CASCADIA

# Advanced Manufacturing

Industry Update | June 2024

**ATLANTA | AUSTIN | LOS ANGELES | MINNEAPOLIS | NASHVILLE | NEW YORK | SEATTLE**

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# Overview

## Introduction

Cascadia Capital is a team of transparent, client-focused, trusted advisors with deep knowledge in a broad range of industries. We're different from most investment banks because we're not conflicted by trading, lending, research or cross-selling business. We partner with our clients to deliver results based on our domain expertise, transaction experience, and commitment to long-term relationships. We have provided our services to leading private equity firms and extraordinary business owners for over 20 years. With bankers across multiple industry verticals, Cascadia Capital has the experience to offer industry breadth while maintaining sector depth. Our industry-focused bankers are extremely knowledgeable in their field and deliver tailored advice and solutions to suit the unique needs of our clients. Our sector specialists stay on top of market trends, risks and opportunities which makes us a valuable and trusted advisor to our clients.

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- Cascadia Capital Overview
- Key Trends
- Key Statistics
- What We're Reading
- Historical Trading Statistics
- Public Comparables
- Select M&A Activity
- Industry Events


### Introduction to Kevin Frisch

- **Experience**
  - 25+ years of M&A and Capital Raising Experience
  - Expertise in:
    - Advanced Manufacturing
    - Aerospace, Space and Defense
  - Panelist, Speaker and Arranger of related Conferences
- **Cascadia Capital – MD, Advanced Manufacturing & Aerospace, Space, and Defense**
- **Imperial Capital – MD, Head of Advanced Manufacturing**
  - With particular focus on the Aerospace, Space, & Defense market that included hosting an Industry Conference 3 years in a row and a multitude of M&A and capital raising deals executed
- **FBR Capital Markets – MD, Industrials Group**
  - Focused on Advanced Manufacturing M&A and Capital Raising
- **Lehman Brothers – Senior Vice President**
  - Focused on Industrials M&A
- **Oppenheimer & Co. – Analyst**
- **Chase Securities – Research Analyst**
- **Education**
  - M.B.A. in Finance – University of Chicago
  - B.A. in Economics, Public Policy – Duke University

**Kevin Frisch leads the Advanced Manufacturing & Aerospace, Space, & Defense practices at Cascadia Capital. Kevin has over 25 years of experience working with companies across Industry 4.0 and is a regular speaker at industry events. He was one of the first bankers covering this sector and is in close contact with strategic and financial investors in the space.**

## CONTACTS


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CASCADIA CONNECT

# 2025 ADVANCED MANUFACTURING & INDUSTRIAL TECH CONFERENCE

MARCH 12-13, 2025 • SANTA MONICA, CA

## SAVE THE DATE

**Cascadia Capital is pleased to announce the Annual Advanced Manufacturing & Industrial Tech Conference (AMIT) is returning for it's 5th year on March 12 - 13, 2025 at Hotel Casa del Mar, Santa Monica, CA.** The event will connect leading companies in the Advanced Manufacturing ecosystem with an audience of key investors and business leaders. Attendees of the AMIT conference are by invitation and will consist of approximately 200 senior industry executives, as well as leading Institutional and private equity firms driving the sector.

## CONFERENCE HIGHLIGHTS

- **Business Owner Insights:** 40+ public and private companies will share industry insights with an audience of 200+
- **Panel Discussions & Keynote Speaker:** Focused panels & presentations providing the latest information in the AMIT industry
- **One-On-One Meetings:** Upon request, Cascadia Capital will arrange private meetings between management teams and investors
- **Networking Opportunities:** AMIT is a perfect place to build a professional network

## BENEFITS OF ATTENDING

- **Learn** first-hand which companies immediately impact your business now and in the future
- **Hear** how leading providers are responding to the current political and financial environment
- **Access** the companies creating state-of-the-art products and services tailored to the markets most changing needs
- **Interact** with public and private institutional investors and hear what sophisticated capital providers are focused on today

## Preliminary Agenda

**WEDNESDAY, MARCH 12**

5:30 pm – 7:00 pm
Welcome Reception

**THURSDAY, MARCH 13**

7:30 am – 9:00 am
Breakfast & Opening Remarks

9:00 am – 12:30 pm
Panel Discussions & 30 Minute Networking Break

12:30 pm – 2:00 pm
Lunch with Keynote Speaker

2:00 pm – 3:00 pm
Company Presentations

3:00 pm – 5:00 pm
Closing Panels

5:00 pm – 6:30 pm
Closing Cocktail Reception

## SECTORS

The conference will feature companies across the $10.5 trillion Manufacturing Sector and include companies across the various sub-verticals as listed below.

### *FOCUS AREAS*

- Advanced Materials
- Additive & Specialty Manufacturing
- Contract Manufacturing & Assembly
- Electronic Manufacturing
- Engineered Components
- Engineering & Support Services
- Factory Automation
- Maintenance, Repair & Operations
- Manufacturing/Industrial Technology

### *END MARKET OVERLAP*

- Aerospace, Space, & Defense
- General Industrial, Industrial Technology

# Key Trends in Industry 4.0 & Advanced Manufacturing

# Cascadia Industry 4.0 & Advanced Manufacturing Ecosystem

## Technology Equipment

- Additive Manufacturing
- Robotics / Automation
- Laser Components
- Semi-Conductor Equipment
- Subtractive Manufacturing
- Tooling
- Material Handling
- Industrial Software

## Manufacturers & Service Centers

- Services
- Subtractive Manufacturing
- Additive Manufacturing
- Finishing / Testing Services
- Metal Fabricators
- Electronic Service Providers
- Part Suppliers
- General Industrial
- Energy
- Aerospace, Space & Defense
- Optics & Photonics
- Medical

## Advanced Materials

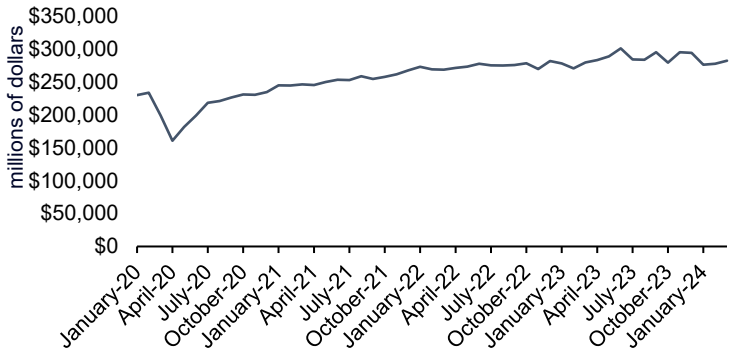
- Specialty Metals
- Composites
- Advanced Lenses
- Specialty Chemicals
- Specialty Resins
- Metallurgy Services

# Key Statistics Cascadia is Tracking

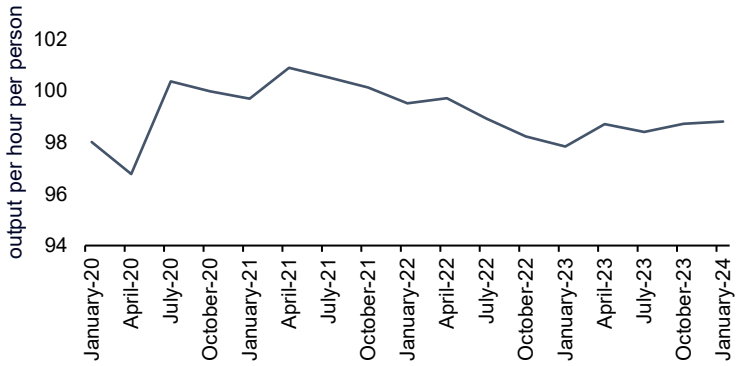
## Manufacturing Data

| | 2019 | 2020 | 2021 | 2022 | 2023 | May 2024* |
|---|---|---|---|---|---|---|
| Federal Reserve Industrial Production | 101.9 | 98.0 | 100.9 | 101.5 | 99.5 | 102.8 |
| Federal Reserve Industry Capacity | 75.7% | 70.3% | 75.6% | 79.0% | 79.6% | 78.4% |
| Manufacturing Sector Real Output | 100.3 | 98.8 | 100.5 | 101.2 | 99.8 | 99.6 |
| All Employees Manufacturing (Thousands) | 12,801 | 12,199 | 12,584 | 12,974 | 12,941 | 12,961 |
| Net Exports of Goods and Services ($Billions) | -578.78 | -627.5 | -861.71 | -975.03 | -798.01 | -845.93 |
| Nominal Broad U.S. Dollar Index | 115.74 | 117.78 | 113.1 | 120.7 | 120.5 | 121.6 |

### New Orders: Durable Goods




### Manufacturing: Labor Productivity

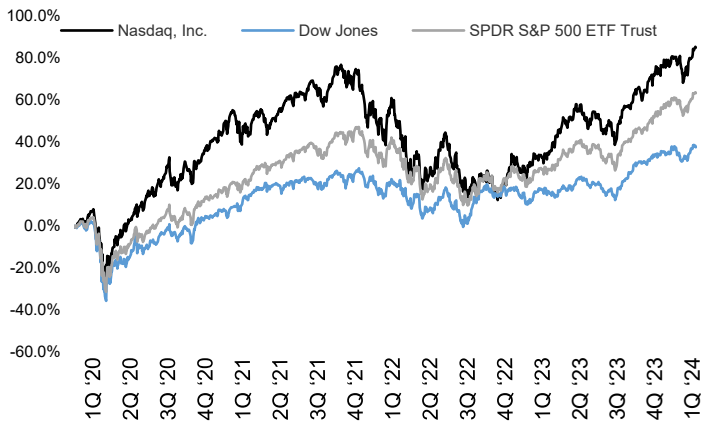



*Note: Data from Federal Reserve and S&P Capital IQ;*
**Statistics represent latest available data points for each relative metric.*

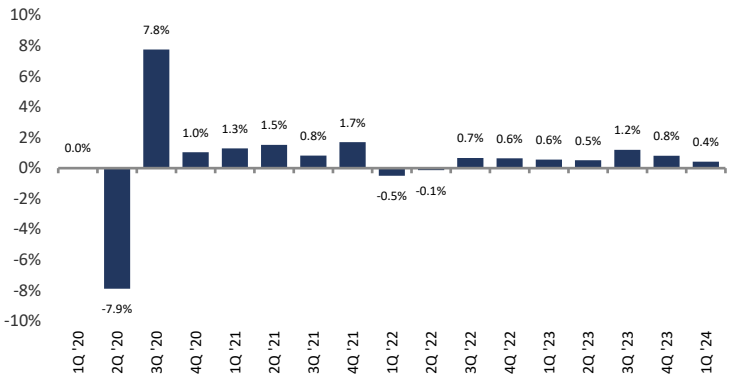
## Macroeconomic Data

| | 2019 | 2020 | 2021 | 2022 | 2023 | May 2024* |
|---|---|---|---|---|---|---|
| CPI | 255.7 | 258.8 | 270.9 | 292.6 | 304.1 | 313.2 |
| Federal Funds Rate – Upper Limit | 1.8% | 0.5% | 0.3% | 2.0% | 5.5% | 5.5% |
| 90-day average SOFR | 1.9% | 0.6% | 0.2% | 2.6% | 5.0% | 5.3% |
| US 10-Year Treasury | 1.9% | 0.8% | 1.5% | 3.0% | 4.0% | 4.4% |
| Unemployment | 3.5% | 8.1% | 5.4% | 3.7% | 3.7% | 3.9% |

### Major Indexes




### Real GDP: Percent Change from Previous Quarter




*Note: Data from Federal Reserve and S&P Capital IQ;*
**Statistics represent latest available data points for each respective metric.*

# What the Cascadia Team is Reading this Month

## NIST Funds 12 Small Semiconductor, Biotech Businesses

Manufacturing Dive – May 2024

The National Institute of Standards and Technology awarded more than $1.2 million to 12 small businesses in eight states for research and development projects in semiconductor manufacturing and other critical areas. The awards will fund R&D efforts related to NIST's own research areas. This includes cybersecurity, quantum computing and the creation of devices that can monitor personal exposure to PFAS.

Read the full article here

## Boeing to Invest C$240M in Canadian Aerospace Development

Reuters – May 2024

Boeing will invest a total of C$240 million ($176 million) in three Canadian aerospace development projects as part of an agreement to sell Poseidon military surveillance planes to Ottawa. The C$240 million, to be spent in the province of Quebec, will be divided between an aerospace innovation zone, a center focusing on a four-seat air taxi and a firm researching advanced landing gear, Boeing said in a statement.

Read the full article here

## PPG To Invest In Advanced Manufacturing In North America

Yahoo Finance – May 2024

PPG (PPG) said it will invest $300 million in advanced manufacturing in North America to support increased demand for paints and coatings in the automotive industry. The investments will commence in 2024 and span a four-year period. Also, PPG will build a new paint and coatings manufacturing plant in Loudon County, Tennessee. Construction of the facility will begin in August 2024 and is anticipated to be completed in 2026.

Read the full article here

## Navy Expands Additive Manufacturing Aboard Ships

National Defense Magazine – May 2024

The United States Navy has begun pressing to put more 3D printers on board ships, and on-shore close to operational theatres. The technology can help them increase shipbuilding capacity and reach production goals of two Virginia-class submarines and a Columbia-class submarine each year

Read the full article here

## Biden Hikes Tariffs on China-Made EVs, Batteries, Semiconductors

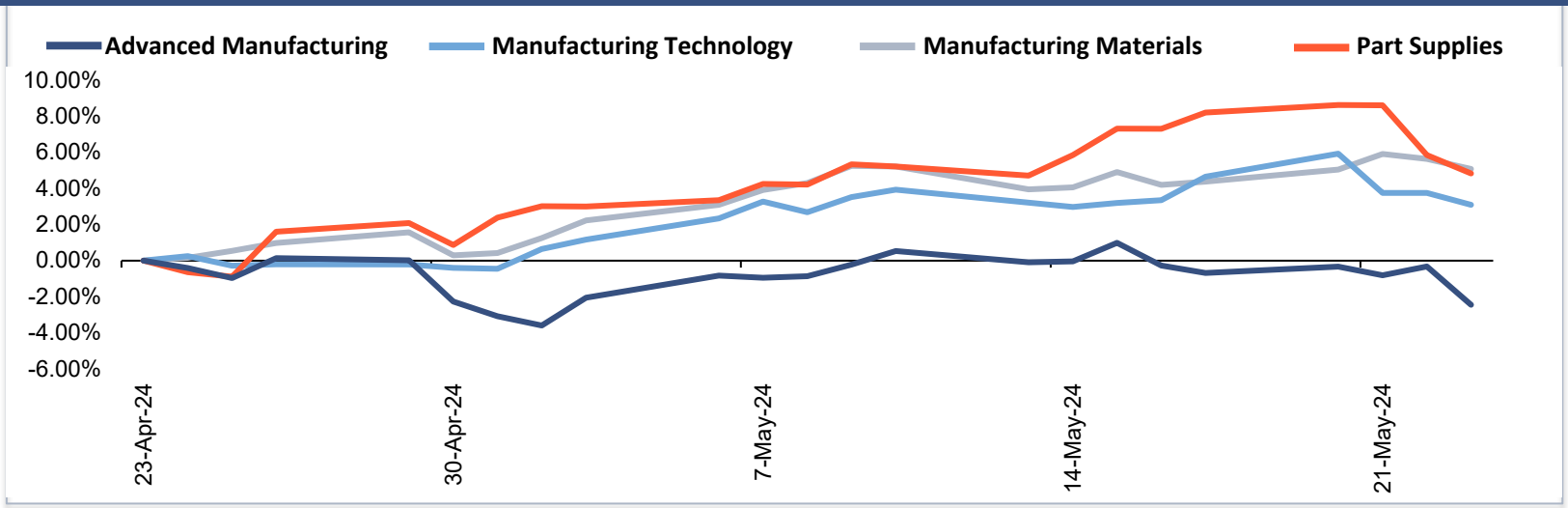
Manufacturing Dive – May 2024

The Biden administration announced a slate of tariff increases on key goods made in China, taking aim at electric vehicles, batteries, critical minerals, semiconductors, solar cells and more. United States Trade Representative Katherine Tai said the USTR would keep existing Section 301 tariffs on China and increase the import tax in strategic sectors. The White House touted the tariff modifications as a tool to better protect U.S. manufacturers against China's trade practices. The tariffs will cover $18 billion worth of imports in clean energy and technology sectors.

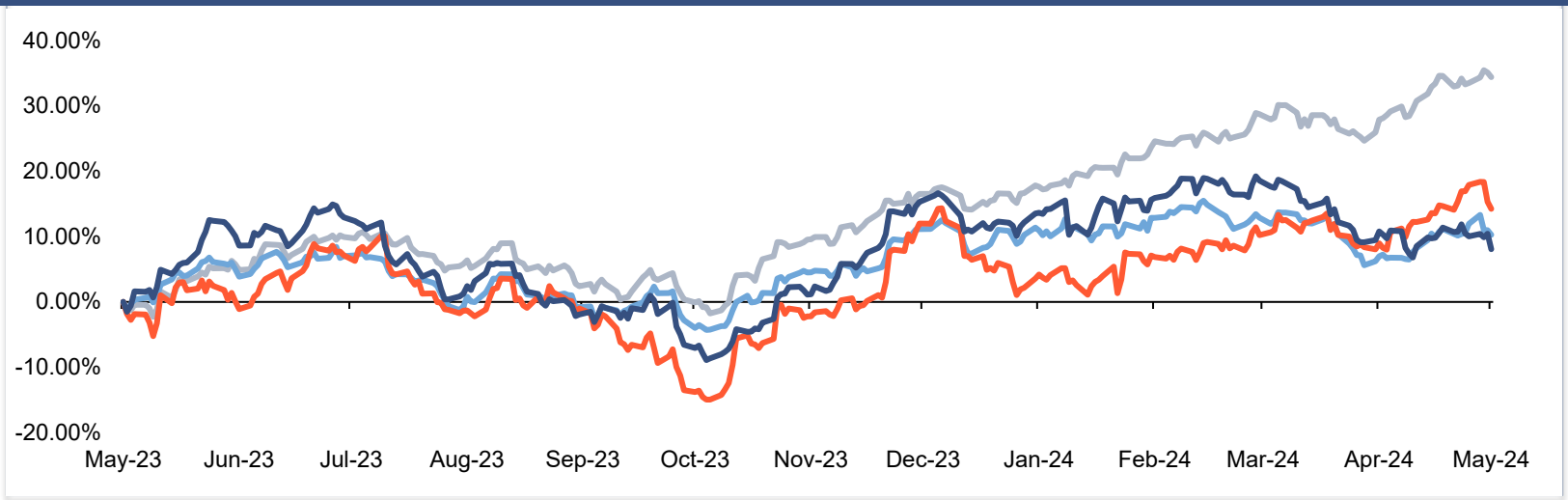
Read the full article here

# Advanced Manufacturing – Historical Trading Statistics

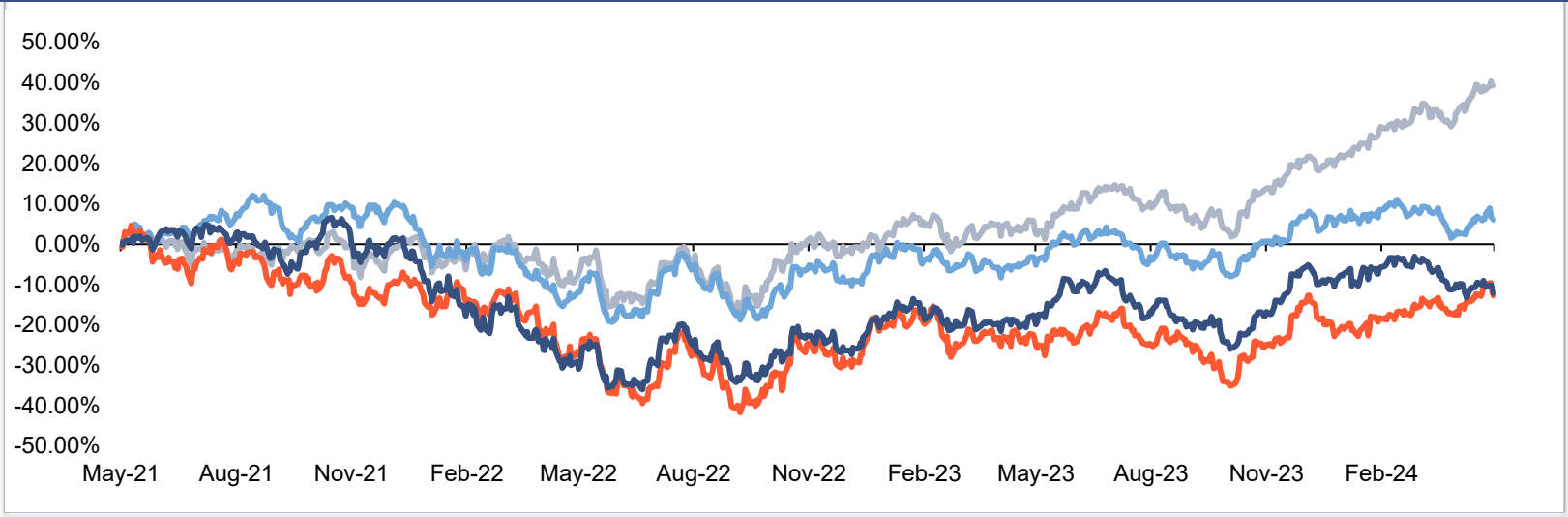
## Last 30 Days




## Last 12 Months



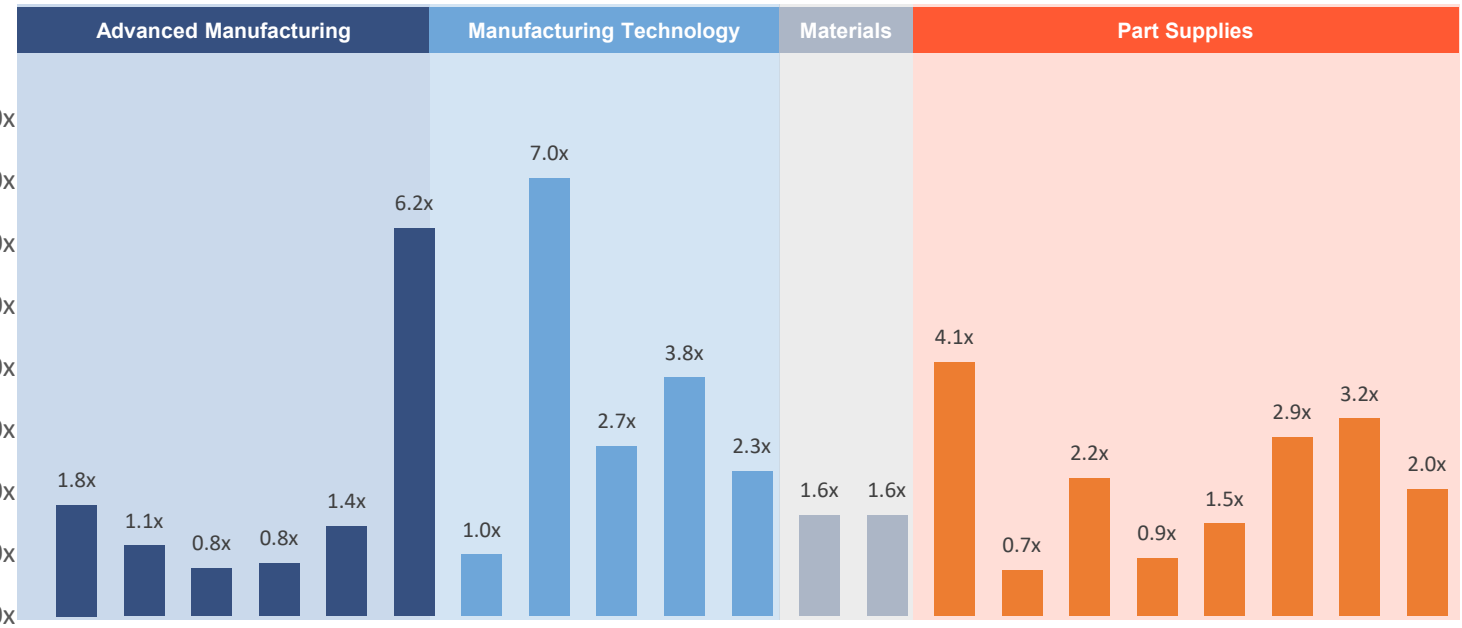

## Last 3 Years



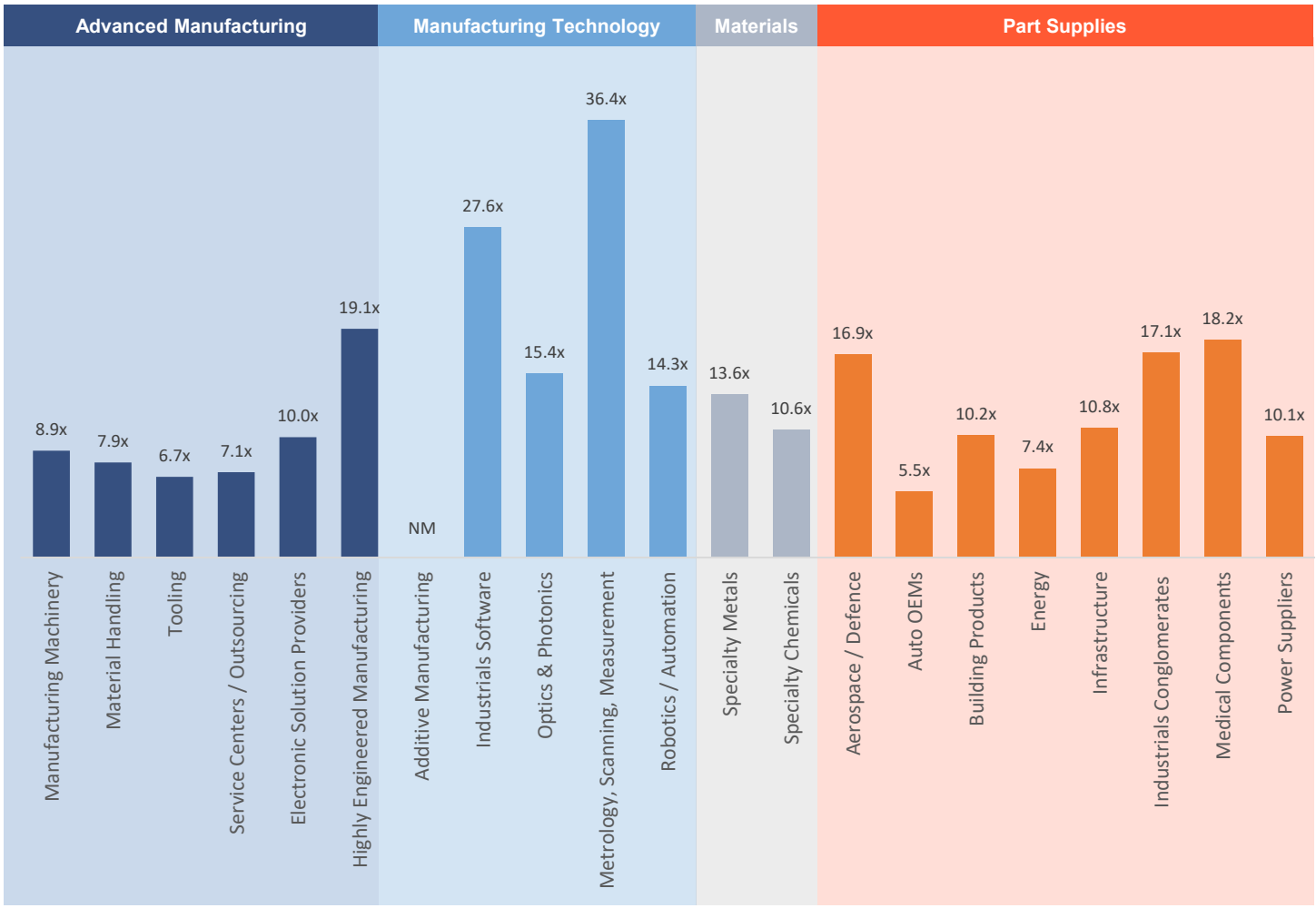

*Note: Data from S&P Capital IQ.*

# Summary of Advanced Manufacturing Valuations

## EV/LTM Revenue




## EV/LTM EBITDA




*Note: Data from S&P Capital IQ.*

# Advanced Manufacturing Public Comparables

($ in millions except stock price)

| Company | Market Cap | Enterprise Value (EV) | Stock Price 05/24/24 | % of 52 Week High | EV / Revenue LTM | EV / EBITDA LTM |
|---|---|---|---|---|---|---|
| **Manufacturing Machinery** | | | | | | |
| Fanuc Corporation | $4,341,470 | $24,317 | $4,591.00 | 86.1% | 4.8x | 17.5x |
| SMC Corporation | 5,256,277 | 30,347 | 81,900.00 | 87.9% | 6.1x | 20.7x |
| IHI Corporation | 586,356 | 6,655 | 3,874.00 | 92.7% | 0.8x | NM |
| DMG Mori Co., Ltd. | 619,145 | 4,473 | 4,378.00 | 91.0% | 1.3x | 8.8x |
| Sumitomo Heavy Industries, Ltd. | 511,774 | 3,858 | 4,205.00 | 86.9% | 0.6x | 5.4x |
| Amada Co., Ltd. | 595,329 | 3,281 | 1,780.50 | 93.1% | 1.3x | 6.8x |
| Makino Milling Machine Co., Ltd. | 157,485 | 907 | 6,640.00 | 93.1% | 0.6x | 5.8x |
| Feintool International Holding AG | 256 | 282 | 17.40 | 72.8% | 0.3x | 3.4x |
| Shibaura Machine Co.,Ltd. | 86,398 | 45,759 | 3,575.00 | 71.2% | 0.3x | 2.8x |
| **Mean** | | | | **86.1%** | **1.8x** | **8.9x** |
| **Median** | | | | **87.9%** | **0.8x** | **6.3x** |
| **Material Handling** | | | | | | |
| Terex Corporation | $4,074 | $4,433 | $61.03 | 92.6% | 0.9x | 5.9x |
| Columbus McKinnon Corporation | 1,279 | 1,780 | 44.98 | 98.1% | 1.8x | 10.8x |
| Manitex International, Inc. | 124 | 228 | 6.08 | 66.4% | 0.8x | 7.1x |
| **Mean** | | | | **85.7%** | **1.1x** | **7.9x** |
| **Median** | | | | **92.6%** | **0.9x** | **7.1x** |
| **Tooling** | | | | | | |
| Kennametal Inc. | $1,996 | $2,601 | $25.28 | 82.6% | 1.3x | 7.5x |
| Exco Technologies Limited | 309 | 410 | 7.95 | 88.5% | 0.6x | 5.1x |
| Hurco Companies, Inc. | 113 | 88 | 17.36 | 61.6% | 0.4x | 7.7x |
| **Mean** | | | | **77.6%** | **0.8x** | **6.7x** |
| **Median** | | | | **82.6%** | **0.6x** | **7.5x** |
| **Service Centers & Outsourcing** | | | | | | |
| Vesuvius plc | $1,309 | $1,613 | $4.93 | 96.9% | 0.8x | 6.3x |
| Bodycote plc | 1,376 | 1,430 | 7.38 | 95.3% | 1.8x | 7.3x |
| Gesco SE | 195 | 269 | 18.00 | 66.9% | 0.5x | 5.5x |
| Adval Tech Holding AG | 71 | 45 | 97.00 | 75.2% | 0.3x | 9.4x |
| **Mean** | | | | **83.6%** | **0.8x** | **7.1x** |
| **Median** | | | | **85.3%** | **0.7x** | **6.8x** |

# Advanced Manufacturing Public Comparables

($ in millions except stock price)

| Company | Market Cap | Enterprise Value (EV) | Stock Price 05/24/24 | % of 52 Week High | EV / Revenue LTM | EV / EBITDA LTM |
|---|---|---|---|---|---|---|
| **Electronic Solutions Providers** | | | | | | |
| Keysight Technologies, Inc. | $25,108 | $25,490 | $144.36 | 83.6% | 4.9x | 17.9x |
| Flex Ltd. | 12,925 | 14,339 | 33.22 | 102.2% | 0.5x | 8.2x |
| Jabil Inc. | 14,326 | 14,986 | 120.63 | 76.9% | 0.5x | 6.0x |
| Sanmina Corporation | 3,702 | 3,602 | 67.94 | 97.5% | 0.5x | 6.7x |
| Plexus Corp. | 3,052 | 3,267 | 114.01 | 99.8% | 0.8x | 11.4x |
| **Mean** | | | | **92.0%** | **1.4x** | **10.0x** |
| **Median** | | | | **97.5%** | **0.5x** | **8.2x** |
| **Highly Engineered Manufacturing** | | | | | | |
| Roper Technologies, Inc. | $58,299 | $65,822 | $547.48 | 96.9% | 10.3x | 24.9x |
| Nordson Corporation | 13,606 | 15,014 | 238.32 | 85.3% | 5.7x | 18.4x |
| RBC Bearings Incorporated | 8,504 | 9,727 | 293.55 | 98.3% | 6.2x | 20.5x |
| Thermon Group Holdings, Inc. | 1,170 | 1,344 | 35.36 | 98.4% | 2.7x | 12.6x |
| **Mean** | | | | **94.7%** | **6.2x** | **19.1x** |
| **Median** | | | | **97.6%** | **5.9x** | **19.4x** |

Sources: Cascadia Capital, LLC, Capital IQ and Company SEC Filings
Enterprise Value is defined as market capitalization plus net debt, minority interest and preferred equity
NA and NM Values are excluded from mean and median calculations
Any foreign securities are converted to USD for historical LTM figures as of the filing date, and for the equity price as of the most recent closing date

# Manufacturing Technology Public Comparables

($ in millions except stock price)

| Company | Market Cap | Enterprise Value (EV) | Stock Price 05/24/24 | % of 52 Week High | EV / Revenue LTM | EV / EBITDA LTM |
|---|---|---|---|---|---|---|
| **Additive Manufacturing** | | | | | | |
| 3D Systems Corporation | $465 | $522 | $3.48 | 31.4% | 1.1x | NM |
| Stratasys Ltd. | 631 | 487 | 9.00 | 41.4% | 0.8x | NM |
| Desktop Metal, Inc. | 186 | 263 | 0.57 | 24.8% | 1.4x | NM |
| Markforged Holding Corporation | 83 | 17 | 0.40 | 0.0% | 0.2x | NM |
| Velo3D, Inc. | 54 | 92 | 0.19 | 0.0% | 1.5x | NM |
| **Mean** | | | | **19.5%** | **1.0x** | **NM** |
| **Median** | | | | **24.8%** | **1.1x** | **NM** |
| **Industrial Software** | | | | | | |
| Dassault Systèmes SE | $51,150 | $50,060 | $38.88 | 79.5% | 8.3x | 31.3x |
| Autodesk, Inc. | 46,026 | 46,172 | 214.87 | 76.9% | 8.4x | 35.6x |
| PTC Inc. | 21,865 | 23,806 | 183.19 | 94.3% | 10.6x | 36.5x |
| Materialise NV | 304 | 229 | 5.20 | 51.0% | 0.8x | 6.8x |
| **Mean** | | | | **75.4%** | **7.0x** | **27.6x** |
| **Median** | | | | **78.2%** | **8.4x** | **33.5x** |
| **Optics & Photonics** | | | | | | |
| Coherent Corp. | $9,004 | $15,129 | $59.73 | 87.9% | 3.3x | 19.2x |
| IPG Photonics Corporation | 3,920 | 2,799 | 86.00 | 60.6% | 2.3x | 11.5x |
| nLIGHT, Inc. | 620 | 513 | 13.34 | 83.8% | 2.6x | NM |
| **Mean** | | | | **77.5%** | **2.7x** | **15.4x** |
| **Median** | | | | **83.8%** | **2.6x** | **15.4x** |
| **Metrology, Scanning, Measurement** | | | | | | |
| AMETEK, Inc. | $39,979 | $42,773 | $173.60 | 93.2% | 6.3x | 19.9x |
| Renishaw plc | 2,956 | 2,792 | 40.65 | 90.3% | 4.2x | 19.7x |
| FARO Technologies, Inc. | 364 | 353 | 18.73 | 75.5% | 1.0x | 69.8x |
| **Mean** | | | | **86.3%** | **3.8x** | **36.4x** |
| **Median** | | | | **90.3%** | **4.2x** | **19.9x** |
| **Robotics & Automation** | | | | | | |
| Siemens Aktiengesellschaft | $138,962 | $186,724 | $177.30 | 93.9% | 2.4x | 15.2x |
| ABB Ltd | 91,160 | 94,752 | 49.32 | 100.0% | 3.3x | 17.7x |
| Rockwell Automation, Inc. | 29,873 | 33,674 | 264.94 | 76.0% | 3.8x | 17.3x |
| Lincoln Electric Holdings, Inc. | 11,699 | 12,485 | 203.60 | 78.0% | 3.0x | 15.2x |
| ATS Corporation | 4,250 | 5,385 | 43.56 | 67.2% | 1.8x | 11.5x |
| Hillenbrand, Inc. | 3,077 | 5,096 | 44.18 | 82.2% | 1.7x | 9.1x |
| iRobot Corporation | 277 | 359 | 9.94 | 19.3% | 0.4x | NM |
| **Mean** | | | | **73.8%** | **2.3x** | **14.3x** |
| **Median** | | | | **78.0%** | **2.4x** | **15.2x** |

Sources: Cascadia Capital, LLC, Capital IQ and Company SEC Filings
Enterprise Value is defined as market capitalization plus net debt, minority interest and preferred equity
NA and NM Values are excluded from mean and median calculations
Any foreign securities are converted to USD for historical LTM figures as of the filing date, and for the equity price as of the most recent closing date

# Manufacturing Materials Public Comparables

($ in millions except stock price)

| Company | Market Cap | Enterprise Value (EV) | Stock Price 05/24/24 | % of 52 Week High | EV / Revenue LTM | EV / EBITDA LTM |
|---|---|---|---|---|---|---|
| **Specialty Metals** | | | | | | |
| Sandvik AB (publ) | $299,924 | $343,628 | $238.10 | 96.3% | 2.8x | 12.9x |
| Alcoa Corporation | 7,371 | 10,153 | 41.64 | 93.4% | 1.0x | 20.6x |
| ATI Inc. | 7,373 | 9,261 | 60.12 | 96.3% | 2.2x | 16.9x |
| Carpenter Technology Corporation | 5,373 | 6,022 | 110.29 | 98.2% | 2.2x | 14.7x |
| Kaiser Aluminum Corporation | 1,520 | 2,496 | 95.62 | 93.4% | 0.8x | 10.7x |
| AMAG Austria Metall AG | 1,022 | 1,409 | 28.98 | 84.0% | 0.9x | 8.1x |
| Haynes International, Inc. | 748 | 848 | 58.86 | 96.7% | 1.4x | 11.4x |
| **Mean** | | | | **94.0%** | **1.6x** | **13.6x** |
| **Median** | | | | **96.3%** | **1.4x** | **12.9x** |
| **Specialty Chemicals** | | | | | | |
| Compagnie de Saint-Gobain S.A. | $41,020 | $48,898 | $81.70 | 98.8% | 1.0x | 6.7x |
| Mitsubishi Materials Corporation | 393,197 | 893,418 | 3,010.00 | 89.8% | 0.6x | 11.1x |
| Quaker Chemical Corporation | 3,300 | 3,907 | 183.73 | 82.8% | 2.0x | 11.7x |
| Materion Corporation | 2,311 | 2,841 | 112.19 | 77.3% | 1.8x | 13.8x |
| Victrex plc | 1,127 | 1,179 | 12.96 | 79.4% | 4.1x | 13.8x |
| Morgan Advanced Materials plc | 908 | 1,178 | 3.19 | 94.4% | 1.1x | 7.5x |
| Gurit Holding AG | 269 | 330 | 57.60 | 57.7% | 0.7x | 9.8x |
| **Mean** | | | | **82.9%** | **1.6x** | **10.6x** |
| **Median** | | | | **82.8%** | **1.1x** | **11.1x** |

Sources: Cascadia Capital, LLC, Capital IQ and Company SEC Filings
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# Part Supplies Public Comparables

($ in millions except stock price)

| Company | Market Cap | Enterprise Value (EV) | Stock Price 05/24/24 | % of 52 Week High | EV / Revenue LTM | EV / EBITDA LTM |
|---|---|---|---|---|---|---|
| **Aerospace & Defense Components** | | | | | | |
| Northrop Grumman Corporation | $69,142 | $83,892 | $466.01 | 93.8% | 2.1x | 18.1x |
| TransDigm Group Incorporated | 74,465 | 92,649 | 1,345.46 | 100.3% | 12.7x | 25.6x |
| HEICO Corporation | 26,392 | 29,113 | 216.89 | 98.9% | 9.0x | 33.6x |
| Curtiss-Wright Corporation | 10,785 | 11,609 | 281.63 | 98.4% | 4.0x | 16.7x |
| Hexcel Corporation | 5,727 | 6,350 | 70.66 | 89.4% | 3.5x | 17.9x |
| Moog Inc. | 5,502 | 6,547 | 172.50 | 94.9% | 1.9x | 13.4x |
| Barnes Group Inc. | 2,032 | 3,264 | 40.52 | 92.8% | 2.1x | 10.3x |
| Senior plc | 700 | 904 | 1.71 | 93.7% | 0.9x | 10.0x |
| Magellan Aerospace Corporation | 468 | 534 | 8.19 | 94.5% | 0.6x | 6.8x |
| **Mean** | | | | **95.2%** | **4.1x** | **16.9x** |
| **Median** | | | | **94.5%** | **2.1x** | **16.7x** |
| **Auto OEMs** | | | | | | |
| Cummins Inc. | $38,832 | $44,235 | $284.72 | 93.6% | 1.3x | 8.7x |
| American Axle & Manufacturing Holdings, Inc | 860 | 3,272 | 7.35 | 76.9% | 0.5x | 4.5x |
| Martinrea International Inc. | 906 | 2,015 | 11.91 | 78.6% | 0.4x | 3.3x |
| **Mean** | | | | **83.0%** | **0.7x** | **5.5x** |
| **Median** | | | | **78.6%** | **0.5x** | **4.5x** |
| **Building Products** | | | | | | |
| Owens Corning | $15,310 | $17,400 | $180.84 | 99.6% | 1.8x | 7.5x |
| Simpson Manufacturing Co., Inc. | 7,196 | 7,370 | 172.06 | 78.8% | 3.3x | 13.4x |
| Gibraltar Industries, Inc. | 2,189 | 2,076 | 72.80 | 83.3% | 1.5x | 9.6x |
| **Mean** | | | | **87.2%** | **2.2x** | **10.2x** |
| **Median** | | | | **83.3%** | **1.8x** | **9.6x** |
| **Energy** | | | | | | |
| Schoeller-Bleckmann Oilfield Equipment Aktie | $673 | $780 | $42.71 | 74.2% | 1.2x | 5.4x |
| Dril-Quip, Inc. | 627 | 442 | 18.22 | 58.9% | 1.0x | 12.0x |
| Broadwind, Inc. | 80 | 109 | 3.97 | 82.5% | 0.6x | 4.9x |
| **Mean** | | | | **71.9%** | **0.9x** | **7.4x** |
| **Median** | | | | **74.2%** | **1.0x** | **5.4x** |
| **Infrastructure** | | | | | | |
| Westinghouse Air Brake Technologies Corporation | $29,894 | $33,593 | $169.94 | 99.5% | 3.4x | 16.6x |
| Northwest Pipe Company | 345 | 531 | 34.52 | 93.5% | 1.2x | 8.3x |
| L.B. Foster Company | 309 | 394 | 27.72 | 90.1% | 0.7x | 13.0x |
| Perma-Pipe International Holdings, Inc. | 71 | 104 | 8.90 | 82.8% | 0.7x | 5.3x |
| **Mean** | | | | **91.5%** | **1.5x** | **10.8x** |
| **Median** | | | | **91.8%** | **0.9x** | **10.7x** |

# Part Supplies Public Comparables

($ in millions except stock price)

| Company | Market Cap | Enterprise Value (EV) | Stock Price 05/24/24 | % of 52 Week High | EV / Revenue LTM | EV / EBITDA LTM |
|---|---|---|---|---|---|---|
| **Manufacturing Focused Industrial Conglomerates** | | | | | | |
| Siemens Aktiengesellschaft | $138,962 | $186,724 | $177.30 | 93.9% | 2.4x | 15.2x |
| RTX Corporation | 139,915 | 180,214 | 106.10 | 98.4% | 2.5x | 18.4x |
| Honeywell International Inc. | 129,840 | 144,787 | 200.34 | 95.0% | 3.9x | 15.6x |
| General Electric Company | 180,895 | 184,292 | 168.65 | 93.5% | 2.7x | 19.1x |
| **Mean** | | | | **95.2%** | **2.9x** | **17.1x** |
| **Median** | | | | **94.4%** | **2.6x** | **17.0x** |
| **Medical Components** | | | | | | |
| Medtronic plc | $108,058 | $125,283 | $81.78 | 89.9% | 3.9x | 15.3x |
| Globus Medical, Inc. | 8,831 | 8,872 | 65.74 | 97.6% | 4.7x | 17.7x |
| Integer Holdings Corporation | 4,082 | 5,274 | 122.35 | 98.7% | 3.2x | 16.8x |
| Orthofix Medical Inc. | 558 | 687 | 14.68 | 68.0% | 0.9x | 22.8x |
| **Mean** | | | | **88.5%** | **3.2x** | **18.2x** |
| **Median** | | | | **93.7%** | **3.6x** | **17.3x** |
| **Power Suppliers** | | | | | | |
| Infineon Technologies AG | $49,311 | $53,044 | $38.01 | 94.4% | 3.4x | 10.6x |
| TE Connectivity Ltd. | 45,934 | 49,102 | 151.55 | 99.2% | 3.1x | 12.9x |
| Delta Electronics, Inc. | 851,994 | 860,345 | 328.00 | 84.4% | 2.2x | 13.8x |
| Diodes Incorporated | 3,341 | 3,247 | 73.11 | 75.1% | 2.2x | 9.8x |
| Mercury Systems, Inc. | 1,868 | 2,426 | 31.65 | 72.2% | 2.9x | NM |
| CTS Corporation | 1,599 | 1,531 | 52.64 | 96.9% | 2.9x | 13.8x |
| Benchmark Electronics, Inc. | 1,551 | 1,707 | 43.51 | 100.4% | 0.6x | 9.2x |
| Key Tronic Corporation | 46 | 186 | 4.32 | 69.2% | 0.3x | 7.0x |
| Cosel Co., Ltd. | 47,348 | 33,391 | 1,427.00 | 86.8% | 0.8x | 3.8x |
| **Mean** | | | | **86.5%** | **2.0x** | **10.1x** |
| **Median** | | | | **86.8%** | **2.2x** | **10.2x** |

Sources: Cascadia Capital, LLC, Capital IQ and Company SEC Filings
Enterprise Value is defined as market capitalization plus net debt, minority interest and preferred equity
NA and NM Values are excluded from mean and median calculations
Any foreign securities are converted to USD for historical LTM figures as of the filing date, and for the equity price as of the most recent closing date

# Selected Advanced Manufacturing Transactions

| Date | Target | Acquirer / Sponsor(s) | Deal Size | EV/LTM Revenue | EV / LTM EBITDA | Target Business Description |
|---|---|---|---|---|---|---|
| 5/27/2024 | Allegient Defense, Inc. | BCS, LLC | $13MM | NA | NA | Allegient Defense is a company that specializes in developing and deploying innovative technologies for defense purposes. They focus on areas such as applied science, technology, and intelligence analysis. Allegient Defense has a track record of supporting government program managers, engineers, and scientists in the development and deployment of tactical communication and surveillance systems, wireless technologies, electronic warfare, and systems/network engineering solutions. As of May 27, 2024, Allegient Defense, Inc. operates as a subsidiary of BCS, LLC. |
| 5/20/2024 | Boh Environmental, LLC | NA | NA | NA | NA | Boh Environmental, LLC manufactures and distributes the field pack-up (FPU) mobility system in the United States and internationally. Its FPU modules are used for moving/storing various materials through ground, sea, or air platforms, including spare/repair parts, major assemblies, tools, hazardous materials, small arms weapons, medical supplies, construction materials, and provisions. The company offers FPU mobile warehouse products, including cargo and FPU systems; linked configurations, which comprise authorized stockage list mobility systems and FPU cargo combinations; and FPU modules, including storage/shipping modules, glide-out bulk storage/shipping racks, short/helo modules, weapons modules, HAZMAT modules, office modules, stackable modules, and floor adapter plates. It also provides customized mission systems, such as modular workshop containers, expandable wall command centers, and containerized command centers; FPU system accessories, which comprise FPU transport systems, bulk racks, parts racks, module slip covers, 2-position module transfer plates, tie down rings, drawer dividers, locks, bridge connector locks, and module security locking bars. The company serves the U.S. army, navy, marine corps, and air force, as well as foreign military sales. Boh Environmental was founded in 1998 and is based in Chantilly, Virginia with an additional office in New Orleans, Louisiana. |
| 5/2/2024 | Dahms Refrigeration Services, LLC | Refrigeration Design & Service, Inc. | NA | NA | NA | Dahms Refrigeration Services, LLC designs and manufactures industrial refrigeration systems. It offers ammonia refrigeration, cold storage, industrial and commercial HVAC, and equipment sale. Dahms Refrigeration Services, LLC was founded in 2001 and is based in Norristown, Pennsylvania. As of May 2, 2024, Dahms Refrigeration Services, LLC operates as a subsidiary of Refrigeration Design & Service, Inc. |
| 5/7/2024 | HJR Equipment Rental, Inc. | DANOBAT GROUP S. Coop. | NA | NA | NA | HJR EQUIPMENT RENTAL, INC. manufactures wheel truing machinery. The company was incorporated in 2006 and is based in Escanaba, Michigan. As of May 7, 2024, HJR EQUIPMENT RENTAL, INC. operates as a subsidiary of DANOBAT GROUP S. Coop. |
| 5/8/2024 | Mallard Manufacturing Corporation | MacLean-Fogg Company | NA | NA | NA | Mallard Manufacturing Corporation manufactures pallet flow and carton flow systems. The company was founded in 1960 and is based in Sterling, Illinois. As of May 8, 2024, Mallard Manufacturing Corporation operates as a subsidiary of MacLean-Fogg Company. |
| 5/3/2024 | Owens Machine and Tool Company | Precision Aerospace Holdings, LLC | NA | NA | NA | Owens Machine and Tool Company manufactures specialized machined tools and parts for the aerospace, defense, gas and oil, medical, and entertainment industries. The company was founded in 1986 and is based in Lewisville, Texas. As of May 3, 2024, Owens Machine And Tool Company operates as a subsidiary of Precision Aerospace Holdings, LLC. |
| 5/2/2024 | Phoenix Aviation Services, L.L.C. | Salt River Aviation, LLC | NA | NA | NA | Phoenix Aviation Services, L.L.C., doing business as AVIOCRAFT, offers repair and overhaul services of aircraft equipment to aviation industry. The company is based in Chandler, Arizona. Phoenix Aviation Services, L.L.C. operates as a subsidiary of Salt River Aviation, LLC. |
| 5/1/2024 | Research In Flight, LLC | Altair HyperWorks, Inc. | NA | NA | NA | Research In Flight, LLC develops and provides vorticity-based fluid simulation analysis platform tools for aerospace engineering applications. The company was founded in 2012 and is based in Auburn, Alabama. As of May 1, 2024, Research In Flight, LLC operates as a subsidiary of Altair HyperWorks, Inc. |
| 5/22/2024 | SEI Industries Ltd. | TransDigm Group Incorporated | $170MM | NA | NA | SEI Industries Ltd. engages in the design, engineering, and manufacture of fabric based industrial equipment. The company offers aerial firefighting equipment, including bambi bucket models, bucket accessories, power fills, and foam systems; ground firefighting equipment, including pumpkin tanks, water reservoirs, flyers, and water backpacks; fire ignition products, such as spheres, green dragons, hand launchers, and red dragon plastic sphere dispensers; remote site fuel and water logistics equipment; secondary containment systems for fuel, water, and chemicals; and air-cells for inside cylindrical, elliptical, octagonal, or rectangular-shaped conservator tanks. It serves oil and mineral exploration companies, aviation companies, government agencies, military forces, relief agencies, original equipment manufacturers, and Fortune 500 companies. The company sells its product through distributors in Canada and internationally. SEI Industries Ltd. was founded in 1978 and is based in Delta, Canada. As of May 22, 2024, Sei Industries Ltd. operates as a subsidiary of TransDigm Group Incorporated. |
| 5/8/2024 | Transco Inc. | VAALCO Energy, Inc. | $40MM | NA | NA | Transco Inc., through its subsidiaries, provides products and services to the railroad, power generation, process, and general manufacturing industries. It offers freight car repair, modification, and rebuilding services to the rail transportation industry, such as general repairs, wrecking repairs, inspections, exterior coatings, interior coatings, cleaning services, wheel replacements, air brakes cleaning, tank testing, safety valve testing, preparing AAR bills, mobile repairs, ultrasonic testing, truck reconditioning, tank car requalification, locomotive painting, and parts fabrication. The company also provides engineered systems for power and process applications, such as thermal insulation solutions, passive fire protection solutions, radiation shielding solutions, sump strainers, and control room habitability solutions. In addition, it offers removable insulation covers, such as steam turbine assemblies, valve covers, pipes and valve covers, steam station assemblies, and engine exhausts. Transco Inc. was founded in 1936 and is headquartered in Chicago, Illinois with manufacturing facilities in North America. As of April 30, 2024, Transco Inc. operates as a subsidiary of VAALCO Energy, Inc.. |
| 4/29/2024 | Trinity Aerospace Corp. | Aero Engineering AcquireCo Inc. | NA | NA | NA | Trinity Aerospace Corp. provides sheet metal fabrication services for aircraft. The company was founded in 2000 and is based in Mississauga, Canada. As of April 29, 2024, Trinity Aerospace Corp. operates as a subsidiary of Aero Engineering AcquireCo Inc. |
| 4/30/2024 | Willbrook Solutions, Inc. | Special Aerospace Services, LLC | NA | NA | NA | Willbrook Solutions, Inc. offers program management support, systems engineering, logistics support services, system modeling and simulation, data analysis, and MBSE and digital engineering services. The company was founded in 2006 and is based in Huntsville, Alabama. As of April 30, 2024, Willbrook Solutions, Inc. operates as a subsidiary of Special Aerospace Services, LLC. |
| 4/23/2024 | Ascent AeroSystems LLC | Robinson Helicopter Company, Inc. | NA | NA | NA | Ascent AeroSystems LLC manufactures aerial systems proven coaxial UAS / UAV drone technology. It offers Blue UAS-Appoints spirit UAV. The company was founded in 2014 and is based in Wilmington, Massachusetts. As of April 23, 2024, Ascent AeroSystems LLC operates as a subsidiary of Robinson Helicopter Company, Inc. |

*Note: Data from S&P Capital IQ and Company SEC filings.*

# Selected Advanced Manufacturing Transactions

| Date | Target | Acquirer / Sponsor(s) | Deal Size | EV/LTM Revenue | EV / LTM EBITDA | Target Business Description |
|---|---|---|---|---|---|---|
| 4/18/2024 | Global Cooling, Inc. | NA | $3MM | NA | NA | Global Cooling, Inc. engages in the manufacturing and selling of freezers. It provides various products such as energy-saving ultra-low temperature freezers, upright ultra-low temperature freezers, under-counter ultra-low temperature freezers, portable ultra-low temperature freezers, storage racks, free-piston Stirling engine technology, and ULT freezers. It also provides direct training for authorized service personnel. The company sells its products directly and through laboratory supply dealers. The company caters to energy, aerospace, life science, pharmaceutical, bioresearch, biotechnology, and industrial sectors. Global Cooling, Inc. was founded in 1995 and is based in Athens, Ohio. |
| 4/17/2024 | Ballymore Company, Inc. | OEP Capital Advisors, L.P. | NA | NA | NA | Ballymore Company, Inc. manufactures rolling safety ladders and hydraulically powered personnel lifts in steel, aluminum, and stainless steel. It offers lifts, platforms, boxed ladders, custom designed or modified ladders, work platforms, crossovers, modified or custom lifts, and ladder replacement parts. Ballymore Company, Inc. was founded in 1946 and is based in Coatesville, Pennsylvania. |
| 4/17/2024 | Labworks International Inc. | Hodess Cleanroom Construction, LLC | NA | NA | NA | Labworks International Inc. custom designs, manufactures, and builds climate-controlled environmental rooms. The company was founded in 2004 and is based in Woodbridge, Canada. As of April 17, 2024, Labworks International Inc. operates as a subsidiary of Hodess Cleanroom Construction, LLC. |
| 4/16/2024 | QTEK Design Ltd. | Rehrig Pacific Company, Inc. | NA | NA | NA | QTEK Design Ltd. manufactures a pallet dispenser for logistics industry. The company was founded in 1977 and is based in London, Canada. As of April 16, 2024, QTEK Design Ltd. operates as a subsidiary of Rehrig Pacific Company, Inc. |
| 4/15/2024 | Becnel Rental Tools, LLC | Transcat, Inc. | $51MM | NA | 8.8x | Becnel Rental Tools, LLC manufactures and rents out wireline pressure control equipment, grease injectors, handling tools, and related kits and accessories. The company was founded in 2012 and is based in Gray, Louisiana. As of April 15, 2024, Becnel Rental Tools, LLC operates as a subsidiary of Transcat, Inc. |
| 4/15/2024 | United Enertech Corporation | Soler & Palau Sistemas de Ventilación, S.L.U. | NA | NA | NA | United Enertech Corporation manufactures air movement and air control products. The company's products include louvers, dampers, roof curbs, rails, sunshades, ventilators, doors, actuators, and air measuring products. The company was founded in 1988 and is based in Chattanooga, Tennessee. As of April 15, 2024, United Enertech Corporation operates as a subsidiary of Soler & Palau Sistemas de Ventilación, S.L.U. |
| 4/9/2024 | Condor Signal & Communications Inc. | Universal Rail Systems Inc. | NA | NA | NA | Condor Signal & Communications Inc. manufactures rail switch heaters, bungalows, clearing devices, foundations, and racking systems for the railway industry. The company was incorporated in 2005 and is based in Oakville, Canada. As of April 9, 2024, Condor Signal & Communications Inc. operates as a subsidiary of Universal Rail Systems Inc. |
| 4/8/2024 | Microtel LLC | Tyto Athene, LLC | NA | NA | NA | Microtel LLC designs and develops software and systems that detect water on the moon, life on Mars, the habitat of Saturn's moon. The company was incorporated in 1998 and is based in Greenbelt, Maryland. As of April 8, 2024, Microtel LLC operates as a subsidiary of Tyto Athene, LLC. |
| 4/3/2024 | Universal Tractor Co. (nka:Kubota of Denver) | Bob Howard German Imports, LLC | NA | NA | NA | Kubota of Denver offers a variety of new and used tractors, track loaders, mini-excavators, skid steer loaders, backhoes, wheel loaders, utility vehicles, attachments, trailers, and zero-turn mowers. Kubota of Denver was formerly known as Universal Tractor Co. and changed its name to Kubota of Denver in April 2024. The company was founded in 1950 and is based in Denver, Colorado. As of April 3, 2024, Kubota of Denver operates as a subsidiary of BOB HOWARD GERMAN IMPORTS, LLC. |
| 4/3/2024 | Venshure Test Services, LLC | AB Dynamics plc | $30MM | NA | NA | Venshure Test Services, LLC supplies OEM for vehicle testing services. The company was incorporated in 2019 and is headquartered in Chelsea, Michigan. As of April 3, 2024, Venshure Test Services, LLC operates as a subsidiary of AB Dynamics plc. |
| 4/2/2024 | Benoure Plumbing and Heating, Inc. | Empowered Ventures, Inc. | NA | NA | NA | Benoure Plumbing and Heating, Inc. residential and commercial plumbing, heating, and air conditioning services. The company was founded in 1966 and is based in South Burlington, Vermont. As of April 2, 2024, Benoure Plumbing and Heating, Inc. operates as a subsidiary of Empowered Ventures, Inc. |
| 4/2/2024 | Wsc, Inc. | Curtiss-Wright Corporation | $34MM | 2.3x | NA | Wsc, Inc. provides simulation technology that supports the design, commissioning, and reliable operation of commercial nuclear power generation and process plants. The company was incorporated in 1995 and is based in Frederick, Maryland. As of April 2, 2024, Wsc, Inc. operates as a subsidiary of Curtiss-Wright Corporation. |
| 4/9/2024 | Alpha Aircraft Services LLC | Ventura Air Charters, Inc. | NA | NA | NA | Alpha Aircraft Services LLC provides aircraft maintenance support services. The company was incorporated in 2019 and is based in Teterboro, New Jersey. As of April 1, 2024, Alpha Aircraft Services LLC operates as a subsidiary of Ventura Air Charters Inc. |
| 4/1/2024 | Redviking Group, LLC | Lincoln Electric Holdings, Inc. | $115MM | 1.6x | NA | Redviking Group, LLC designs, manufactures, and sells custom machines and production lines in the United States and internationally. The company offers custom weld and assembly stations, robotic vision inspection systems, and complete assembly lines; and battery-free AGV assembly lines, integrated laser weld and assembly systems, multi-component gages and leak testers, and controls. It also provides dynamic test systems, including flexible and single component test systems, helicopter test stands, transmission test stands, integrated test executive and controls platforms, vehicle powertrain test stands, dynamometers, and blade balance stands; and manufacturing execution systems, including error proofing/mistake proofing systems, tracking and traceability systems, factory equipment health monitoring systems, inspection systems, kitting and sequencing solutions, programmed work instructions solutions, and customized manufacturing reports. |

*Note: Data from S&P Capital IQ and Company SEC filings.*

# Selected Advanced Manufacturing Transactions

| Date | Target | Acquirer / Sponsor(s) | Deal Size | EV/LTM Revenue | EV / LTM EBITDA | Target Business Description |
|---|---|---|---|---|---|---|
| 3/26/2024 | Ammcon Corp. | Fairbanks Morse Defense | NA | NA | NA | Ammcon Corp. manufactures industrial machinery and equipment for Navy, coast guard, and military sealift command. The company offers in logging and excavating equipment hydraulic cylinder repair and commercial pumps to piping products for submarines and aircraft carriers. The company is headquartered in Hillsboro, Oregon. As of March 26, 2024, Ammcon Corp. operates as a subsidiary of Fairbanks Morse Defense. |
| 3/26/2024 | Aqua Blasting Corporation | Metal Finishing Technologies, LLC | NA | NA | NA | Aqua Blasting Corporation manufactures aerospace components and services. The company offers shot peening, glass bead peening, wet abrasive peening, dry abrasive peening, soda blasting, tumbling, and surface finish testing. It was founded in 1971 and is headquartered in Bloomfield, Connecticut. As of March 26, 2024, Aqua Blasting Corporation operates as a subsidiary of Metal Finishing Technologies, LLC. |
| 3/25/2024 | Near Space Corporation | Aerostar International, Inc. | NA | NA | NA | Near Space Corporation is a research and consulting services company. The company was formerly known as GSSL, Inc. and changed its name to Near Space Corporation in June 2021. Near Space Corporation was incorporated in 1994 and is headquartered in Tillamook, Oregon. As of March 25, 2024, Near Space Corporation operates as a subsidiary of Aerostar International, Inc. |
| 3/20/2024 | Aerofab NDT LLC | Precision Aerospace Group, Inc. | NA | NA | NA | Aerofab NDT LLC manufactures non-destructive testing tools for the aerospace and aviation industry. The company was incorporated in 2013 and is based in Kent, Washington. As of March 20, 2024, Aerofab NDT LLC operates as a subsidiary of Precision Aerospace Group, Inc. |
| 3/14/2024 | Fox Valley Metal-Tech, Inc. | ArmorWorks Enterprises, LLC | NA | NA | NA | Fox Valley Metal-Tech, Inc. manufactures metal fabrications for commercial and defense applications. The company offers fabrication assembly, welding, painting, inspection, quality standards, project management, and equipment. Fox Valley Metal-Tech, Inc. was founded in 1989 and is headquartered in Green Bay, Wisconsin. As of March 14, 2024, Fox Valley Metal-Tech, Inc. operates as a subsidiary of ArmorWorks Enterprises, LLC. |
| 3/12/2024 | Aire Care Mechanical Heating & Cooling, LLC | Liberty Service Partners | NA | NA | NA | Aire Care Mechanical Heating & Cooling, LLC provides air conditioning services to commercial and residential sector. The company offers heating, ventilation, and air conditioning repair, and maintenance services. The company was founded in 2015 and is headquartered in Knoxville, Tennessee. As on March 12, 2024, Aire Care Mechanical Heating & Cooling, LLC operates as a subsidiary of Liberty Service Partners. |
| 3/11/2024 | Hte Technologies Inc. | John Henry Foster Minnesota, Inc. | NA | NA | NA | Hte Technologies Inc. operates as an industrial productivity solutions company. The company was founded in 1959 and is based in Saint Louis, Missouri. As of March 11, 2024, Hte Technologies Inc. operates as a subsidiary of John Henry Foster Minnesota, Inc. |
| 3/7/2024 | Agr International, Inc. | Indicor, LLC | NA | NA | NA | American Glass Research is a third-party laboratory that provides a range of services to the glass container industry. These services include testing, design analysis, analytical testing, consulting, training, inspection, product liability, and auditing. The company is a division of Agr International, Incorporated, which supplies inspection equipment to the glass and plastics industries. American Glass Research has facilities in Pennsylvania, Ohio, and the Netherlands, and is known globally for its services to manufacturers and users of glass products. As of March 7, 2024, Agr International, Inc. operates as a subsidiary of Indicor, LLC. |
| 3/7/2024 | Stack HIP, LLC | Kittyhawk, Inc. | NA | NA | NA | Stack HIP, LLC provides HIP services to aerospace, defense, and medical customers. Stack HIP, LLC was incorporated in 2018 and is headquartered in Seattle, Washington. As of March 7, 2024, Stack HIP, LLC operates as a subsidiary of Kittyhawk, Inc. |
| 3/6/2024 | Surgically Clean Air Inc. | Dr. Nicholas M. Kavouklis, DMD | NA | NA | NA | Surgically Clean Air Inc. manufactures and installs air purification products. The company serves dental, sports and fitness, office, retail and commercial, childcare, education, healthcare, industrial, and veterinary industries. The company was incorporated in 2008 and is headquartered in Toronto, Canada. As of March 6, 2024, Surgically Clean Air Inc. operates as a subsidiary of Dr. Nicholas M. Kavouklis, DMD. |
| 3/5/2024 | BMWG, LLC | Arch Cutting Tools Corp. | NA | NA | NA | BMWG, LLC manufactures and sells indexable tools and carbide cutting tools. BMWG, LLC was formerly known as BMW Grinding, LLC and changed its name to BMWG, LLC in January 2014. The company was founded in 1995 and is based in Gallatin, Tennessee. As of March 5, 2024, BMWG, LLC operates as a subsidiary of ARCH Cutting Tools Corp. |
| 3/5/2024 | Fourgons Transit Inc, Les | Morgan Corporation | NA | NA | NA | Fourgons Transit Inc, Les manufactures truck bodies and trailers. The company was founded in 1978 and is based in Laval, Canada. As of March 5, 2024, Fourgons Transit Inc, Les operates as a subsidiary of Morgan Corporation. |
| 3/4/2024 | Canariis Corporation (nka:Quinn Enterprise Holdings, Inc.) | American Event Services, LLC | NA | NA | NA | Quinn Enterprise Holdings, Inc. manufactures custom UL-listed packaged HVAC, plumbing, and fire-protection systems. The company was formerly known as Canariis Corporation and changed its name to Quinn Enterprise Holdings, Inc. in March 2024. Quinn Enterprise Holdings, Inc. was founded in 1955 and is headquartered in Riverview, Florida. As of March 4, 2024, Quinn Enterprise Holdings, Inc. operates as a subsidiary of American Event Services, LLC. |
| 3/4/2024 | CM Recycling Equipment Solutions | Shred-Tech Corporation | NA | NA | NA | CM Recycling Equipment Solutions manufactures tire shredding equipment. The company was founded in 1982 and is based in Sarasota, Florida. As of March 4, 2024, CM Recycling Equipment Solutions operates as a subsidiary of Shred-Tech Corporation. |
| 3/4/2024 | Magpie Aviation, Inc. | Ampaire Inc. | NA | NA | NA | Magpie Aviation, Inc. engages in developing technologies for automated towing connections between two aircraft. The company was incorporated in 2021 and is based in Hayward, California. As of March 4, 2024, Magpie Aviation, Inc. operates as a subsidiary of Ampaire Inc. |

*Note: Data from S&P Capital IQ and Company SEC filings.*

# Selected Advanced Manufacturing Transactions

| Date | Target | Acquirer / Sponsor(s) | Deal Size | EV/LTM Revenue | EV / LTM EBITDA | Target Business Description |
|---|---|---|---|---|---|---|
| 3/4/2024 | Techni-air 2000 Inc | Argo MRT Americas Inc. | NA | NA | NA | Techni-air 2000 Inc. provides aircraft maintenance services. The company was incorporated in 2022 and is based in Dorval, Canada. As of March 4, 2024, Techni-air 2000 Inc. operates as a subsidiary of Argo Mobile Repair Team Americas Inc. |
| 3/1/2024 | Synectic Research & Analysis, Inc. | Avion Solutions, Inc. | NA | NA | NA | Synectic Research & Analysis, Inc. provides test planning and analysis, software development, and modeling and simulation for space and missile defense programs. The company was founded in 2001 and is headquartered in Huntsville, Alabama. As of March 1, 2024 Synectic Research & Analysis, Inc. operates as a subsidiary of Avion Solutions, Inc. |
| 2/29/2024 | Dallas A.C. Horn & Co. Inc. | PROBAT-Werke von Gimborn Maschinenfabrik GmbH | NA | NA | NA | Dallas A.C. Horn & Co. Inc. manufactures and sells premium food processing equipment. The company was founded in 1907 and is based in Dallas, Texas. As of February 29, 2024, Dallas A. C. Horn & Company, Inc. operates as a subsidiary of PROBAT-Werke von Gimborn Maschinenfabrik GmbH. |
| 2/28/2024 | Maxbox Supplies LLC | Impact Environmental Group | NA | NA | NA | Maxbox Supplies LLC manufactures and sells industrial supply products. The company's product line includes portable spill containment berms, tarps, filters, box parts, industrial hoses, valves, fittings, and related products and services. It caters to oilfield and refinery supply industry. The company was founded in 2009 and is based in Pearland, Texas with additional offices in Gonzales, Louisiana and Corpus Christi, Texas. As of February 28, 2024 Maxbox Supplies LLC operates as a subsidiary of Impact Environmental Group. |
| 2/27/2024 | ePicker LLC | Big Lift, LLC | NA | NA | NA | ePicker LLC manufactures material handling equipment. The company serves delivery fleets, convenience stores, warehouses, and e-commerce, retail, and manufacturing industries. The company was founded in 2021 and is based in Fort Worth, Texas. As of February 27, 2024, ePicker LLC operates as a subsidiary of Big Lift, LLC. |
| 2/26/2024 | AC Controls Company, Inc. | Kele, Inc. | NA | NA | NA | AC Controls Company, Inc. distributes industrial instrumentation, valves, and controls for process and combustion applications. Its distribution portfolio includes a range of products for measuring or controlling temperature, pressure, level, or flow, as well as personnel and plant safety. The company also provides systems integration services; and maintenance and troubleshooting services that include maintenance agreements and service contracts, boiler optimization, calibration, and operator and product training. It serves process and power industries, including pulp and paper, pharmaceutical, mining, textile, chemicals, government, institutional, and more. The company was founded in 1960 and is based in Concord, North Carolina. The company has additional offices in Greenville, North Carolina; and Richmond, Virginia with sales, service, and warehouse facilities. As of February 26, 2024, AC Controls Company, Inc. operates as a subsidiary of Kele, Inc. |
| 2/26/2024 | Cimquest, Inc. | CNC Software, Inc. | NA | NA | NA | Cimquest Inc engages in designing, engineering, and manufacturing of CAD/CAM, 3D printing, and rapid prototyping integrators. The company was founded in 1990 and is based in Branchburg, New Jersey. As of March 4, 2024, Cimquest, Inc. operates as a subsidiary of CNC Software, Inc. |
| 2/26/2024 | Scott Springfield Mfg. Inc. | Modine Manufacturing Company | $185MM | 1.7x | NA | Scott Springfield Mfg. Inc. designs and manufactures custom air handlers. The company was founded in 1978 and is headquartered in Calgary, Canada. As of March 1, 2024 Scott Springfield Mfg. Inc. operates as a subsidiary of Modine Manufacturing Company. |
| 2/21/2024 | Anillo Industries Inc. | Novaria Holdings LLC | NA | NA | NA | Anillo Industries, Inc. manufactures and supplies Army Navy (AN), Military Specification (MS), National Aerospace Standard (NAS) series and OEM washers, bushings, shims, and stampings to the aerospace industry. It also offers tool and die design and fabrication, metals processing, milling, light machining heat treating, chemical processing, and painting. The company was founded in 1957 and is headquartered in Orange, California. As of February 21, 2024, Anillo Industries Inc. operates as a subsidiary of Novaria Holdings LLC. |
| 2/15/2024 | E2metrix Inc. | Ovivo Inc. | NA | NA | NA | E2metrix Inc. engages in the design, development, manufacture, and marketing of equipment for the treatment of wastewater. It serves municipal water treatment, food processing, cheese factories, slaughterhouses, mining, dairy processing, pulp and paper, and manure applications. The company was incorporated in 2010 and is based in Sherbrooke, Canada. As of February 15, 2024, E2metrix Inc. operates as a subsidiary of Ovivo Inc. |
| 2/13/2024 | American Gear & Engineering Company, Inc. | B & D Industrial, Inc. | NA | NA | NA | American Gear & Engineering Company, Inc. engages in manufacturing gears and replacements parts from worn-out samples. The company was incorporated in 1985 and is headquartered in Westland, Michigan. As of February 13, 2024 American Gear & Engineering Company, Inc. operates as a subsidiary of B & D Industrial, Inc. |
| 2/13/2024 | Automation & Modular Components, LLC | FlexLink AB | NA | NA | NA | Automation & Modular Components, Inc. designs, manufactures, and assembles modular conveyor systems. It offers conveyors and components, power and free palletized conveyor systems, and modular systems. The company also provides installation services. It serves appliance, assembly and material handling, automotive, bearings, consumer products, container handling, electronics, food, glass machining, medical, metalworking, munitions, packaging, parts processing, pharmaceutical, power transmission, and recreational industries. Automation & Modular Components, Inc. was founded in 1988 and is based in Davisburg, Michigan. As of February 13, 2024, Automation & Modular Components, LLC operates as a subsidiary of FlexLink AB. |
| 2/12/2024 | McGee Equipment Company | Atlanta Forklifts, Inc. | NA | NA | NA | McGee Equipment Company provides racking and storage solutions to the material handling industry. It offers pallet storage systems, bulk storage, order pick-systems, warehouse consolidations and relocations, assembly workstations and technical work tables, small parts shelving, record archive storage, file shelving, movable aisle shelving, retail shelving, employee lockers, and school corridor lockers. The company was founded in 1972 and is headquartered in Norcross, Georgia. As of February 12, 2024, McGee Equipment Company operates as a subsidiary of Atlanta Forklifts, Inc. |
| 2/12/2024 | Sawquip International Inc. | 4170083 Canada Inc | NA | NA | NA | Sawquip International Inc. manufactures sawmill and mining equipment. The company was founded in 1988 and is based in Lanoraie, Canada. As of February 12, 2024, Sawquip International Inc. operates as a subsidiary of 4170083 Canada Inc. |
| 2/7/2024 | IngéNia Technologies Inc. | SPX Technologies, Inc. | $346MM | NA | NA | IngéNia Technologies Inc. specializes in the design and manufacture of high-quality air handling units. The company was founded in 2004 and is based in Mirabel, Canada. As of February 7, 2024, IngéNia Technologies Inc. operates as a subsidiary of SPX Technologies, Inc. |

*Note: Data from S&P Capital IQ and Company SEC filings.*

# Selected Advanced Manufacturing Transactions

| Date | Target | Acquirer / Sponsor(s) | Deal Size | EV/LTM Revenue | EV / LTM EBITDA | Target Business Description |
|---|---|---|---|---|---|---|
| 2/6/2024 | AVI International, Inc. | ALDRICH Reciprocating Pumps | NA | NA | NA | AVI International, Inc. manufactures and repairs pumps, motors, and mag drives for the electric utility, sewage treatment, and general industrial pump and motor users industry. The company is based in Torrington, Connecticut. As of February 6, 2024, AVI International, Inc. operates as a subsidiary of ALDRICH Reciprocating Pumps. |
| 2/6/2024 | CNCNorth, Inc. | UVA LIDKÖPING AB | NA | NA | NA | CNCNorth, Inc. designs and manufactures new grinding equipment for the bearing, automotive, military, and aerospace manufacturing markets. The company was incorporated in 2005 and is based in Claremont, New Hampshire. As of February 5, 2024, CNCNorth, Inc. operates as a subsidiary of UVA LIDKÖPING AB. |
| 2/6/2024 | General Body Manufacturing Co. | Reading Truck Group, LLC | NA | NA | NA | General Body Manufacturing Co., doing business as General Truck Body, designs and manufactures custom truck bodies for transportation and service industries. The company offers truck bodies, which include flatbeds, goosenecks, dumps, hoists, service bodies, cranes/buckets, lift-gates, truck accessories, and various van shelving and toolboxes. It also provides truck service bodies for oil well services, such as control center/data vans, fluid/chemical lab vehicles, control cabins, chemical blending units, and wire-line vehicles; medical, dental, and veterinary vehicles; mobile government/military command and control center vehicles; environmental services vehicles, including medical waste and air quality vehicles; and emergency response vans and specialty vehicles. In addition, the company offers repair and service work solutions. General Body Manufacturing Co. was founded in 1919 and is headquartered in Houston, Texas. As of February 6, 2024, General Body Manufacturing Co. operates as a subsidiary of Reading Truck Group, LLC. |
| 2/6/2024 | Willick Engineering Co., Inc. | Pinnacle X-Ray Solutions, LLC | NA | NA | NA | Willick Engineering Co., Inc. provides x-ray systems, real-time inspection services, and professional radiographic systems repair and support services. The company was founded in 1965 and is based in Santa Fe Springs, California. As of February 6, 2024, Willick Engineering Co., Inc. operates as a subsidiary of Pinnacle X-Ray Solutions, LLC. |
| 2/5/2024 | CR Holland Crane Service | Barnhart Crane & Rigging Co. | NA | NA | NA | CR Holland Crane Service provides customized equipment for moving heavy objects on the ground. It offers crane rental service, heavy hauling, custom rigging, and storage. The company was founded in 2000 and is headquartered in Forest City, Iowa. As of February 5, 2024, CR Holland Crane Service operates as a subsidiary of Barnhart Crane & Rigging Co. |
| 2/5/2024 | Kinergy Corporation | Carrier Process Equipment Group Inc. | NA | NA | NA | Kinergy Corporation designs and manufactures vibrating equipment solutions including conveyors, feeders, bin activators, and screeners. The company was founded in 1978 and is based in Louisville, Kentucky. As of February 5, 2024, Kinergy Corporation operates as a subsidiary of Carrier Process Equipment Group Inc. |
| 2/2/2024 | Branch Environmental Corp | MIXER DIRECT, INC. | NA | NA | NA | Branch Environmental Corp designs, engineers, sources, and delivers air and water purification systems. The company was founded in 1988 and is based in Somerville, New Jersey. As of February 2, 2024, Branch Environmental Corp operates as a subsidiary of MIXER DIRECT, INC. |
| 2/1/2024 | Extract Production Services, LLC | NOV Inc. | NA | NA | NA | Extract Production Services, LLC manufactures electrical submersible pumps for oil and gas industry. The company also provides artificial lift services. The company's products include, motors, pumps, gas seperators, protectors, variable speed drives, and electrical submersible pump cable. The company was incorporated in 2017 and is based in Tulsa, Oklahoma. As per the transaction announced on February 1, 2024, Extract Production Services, LLC operates as a subsidiary of NOV Inc. |
| 1/31/2024 | Data Science Automation, Inc. | PACIV, Inc. | NA | NA | NA | Data Science Automation, Inc. operates an automation engineering services and training company. the company was founded in 1993 and is based in McMurray, Pennsylvania. As of January 31, 2024, Data Science Automation, Inc. operates as a subsidiary of PACIV, Inc. |
| 1/29/2024 | Collins Bus Corporation | Forest River Bus, LLC | $303MM | NA | NA | Collins Bus Corporation manufactures and markets school buses. The company offers sales, support, and maintenance services; and various replacement parts. It provides its products through a network of distributors and dealers in the United States and Canada. The company was founded in 1967 and is based in South Hutchinson, Kansas. As of January 26, 2024, Collins Bus Corporation operates as a subsidiary of Forest River Bus, LLC |
| 1/29/2024 | Gilmore Group | Control Devices, LLC | NA | NA | NA | Gilmore Group manufactures severe service valves and flow control products. The company was founded in 1963 and is based in Houston, Texas. As of January 26, 2024, Gilmore Group operates as a subsidiary of Control Devices, LLC. |
| 1/25/2024 | Lean Manufacturing Products, Inc. | SOLV Metals, LLC | NA | NA | NA | Lean Manufacturing Products, Inc. produces and manufactures material handling and storage products. The company was founded in 2016 and is headquartered in Waukesha, Wisconsin. As per the transaction announced on January 25, 2024, Lean Manufacturing Products, Inc. operates as a subsidiary of SOLV Metals, LLC. |
| 1/25/2024 | Merrill Technologies Group, Inc. | Arlington Management Employees, LLC | NA | NA | NA | Merrill Technologies Group, Inc. provides contract manufacturing services for the defense, aerospace, heavy equipment, automation, and energy markets. The company provides machining services; metal fabrication and welding services; automation, system integration, and machine design for machining, assembly, and testing; and aerospace manufacturing and maintenance activities. Its precision machining services include grinding, milling, turning, solid model machining, electrical discharge machining, water jet cutting, industrial painting, inspection, testing, validation, and large part machining; and metal fabrication and welding services comprise certifications, training, cutting, forming, straightening, stress relief, abrasive blasting, painting, finishing, delivery, precision, and welding processes. The company manufactures, repairs, overhauls, and tests aircraft components. The company caters to automotive, aerospace/aviation, chemical processing, construction, defense, energy, food systems, machine build, machine tool, mining, plastic injection, prototype, rail systems, and wind power industries. Merrill Technologies Group, Inc. was formerly known as Merrill Tool Holding Company. Merrill Technologies Group, Inc. was founded in 1968 and is based in Saginaw, Michigan. |

*Note: Data from S&P Capital IQ and Company SEC filings.*

# Selected Advanced Manufacturing Transactions

| Date | Target | Acquirer / Sponsor(s) | Deal Size | EV/LTM Revenue | EV / LTM EBITDA | Target Business Description |
|---|---|---|---|---|---|---|
| 1/25/2024 | Wisconsin Metal Parts, Inc. | SOLV Metals, LLC | NA | NA | NA | Wisconsin Metal Parts, Inc. manufactures CNC machined parts, sheet metal fabrication, metal stamping prototypes, fiber laser cutting, tools, and dies. The company was founded in 1988 and is based in Waukesha, Wisconsin. As of January 25, 2024, Wisconsin Metal Parts, Inc. operates as a subsidiary of SOLV Metals, LLC. |
| 1/24/2024 | KWS Manufacturing Company, Ltd. | Kadant Inc. | $81MM | 1.8x | 9.1x | KWS Manufacturing Company, Ltd. designs and manufactures conveying equipment for the bulk material handling industry. It provides screw conveyors, shaftless screw conveyors, belt conveyors, bucket elevators, vertical screw conveyors, screw feeders and live bottoms, and drag conveyors. The company also offers engineering, process improvement, troubleshooting, and plant survey services. It serves end users, power transmission distributors, engineering firms, system suppliers, and original equipment manufacturers; and aggregate, brewing, cement, chemical, feed and grain, food, gypsum, ice handling, mining and metals, power, pulp and paper, poultry processing, rendering, and wastewater treatment industries in the United States and internationally. The company was founded in 1972 and is based in Burleson, Texas. As of January 24, 2024, Kws Manufacturing Company, Ltd. operates as a subsidiary of Kadant Inc. |
| 1/23/2024 | Ice House America, LLC | Fort Point Capital, LLC | NA | NA | NA | Ice House America, LLC engages in the manufacture and distribution of ice vending machines and ice vending huts in the United States and internationally. It offers mobile ice vending and mini ice vending machines. The company sells its products through dealers in the United States, the Caribbean, Australia, Brazil, and Nigeria. Ice House America, LLC was incorporated in 2003 and is based in Moultrie, Georgia. |
| 1/22/2024 | Integrated Warehouse Solutions West, Inc. | ASSA ABLOY AB (publ) | NA | NA | NA | Integrated Warehouse Solutions West, Inc. manufactures and markets material handling solutions. The company offers dock and warehouse equipment that include steel and aluminum dock boards and plates, edge of dock levelers, portable yard ramps, mezzanines, carts, and warehouse safety equipment; loading dock equipment, such as pit-styles, vertical storing and telescoping lip dock levelers, vehicle restraints, dock lifts and in-plant lifts, truck levelers, dock seals and shelters, and accessories; and material handling equipment, including drum handling equipment, hand trucks and carts, and lift equipment, as well as associated dock and material handling products. It offers products through sales representatives. The company is based in Fort Worth, Texas. As of January 22, 2024, Integrated Warehouse Solutions West, Inc. operates as a subsidiary of ASSA ABLOY AB (publ). |
| 1/2/2024 | PGT Innovations, Inc. | MITER Brands | $3,164MM | 2.1x | 11.2x | PGT Innovations, Inc., together with its subsidiaries manufactures and supplies impact-resistant aluminum frame windows and doors in the United States and internationally. The company provides heavy-duty aluminum or vinyl frames with laminated glass to provide protection from hurricane-force winds and wind-borne debris. |
| 12/21/2023 | Triumph Airborne Structures/Triumph Accessory Services-Grand Prairie/Triumph Aviation Services Asia | AAR Corp. | $725MM | NA | NA | Triumph Airborne Structures/Triumph Accessory Services-Grand Prairie/Triumph Aviation Services Asia represents the combined operations of Triumph Airborne Structures, Inc.; Triumph Accessory Services - Grand Prairie, Inc.; and Triumph Aviation Services Asia, Ltd. Triumph Airborne Structures, Inc. engages in the maintenance, repair, and overhaul of aero structures. |
| 12/20/2023 | Bourgault Industries Ltd. | Salford Group, Inc. | $477MM | NA | NA | Bourgault Industries Ltd. is a global manufacturer of seeding and tillage equipment. Bourgault's focus is on designing, manufacturing, and distributing high-quality and durable farm equipment that meets the needs of their customers. |
| 12/15/2023 | STANLEY Infrastructure, LLC | Epiroc AB (publ) | $760MM | 1.4x | NA | Stanley Infrastructure, LLC engages in the manufacture of handheld hydraulic tools. Its products are used in light construction, demolition, recycling, mining, electric utility, municipal water, railroad maintenance of way, underwater, search and rescue, and rail signal, communications, and catenary. |
| 12/4/2023 | Cooltera Limited | Vertiv Holdings Co | NA | NA | NA | Cooltera Limited operates as a Designer and manufacturer of liquid cooling systems intended for computer data centers. The company specializes in engineering and making server liquid cooling distributors, water-cooling backplane cooling controllers, and indirect natural air cooling systems. |
| 11/27/2023 | Commercial Aviation Solutions business of L3Harris Technologies, Inc. | TJC LP; Resolute Fund VI, L.P. | $800MM | NA | NA | Commercial Aviation Solutions business of L3Harris Technologies, Inc. comprises mission-critical solutions for government and commercial customers.Provider of aviation services based in the United States. The company offers pilot training, flight data analytics, avionics, and advanced air mobility products and services, among other capabilities. |

| | EV / LTM Revenue | EV / LTM EBITDA |
|---|---|---|
| **Mean** | **1.8x** | **9.7x** |
| **Median** | **1.7x** | **9.1x** |

*Note: Data from S&P Capital IQ and Company SEC filings.*

# Upcoming Advanced Manufacturing Conferences

## June & July 2024

### Rapid + TCT 2024
June 25th – June 27th
Los Angeles, CA

The three-day event will feature the latest in 3D-printing technology from the industry's leading product and service providers, a full schedule of speakers including a keynote series, and over 125 hours of educational content. The expansive show floor will showcase over 400 exhibiting companies' latest advancements. Known worldwide as North America's largest additive manufacturing and industrial 3D printing event, RAPID + TCT provides everything you need to know about the latest 3D-technologies, all under one roof.

Link to event here

### Farnborough International Airshow
July 22nd - July 26th
Farnborough, UK

Returning in July of 2024, the ground-breaking airshow will see global aerospace and aviation leaders return to Hampshire, United Kingdom, for unrivalled opportunities to discover the latest pioneering technology and engineering, announce historic partnerships, build connections and work towards the cumulative sustainable aerospace vision as an industry. The international trade show is put together every two years by Farnborough International Ltd. and runs for five days. Programming takes place at the Farnborough International Exhibition & Conference Centre, which lies roughly 31 miles south-west of London.

Link to event here

## July & August 2024

### ASCEND 2024
July 30th - August 1st
Las Vegas, NV

ASCEND connects the civil, commercial, and national security space sectors, along with adjacent industries, to embrace the opportunities and address the challenges that come with increased activity in space. Building a sustainable off-world future requires long-term thinking. Strategic planning, innovation, scientific exploration, and effective regulations and standards will help us preserve space for future generations. 2024 ASCEND, hosted 30 July – 1 August in Las Vegas, will enable the technical exchanges, debates, and collaboration that will help forge a sustainable off-world future for all.

Link to event here

### Space & Missile Defense Symposium
August 6th - August 8th
Huntsville, AL

The Space and Missile Defense Symposium is the leading educational, professional development and networking event in the space and missile defense community. The symposium is widely attended by leaders and professionals from the United States and our allies around the world. The event will be hosted at the Von Braun Center in Huntsville, Alabama, and will feature the top government and industry leaders in the space and missile defense sector. The event will include technology tracks, discussion panels, and product demonstrations from several industry leaders.

Link to event here

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