The range indicates a decline of 1% at the mid-point from the prior-year quarter. Revenue guidance for the AeroTech segment is at \$100 million to \$110 million. The mid-point of the range hints at a 29% slump year over year.

The FoodTech segment's operating margins are expected in the band of 13% to 13.5% compared with 13.1% in first-quarter 2020. For AeroTech, operating margins are predicted to be 7.0-7.5%, down from 12.5% reported in the year-ago quarter. Earnings per share for first-quarter 2021 is expected between 70 cents and 80 cents. The mid-point of the guided range indicates plunge of 26% from earnings per share of \$1.01 in first-quarter 2020.

- ▼ At the FoodTech segment, general economic and trade uncertainties have impacted the decision-making process among customers. It continues to be impacted by persistent decline in demand for food service due to reduced restaurant, travel and school activity. The potential impact of the coronavirus outbreak on supply chain and general business disruptions is likely to act as a headwind in 2021 as well.
- ▼ For AeroTech, a large portion of the business is dependent on the passenger airline industry. Passenger air travel has been severely disrupted by the pandemic globally. This in turn impacted the company's mobile equipment and airport services business. This is expected to continue till the situation improves. Further, it is witnessing reduced aftermarket demand in the segment due to lower equipment utilization by customers. Even though there has been an improvement in certain areas of the world with the reopening of countries and regions, this pickup will be short lived and these improvements may not continue if a broader resurgence in COVID-19 cases causes restrictions to be reinstated.
- ▼ John Bean incurred restructuring expense of \$12.1 million in 2020, associated with its manufacturing capacity rationalizations. An additional \$4-\$6 million in exit costs are expected during 2021 to complete these activities. These costs will impact margins in the near term. The citrus industries in Florida, Brazil, and other countries have been facing increased pressure on their harvest productivity and citrus bearing acreage owing to citrus canker and greening diseases. Reduced amounts of available fruit for the processed or fresh food markets could adversely affect the FoodTech segment's results.

Impact of the coronavirus pandemic on demand for both the FoodTech and AeroTech segments is likely to continue weighing on John Bean Technologies' results until the situation stabilizes.

Last Earnings Report

John Bean Earnings and Revenues Surpass Estimates in Q4

John Bean reported adjusted earnings of \$1.02 per share in fourth-quarter 2020, surpassing the Zacks Consensus Estimate of 89 cents by a margin of 15%. However, the bottom line declined 32% from the prior-year quarter reflecting the impact of the COVID-19 pandemic as reductions in global passenger air travel and global foodservice production impacted demand for the company's products and services.

On a reported basis, the company's earnings per share was 94 cents compared with the prior-year quarter's \$1.31.

Revenues of \$439 million beat the Zacks Consensus Estimate of \$428 million. Further, the top line slumped 20% from the prior-year quarter figure of \$545 million.

In the reported quarter, the company's total orders went up 2% to \$492 million from the prior-year quarter. Orders in the JBT FoodTech segment dipped 2% year over year to \$364 million. In the JBT AeroTech segment, orders improved 14% to \$128 million from the prior-year quarter.

Backlog in the FoodTech segment increased 6% from the year-ago quarter to \$427 million as of fourth-quarter 2020 end. The AeroTech segment's backlog was \$287 million at the end of the reported quarter, down 6% from the prior-year quarter. Total backlog of \$713 million as of the end of the fourth quarter was up 1% year over year.

Cost and Margins

Cost of sales decreased 19% year over year to \$306 million in the fourth quarter. Gross profit slumped 21% year over year to \$133 million. Gross margin came in at 30.3% compared with the year-earlier quarter's 30.8%.

Selling, general and administrative expenses were down 14% year over year to \$89 million. Adjusted operating profit declined 32% year over year to \$47 million. Adjusted operating margin was 10.7%, down 200 basis points from 12.7% in the prior-year quarter. In the reported quarter, adjusted EBITDA was around \$660 million, reflecting a year-over-year plunge of 25%. Adjusted EBITDA margin was 15%, down from 16% in the year-ago quarter.

Segment Performance

JBT FoodTech: Net sales fell 10% year over year to \$321 million as increase in recurring revenues was offset by decline in equipment demand. Adjusted operating profit amounted to \$43.6 million, reflecting a decline of 18% from the prior-year quarter.

JBT AeroTech: Net sales were \$118 million, reflecting a decline of 37% from the prior-year quarter. The segment's adjusted operating profit plunged 56% year over year to \$12.7 million.

Financial Performance

John Bean reported cash and cash equivalents of around \$47.5 million at the end of 2020, up from \$39.5 million at the end of fiscal 2019. The company generated around \$252 million of cash from operating activities during 2020 compared with \$111 million in the prior year. At the end of 2020, long-term debt was \$522 million, down from \$698 million as of end of 2019.

2020 Results

John Bean's adjusted earnings per share in 2020 was \$3.94, down 21% from the prior-year's figure of \$4.96. However, the bottom line beat the Zacks Consensus Estimate of \$3.83. Including one-time items, the company delivered an earnings per share of \$3.39 in 2020 compared with \$4.03 in 2019. Sales declined 11% year over year to \$1,729 million from the prior-year figure of \$1,946 million. The top line surpassed the Zacks Consensus Estimate of \$1,720 million.

Guidance

John Bean expects the seasonally slower first-quarter 2021 revenues to be \$400-\$425 million. While the FoodTech segments revenues for the ongoing quarter are projected between \$300 million and \$315 million, the same for the AeroTech segment are anticipated in the range of \$100 million to \$110 million.

The FoodTech segment's operating margins are expected in the band of 13% to 13.5% and adjusted EBITDA margins to be 18.25-18.75%. For AeroTech, operating margins are forecasted to be 7.0-7.5%, while adjusted EBITDA margins are expected between 8.0% and 8.5%. Earnings per share for first-quarter 2021 is expected to range between 70 cents to 80 cents.

For 2021, John Bean anticipates an increase of 5-8% in revenues for the FoodTech segment. Operating margins are expected between 14% and 15%, and adjusted EBITDA margins in the band of 19.5% to 20%.

The AeroTech segment's revenue growth is expected to be flat to 5% in 2021. Operating margins are anticipated between 10.75% and 11.25%, and adjusted EBITDA margins in the range of 12.0% to 12.5%.

The company projects adjusted earnings per share to be \$4.30-\$4.55 for 2021. The mid-point of the guidance range suggests growth of 12% from earnings of \$3.94 per share in 2020.

Quarter Ending	12/2020
Report Date	Feb 22, 2021
Sales Surprise	2.70%
EPS Surprise	14.61%
Quarterly EPS	1.02
Annual EPS (TTM)	3.95

Recent News

John Bean Buys AutoCoding, Boosts In-Line Coding Abilities

On **Mar 1**, John Bean Tannounced that it has acquired AutoCoding Systems Ltd. for \$17 million in a bid to expand its competencies in packaging line equipment and related devices, including coding and label inspection and verification. Based in Runcorn, the U.K., AutoCoding is a leading provider of software solutions for automatic set-up and control of end-of-line packaging devices. The company additionally operates in the United States and Australia, generating annual revenues of approximately \$7 million.

AutoCoding's central command software solution integrates and automates the usage of in-line packaging devices, such as coders, scanners, labelers, and checkweighers, while reducing manual inspection for line configuration. AutoCoding is scalable across John Bean's FoodTech's diverse end markets and is a strategic fit for its Proseal business.

Moreover, AutoCoding assists customers to reduce food waste, while ensuring accurate food packaging information and food safety. Notably, the latest buyout will fortify John Bean's abilities in the growing global market for in-line coding and inspection solutions that include hardware and software for pharmaceutical, food & beverage, and nutraceutical customers

Valuation

John Bean Technologies' shares are up 52.4% in the trailing six-month period and 72% over the trailing 12-month period. Stocks in the Zacks Manufacturing – Thermal Products industry and the Industrial Products sector are up 58.9% and 49.5% in the trailing six-month period, respectively. Over the past year, the Zacks sub-industry and the sector are up 120.3% and 106.4%, respectively.

The S&P 500 index is up 19.6% in the trailing six-month period and 48.1% in the past year.

The stock is currently trading at 29.32X forward 12-month earnings, which compares with 28.25X for the Zacks sub-industry, 22.95X for the Zacks sector and 23.11X for the S&P 500 index.

Over the past five years, the stock has traded as high as 36.18X and as low as 11.56X, with a 5-year median of 24.84X.

Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$144 price target reflects 30.79X forward 12-month earnings.

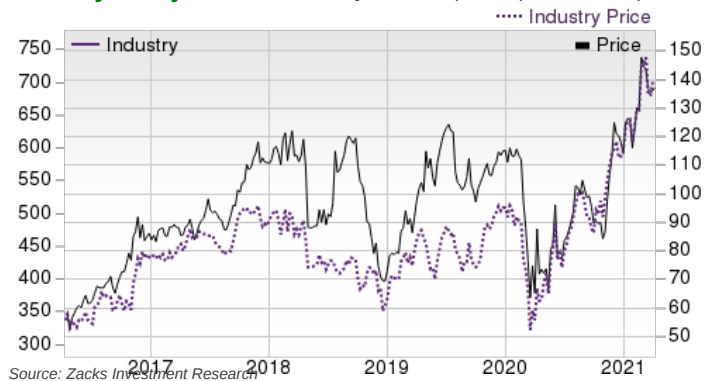
The table below shows summary valuation data for JBT:

Valuation Multiples - JBT					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	29.32	28.25	22.95	23.11
	5-Year High	36.18	28.25	23.02	23.83
	5-Year Low	11.56	12.77	12.69	15.3
	5-Year Median	24.84	16.96	18.15	18
P/S F12M	Current	2.34	5.48	4.67	4.77
	5-Year High	2.59	5.48	4.67	4.77
	5-Year Low	0.95	1.31	1.89	3.21
	5-Year Median	1.67	2.79	2.48	3.71
EV/EBITDA TTM	Current	19.12	33.04	33.69	18.5
	5-Year High	23.62	33.04	33.98	18.51
	5-Year Low	8.66	10.68	12.85	9.62
	5-Year Median	16.4	14.43	18.68	13.36

As of 04/12/2021

Source: Zacks Investment Research

Industry Analysis Zacks Industry Rank: Top 26% (65 out of 254)



Top Peers

Company (Ticker)	Rec	Rank
Bunge Limited (BG)	Outperform	1
The Middleby Corporation (MIDD)	Outperform	2
Dover Corporation (DOV)	Neutral	3
Honeywell International Inc. (HON)	Neutral	3
Illinois Tool Works Inc. (ITW)	Neutral	4
Pentair plc (PNR)	Neutral	3
ThyssenKrupp AG Sponsored ADR (TKAMY)	Neutral	3
Textron Inc. (TXT)	Neutral	3

The positions listed should not be deemed a recommendation to buy, hold or sell.

Industry Comparison Industry: Manufacturing - Thermal Products				Industry Peers		
	JBT	X Industry	S&P 500	DOV	HON	MIDD
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Outperform
Zacks Rank (Short Term)	3	-	-	3	3	2
VGM Score	B	-	-	B	B	B
Market Cap	4.35 B	4.35 B	29.81 B	20.13 B	157.86 B	9.05 B
# of Analysts	5	5	12	8	10	7
Dividend Yield	0.29%	0.00%	1.33%	1.41%	1.64%	0.00%
Value Score	C	-	-	B	C	C
Cash/Price	0.01	0.01	0.06	0.03	0.10	0.03
EV/EBITDA	20.88	21.06	16.97	18.50	21.72	23.21
PEG F1	5.51	2.32	2.38	1.89	2.78	NA
P/B	6.82	4.89	4.01	5.96	8.87	4.57
P/CF	21.95	21.95	17.10	18.35	26.26	23.86
P/E F1	30.41	27.23	22.05	21.71	28.71	23.73
P/S TTM	2.52	2.99	3.42	3.01	4.84	3.60
Earnings Yield	3.23%	3.75%	4.47%	4.61%	3.48%	4.21%
Debt/Equity	0.82	0.40	0.66	0.92	0.92	0.86
Cash Flow (\$/share)	6.25	2.98	6.78	7.66	8.71	6.91
Growth Score	A	-	-	B	C	C
Historical EPS Growth (3-5 Years)	21.66%	15.02%	9.34%	17.63%	4.80%	6.55%
Projected EPS Growth (F1/F0)	12.13%	21.22%	15.26%	13.69%	11.34%	38.13%
Current Cash Flow Growth	-11.79%	-5.62%	0.61%	-3.59%	-14.09%	-22.29%
Historical Cash Flow Growth (3-5 Years)	18.28%	12.24%	7.37%	4.03%	1.22%	7.12%
Current Ratio	1.35	1.31	1.39	1.51	1.47	1.81
Debt/Capital	45.06%	28.81%	41.26%	47.87%	47.89%	46.33%
Net Margin	6.30%	8.82%	10.59%	10.23%	14.64%	8.25%
Return on Equity	20.94%	20.95%	14.86%	25.96%	27.93%	13.99%
Sales/Assets	0.94	0.81	0.51	0.74	0.52	0.48
Projected Sales Growth (F1/F0)	5.54%	5.54%	7.37%	8.40%	4.94%	16.50%
Momentum Score	C	-	-	F	A	A
Daily Price Change	0.09%	0.00%	0.24%	0.38%	0.71%	1.40%
1-Week Price Change	0.82%	0.00%	1.54%	1.47%	4.70%	-1.76%
4-Week Price Change	-4.41%	3.72%	2.84%	3.48%	5.74%	-3.20%
12-Week Price Change	8.63%	10.00%	10.11%	12.05%	10.99%	23.07%
52-Week Price Change	77.07%	80.00%	55.81%	62.66%	65.72%	214.92%
20-Day Average Volume (Shares)	172,006	172,006	1,992,726	650,993	2,829,604	474,569
EPS F1 Estimate 1-Week Change	0.00%	0.00%	0.00%	0.00%	0.44%	0.04%
EPS F1 Estimate 4-Week Change	0.00%	0.00%	0.00%	-0.23%	0.59%	2.52%
EPS F1 Estimate 12-Week Change	2.39%	2.12%	2.05%	3.94%	0.53%	17.59%
EPS Q1 Estimate Monthly Change	0.00%	0.00%	0.00%	0.00%	2.19%	4.94%

Source: Zacks Investment Research

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we maintain a balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	C
Growth Score	A
Momentum Score	C
VGM Score	B

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

Disclosures

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Glossary of Terms and Definitions

52-Week High-Low: The range of the highest and lowest prices at which a stock has traded during the past year. This range is determined based on the stock's daily closing price which may differ from the intra-day high or low. Many investors use it as a technical indicator to determine a stock's current value and future price movement. The idea here is that if price breaks out from the 52-week range, in either direction, the momentum may continue in the same direction.

20-Day Average Volume (Shares): The average number of shares of a company traded in a day over the last 20 days. It is a direct indication of a security's overall liquidity. The higher the average daily trading volume, the easier it is to enter or exit the stock at a desired price with more buyers and sellers being available.

Daily Price Change: This is the percentage difference between a trading day's closing price and the prior trading day's closing price. This item is updated at 9 p.m. EST each day.

1-Week Price Change: This is the percentage change in a stock's closing price over the last 5 trading days. This change reflects the collective buying and selling sentiment over the 1-week period.

A strong weekly price increase for the stock, especially when accompanied by increased volume, is an indication of it gaining momentum.

4-Week Price Change: This is the percentage change in a stock's closing price over the last 20 trading days or past 4 weeks. This is a medium-term price change metric and an indication of the stock gaining momentum.

12-Week Price Change: This is the percentage change of a stock's closing price over the last 60 trading days or past 12 weeks. Similar to 4-week price change, this is a medium-term price change metric. It shows whether a stock has been enjoying strong investor demand, or if it has been in consolidation, or distress over this period.

52-Week Price Change: This is the percentage change in a stock's closing price over the last 260 trading days or past 52 weeks. This long-term price change metric is a good reference point for investors. Some investors seek stocks with the best percentage price change over the last 52 weeks, expecting the momentum to continue.

Market Cap: The number of outstanding common shares of a company times its latest price per share. This figure represents a company's size, which indicates various characteristics, including price stability and risk, in which investors could be interested.

Year-To-Date Price Change: Change in a stock's daily closing price in the period of time beginning the first day of the current calendar year through to the previous trading day.

of Analysts: Number of EPS estimates used in calculating the current-quarter consensus. These estimates come from the brokerage analysts tracking this stock. However, the number of such analysts tracking this stock may not match the number of estimates, as all brokerage analysts may not come up with an estimate or provide it to us.

Beta: A measure of risk commonly used to compare the volatility of a stock to the overall market. The S&P 500 Index is the base for calculating beta and carries a value of 1. A stock with beta below 1 is less risky than the market as a whole. And a stock with beta above 1 is riskier.

Dividend: The portion of earnings a company is expected to distribute to its common shareholders in the next 12 months for each share they own. Dividends are usually paid quarterly. Dividend payments reflect positively on a company and help maintain investors' trust. Investors typically find dividend-paying stocks appealing because the dividend adds to any market price appreciation to result in higher return on investment (ROI). Moreover, a steady or increasing dividend payment provides investors a cushion in a down market.

Dividend Yield: The ratio of a company's annual dividend to its share price. The annual dividend used in the ratio is calculated based on the most recent dividend paid by the company. Dividend yield is an estimate of the dividend-only return from a stock in the next 12 months. Since dividend itself doesn't change frequently, dividend yield usually changes with a stock's price movement. As a result, often an unusually high dividend yield is a result of weak stock price.

S&P 500 Index: The Standard & Poor's 500 (S&P 500) Index is an unmanaged group of securities considered to be representative of the stock market in general. It is a market-capitalization-weighted index of stocks of the 500 largest U.S. companies. Each stock's weight in the index is proportionate to its market value.

Industry: One of the 250+ groups that Zacks classifies all stocks into based on the nature of business. These groups are termed as expanded (aka "X") industries and map to their respective (economic) sectors; Zacks has 16 sectors.

Zacks Industry Rank: The Zacks Industry Rank is determined by calculating the average Zacks Rank for all stocks in the industry and then assigning an ordinal rank to it. For example, an industry with an average Zacks Rank of 1.6 is better than an industry with an average Zacks Rank of 2.3. So, the industry with the better average Zacks Rank would get a better Zacks Industry Rank. If an industry has the best average Zacks Rank, it would be considered the top industry (1 out of 250+), which would place it at the top 1% of Zacks-ranked industries. Studies have shown that roughly half of a stock's price movement can be attributed to the industry group it belongs to. In fact, the top 50% of Zacks-ranked industries outperforms the bottom 50% by a factor of more than 2 to 1.

Last EPS Surprise: The percentage deviation of a company's last reported earnings per share from the Zacks Consensus Estimate. Companies with a positive earnings surprise are more likely to surprise again in the future (or miss again if they recently missed).

Last Sales Surprise: The percentage deviation of a company's last reported sales from the Zacks Consensus Estimate.

Expected Report Date: This is an estimated date of a company's next earnings release. The information originated or gathered by Zacks Investment Research from its information providers or publicly available sources is the basis of this estimate.

Earnings ESP: The Zacks Earnings ESP compares the Most Accurate Estimate to the Zacks Consensus Estimate for the yet-to-be reported quarter. The Most Accurate Estimate is the most recent version of the Zacks Consensus EPS Estimate. The idea here is that analysts revising their estimates closer to an earnings release have the latest information, which could potentially be more accurate than what they and others contributing to the consensus had predicted earlier. Thus, a positive or negative Earnings ESP reading theoretically indicates the likely deviation of the actual earnings from the consensus estimate. However, the model's predictive power is significant for positive ESP readings only. A positive Earnings ESP is a strong predictor of an earnings beat, particularly when combined with a Zacks Rank #1 (Strong Buy), #2 (Buy) or #3 (Hold). Our research shows that stocks with this combination produce a positive surprise nearly 70% of the time.

Periods:

TTM: Trailing 12 months. Using TTM figures is an effective way of analyzing the most-recent financial data in an annualized format that helps neutralize the effects of seasonality and other quarter-to-quarter variation.

F1: Current fiscal year. This period is used to analyze the estimates for the ongoing full fiscal year.

F2: Next fiscal year. This period is used to analyze the estimates for the next full fiscal year.

F12M: Forward 12 months. Using F12M figures is an effective way of analyzing the near-term (the following four unreported quarters) estimates in an annualized manner. Instead of typically representing estimates for the full fiscal year, which may not represent the nitty-gritty of each quarter, F12M figures suggest an all-inclusive annualized estimate for the following four quarters. The annualization helps neutralize the potential effects of seasonality and other quarter-to-quarter variations.

P/E Ratio: The price-to-earnings ratio measures a company's current market price per share relative to its earnings per share (EPS). Usually, the trailing-12-month (TTM) EPS, current-fiscal-year (F1) EPS estimate, or forward-12-month (F12M) EPS estimate is used as the denominator. In essence, this ratio shows what the market is willing to pay today for each dollar of EPS. In other words, this ratio gives a sense of what the relative value of the company is at the already reported level of earnings or at a future level of earnings.

It is one of the most widely-used multiples for determining the value of a company and helps comparing its valuation with that of a competitor, the industry group or a benchmark.

PEG Ratio: The price/earnings to growth ratio is a stock's P/E ratio using current fiscal year (F1) EPS estimate divided by its expected EPS growth rate over the coming 3 to 5 years. This ratio essentially determines a stock's value by factoring in the company's expected earnings growth and is thus believed to provide a more complete picture than just the P/E ratio, particularly for faster-growing companies.

P/S Ratio: The price-to-sales ratio is calculated as a company's current price per share divided by trailing 12 months (TTM) sales or revenues per share. This ratio shows what the market is willing to pay today for each dollar of TTM sales per share. The P/S ratio is at times the only valuation metric when the company has yet to become profitable.

Cash/Price Ratio: The cash-to-price ratio or Cash Yield is calculated as cash and marketable securities per share divided by the company's current share price. Like the earnings yield, which shows the anticipated yield (or return) on a stock from earnings for each dollar invested, the cash yield does the same, with cash being the source of return instead of earnings. For example, a cash/price ratio of 0.08 suggests a return of 8% or 8 cents for every \$1 investment.

EV/EBITDA Ratio: The EV/EBITDA ratio, also known as Enterprise Multiple, is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). Usually, trailing-12-month (TTM) or forward-12-month (F12M) EBITDA is used as the denominator.

EV/Sales Ratio: The enterprise value-to-sales ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by annual sales. It is an expansion of the P/S valuation, which uses market value instead of enterprise value. The EV/Sales ratio is perceived as more accurate than P/S, in part, because the market capitalization does not take a company's debt into account when valuing it.

EV/CF Ratio: The enterprise value-to-cash flow ratio is calculated as a company's enterprise value (market capitalization + value of total long-term debt + book value of preferred shares - cash and marketable securities) divided by the trailing-12-month (TTM) operating cash flow. It's a measure of how long it would take to buy the entire business if you were able to use all the company's operating cash flow.

The EV/CF ratio is perceived as more accurate than the P/CF ratio, in part, because the market price does not take a company's debt into account when valuing it.

EV/FCF Ratio: The enterprise value-to-free cash flow metric compares a company's enterprise value to its trailing-12-month (TTM) free cash flow (FCF). This metric is very similar to the EV/CF ratio, but is considered a more exact measure owing to the fact that it uses free cash flow, which subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding growth activities and payments to shareholders.

P/EBITDA Ratio: The P/EBITDA ratio is calculated as a company's per share market value divided by EBITDA (earnings before interest, taxes, depreciation, and amortization). This metric is very similar to the EV/EBITDA ratio, but is considered a little less exact measure as it uses market price, which does not take a company's debt into account. However, since EBITDA is often considered a proxy for cash income, the metric is used as a measure of what the market is willing to pay today for each dollar of the company's cash profitability in the trailing 12 months (TTM) or forward 12 months (F12M).

P/B Ratio: The price-to-book ratio is calculated as a company's current price per share divided by its book value (total assets – liabilities – preferred stocks) per share. In short, the book value is how much a company is worth. In other words, it reflects the total value of a company's assets that its common shareholders would receive if it were to be liquidated. So, the P/B ratio indicates whether you're paying higher or lower than what would remain if the company went bankrupt immediately. Investors typically use this metric to determine how a company's stock price stacks up to its intrinsic value.

P/TB Ratio: The price-to-tangible-book value ratio is calculated as the per share market value of a company divided by the value of its tangible assets (total assets – liabilities – preferred stocks – intangible assets) per share. Tangible book value is the same thing as book value except it excludes the value of intangible assets to get a step closer to the baseline value of the company.

P/CF Ratio: The price-to-cash flow ratio measures a company's per share market price relative to its trailing-12-month (TTM) operating cash flow per share. This metric is used to determine whether a company is undervalued or overvalued relative to another stock, industry or sector. And like the P/E ratio, a lower number is typically considered better from the value perspective.

One of the reasons why P/CF ratio is often preferred over P/E ratio is the fact that operating cash flow adds back non-cash expenses such as depreciation and amortization to net income. This feature helps valuing stocks that have positive cash flow but are not profitable because of large noncash charges.

P/FCF Ratio: The price-to-free cash flow ratio is an extension of P/CF ratio, which uses trailing-12-month (TTM) free cash flow per share instead of operating cash flow per share. This metric is considered a more exact measure than P/CF ratio, as free cash flow subtracts capital expenditures (CAPEX) from a company's total operating cash flow, thereby reflecting the actual cash flow available for funding activities that generate additional revenues.

Earnings Yield: The earnings yield is calculated as current fiscal year (F1) EPS estimate divided by the company's current share price. The ratio, which is the inverse of the P/E ratio, measures the anticipated yield (or return) from earnings for each dollar invested in a stock today.

For example, earnings yield for a stock, which is trading at \$35 and expected to earn \$3 per share in the current fiscal year (F1), would be 0.0857 ($3/35 = 0.0857$) or 8.57%. In other words, for \$1 invested in the stock today, the yield from earnings is anticipated to be 8.57 cents.

Investors most commonly compare the earnings yield of a stock to that of a broad market index (such as the S&P 500) and prevailing interest rates, such as the current 10-year Treasury yield. Since bonds and stocks compete for investors' dollars, stock investors typically demand a higher yield for the extra risk they assume compared to investors of U.S. Treasury-backed securities that offer virtually risk-free returns. This additional return is referred to as the risk premium.

Debt/Equity Ratio: The debt-to-equity ratio is calculated as a company's total liabilities divided by its shareholder equity. This metric is used to gauge a company's financial leverage. In other words, it is a measure of the degree to which a company is financing its operations through debt versus its own funds. The higher the ratio, the higher the risk for shareholders.

However, this ratio is difficult to compare across industry groups where ideal amounts of debt vary. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-equity ratio should be compared with other companies in the same industry.

Cash Flow (\$/share): Cash flow per share is calculated as operating cash flow (after-tax earnings + depreciation + other non-cash charges) divided by common shares outstanding. It is used by many investors as a measure of a company's financial strength. Since cash flow per share takes into consideration a company's ability to generate cash by adding back non-cash expenses, it is regarded by some as a more accurate measure of a company's financial situation than earnings per share, which could be artificially deflated.

Current Ratio: The current ratio or liquidity ratio is a company's current assets divided by its current liabilities. It measures a company's ability to pay short-term obligations. A current ratio that is in line with the industry average or slightly higher is generally considered acceptable. A current ratio that is lower than the industry average would indicate a higher risk of distress or default. A higher number is usually better. However, a very high current ratio compared to the industry average could be an indication of inefficient use of assets by management.

Debt/Capital Ratio: Debt-to-capital ratio is a company's total debt (interest-bearing debt + both short- and long-term liabilities) divided its total capital (interest-bearing debt + shareholders' equity). It is a measure of a company's financial leverage. All else being equal, the higher the debt-to-capital ratio, the riskier the stock.

However, this ratio can vary widely from industry to industry, the ideal amount of required debt being different. Some businesses are more capital intensive than others and typically require higher debt to finance their operations. So, a company's debt-to-capital ratio should be compared with the same for its industry.

Net Margin: Net margin is calculated as net income divided by sales. It shows how much of each dollar in sales generated by a company translates into profit. For example, if a company's net margin is 15%, its net income is 15 cents for every \$1 of sales it makes.

A change in margin can reflect either a change in business conditions, or a company's cost controls, or both. If a company's expenses are growing faster than sales, its net margin will decline. However, different net margin rates are considered good for different industries, so it's better to compare net margin rates of companies in the same industry group.

Return on Equity: Return on equity (ROE) is calculated as trailing-12-month net income divided by trailing-12-month average shareholder equity (including reinvested earnings). This metric is considered a measure of how effectively management is using a company's assets to generate profits. For example, if a company's ROE is 10%, it creates 10 cents profits for every \$1 shareholder equity, which is basically the company's assets minus debt. A company's ROE deemed good or bad depends on what's normal for its peers or industry group.

Sales/Assets Ratio: The sales-to-assets ratio or asset utilization ratio or asset turnover ratio is calculated as a company's annual sales divided by average assets (average of assets at the beginning of the year and at the year's end). This metric helps investors understand how effectively a company is using its assets to generate sales. For example, a sales-to-assets ratio of 2.5 indicates that the company generated \$2.50 in sales for every \$1 of assets on its books.

The higher the sales-to-assets ratio, the better the company is performing. However, similar to many other ratios, the asset turnover ratio tends to be higher for companies in certain industries/sectors than in others. So, a company's sales-to-assets ratio should be compared with the same for its industry/sector.

Historical EPS Growth (3-5 Years): This is the average annual (trailing-12-month) EPS growth rate over the last 3-5 years. This metric helps investors see how a company's EPS has grown from a long-term perspective.

Note: There are many factors that can influence short-term numbers — a recession will reduce this number, while a recovery will inflate it. The longterm perspective helps smooth out short-term events.

Projected EPS Growth (F1/F0): This is the estimated EPS growth rate for the current financial year. It is calculated as the consensus estimate for the current fiscal year (F1) divided by the reported EPS for the last completed fiscal year (F0).

Current Cash Flow Growth: It measures the latest year-over-year change in operating cash flow. Cash flow growth tells an investor how quickly a company is generating inflows of cash from operations. A positive change in the cash flow is desired and shows that more 'cash' is coming in than going out.

Historical Cash Flow Growth (3-5 Years): This is the annualized change in cash flow over the last 3-5 years. The change in a longer period helps put the current reading into proper perspective. By looking at the rate, rather than the actual dollar value, the comparison across the industry and peers becomes easier.

Projected Sales Growth (F1/F0): This metric looks at the estimated sales growth for the current year. It is calculated as sales estimate for the current fiscal year (F1) divided by the reported sales for the last completed fiscal year (F0).

Like EPS growth, a higher rate is better for sales growth. A look at a company's projected sales growth instantly tells you what the outlook is for their products and services. However, different sales growth rates are considered good for different industries, so it's better to compare sales growth rates of companies in the same industry group.

EPS F1 Estimate 1-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past week. The change in a company's consensus EPS estimate (or earnings estimate revision) has proven to be strongly correlated with the near-term price movement of its shares. It is an integral part of the Zacks Rank.

If a stock's consensus EPS estimate is \$1.10 now versus \$1.00 a week ago, that will be reflected as a 10% upward revision. If, on the other hand, it went from \$1.00 to 90 cents, that would be a 10% downward revision.

EPS F1 Estimate 4-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past four weeks.

A stock's earnings estimate revision in a 1-week period is important. But it's more meaningful to look at the longer-term revision. And, of course, the 4-week change helps put the 1-week change into proper perspective.

EPS F1 Estimate 12-Week Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal year over the past 12 weeks.

This metric essentially shows how the consensus EPS estimate has changed over a period longer than 1 week or 4 weeks.

EPS Q1 Estimate Monthly Change: The percentage change in the Zacks Consensus EPS estimate for the current fiscal quarter over the past four weeks.

While the revision in consensus EPS estimate for the current fiscal year is strongly correlated with the near-term price movement of its shares, the estimate revision for the current fiscal quarter is an important metric as well, especially over the short term, and particularly as a stock approaches its earnings date. If a stock's Q1 EPS estimate decreases ahead of its earnings release, it's usually a negative sign, whereas an increase is a positive sign.