

2022

Machinery Manufacturing M&A Report

CURRENT AND FUTURE DIRECTION OF 15 SUBSECTORS

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Industry Definition

The Machinery Manufacturing sector's numerous applications range from tractors and semiconductor machinery to printers and wind turbines. While diverse in purposes and operations, many of these seemingly different machinery manufacturers have been affected by similar disruptions and successes and have recently utilized mergers and acquisitions (M&A) in comparable ways. CEOs have been grappling with a variety of trends, but M&A activity is one of the common threads amongst many differences. (See *Appendix A for the complete list of industry subsectors.*)

Three Key Trends Influencing Machinery Manufacturing

As *Appendix B1* shows, the Machinery Manufacturing industry has recently been affected most significantly by three trends: (1) unpredictable fluctuations in demand, (2) a heightened domestic and international competitive landscape, and (3) increasing input costs. With the US now in a recession, companies well positioned to navigate these trends should outperform competition. As we will share in this briefing, many recent mergers and acquisitions have been pursued by machinery manufacturers for the purpose of strengthening one's strategy in light of these trends.

How M&A is Helping Executives Navigate Industry Trends

Leading up to the end of 2019, the Machinery Manufacturing sector had M&A activity that was noticeably driven by acquisitions of technological advancements. Larger companies were buying smaller industry participants to gain access to the technological processes. This M&A driver still remains a factor, but now M&A is in greater demand in helping CEOs navigate the three important trends introduced above.

These issues have proven more difficult for some subsectors than others, and even provided opportunities for a select few, but all the while they have spurred M&A activity across the industry. M&A has been driven by companies' efforts to keep revenue growth strong by diversifying product offerings when the core business's demand driver becomes volatile. Acquisitions have also been a useful tool for CEOs looking to gain economies of scale to combat increasing input costs and strengthen market position amidst increasing international competition.

The most widespread trend affecting the Machinery Manufacturing sector is unpredictable demand. Many of the subsectors have very different

demand drivers and customer bases. For example, the Construction Machinery and HVAC & Commercial Refrigeration Equipment Manufacturing subsectors are very closely tied with macroeconomic conditions and consumer confidence. This differs significantly for the Tractor & Agricultural Machinery and Mining and Oil & Gas Machinery Manufacturing subsectors that experience demand fluctuations as a result of unpredictable commodity prices such as crops, oil, and other natural resources. Regardless of an industry's primary demand drivers, uncertainty is likely to continue to create challenges in the upcoming year.

Industry executives are looking for solutions, one of which has been product extension M&As (*See Glossary in Appendix E for definitions*) which are aimed at diversifying product offerings in attempt to stabilize demand. One recent example of product extension M&A is Ringfeder Power Transmission Corp.'s acquisition of Carlyle Johnson Machine Company in December 2021 for \$16.5MM. Ringfeder provides shock absorbing and keyless connection technologies and generates an estimated \$146MM in revenue annually. Carlyle Johnson designs, manufactures, and sells clutches and brakes. Ringfeder sought out the acquisition of Carlyle to expand into the clutch and brake manufacturing market. Strategic acquisitions such as this have been commonplace as industry participants look to soften the blow of steep changes in demand that have become an increasingly prevalent obstacle for executives to navigate.

Another important trend currently affecting the Machinery Manufacturing industry across many subsectors, is an increase in competitive forces from foreign companies. Steadily increasing imports have been largely driven by cheaper labor, less regulations, and more efficient supply chains in countries like China, Taiwan, and India. According to IBIS World, international producers account for roughly 54.4% of domestic demand in the Power Tools & General Machinery Manufacturing subsector. This figure is concerning for domestic manufacturers as this is expected to increase through 2027. The Woodworking Machinery subsector has also experienced significant international competition with foreign companies fulfilling 73.4% of US demand. Although this has been a steady figure for the Woodworking Machinery subsector, it still leaves very little room for growth amongst the smaller domestic industry participants. Market participants have taken notice of this growing threat and some CEOs have reacted by initiating consolidation efforts to bolster market positions in anticipation of increasing foreign competition.

One example of consolidation acquisitions is IDEX Corporation's acquisition of Kz Co. that closed in May of 2022 and had a transaction value of \$120MM. Both of these companies produce valves and fluid controlling machinery among other operations. IDEX Corporation is a much larger market participant, generating \$2.6Bn in annual revenue, and produces a wider range of products to a broad range of industries including agriculture, general industrial manufacturing, food and beverage production, water and wastewater management, and energy. Kz Co. has a narrower focus on developing its fluid controlling machinery for the agricultural industries and generated roughly \$25MM in annual revenue prior to the acquisition.

This acquisition was made to expand IDEX's market share and strengthen operations amidst rising input costs and increasing competition. Increases in the cost of essential input items such as energy, raw materials, and labor are likely to continue to put added pressure on companies' profit margins which is worrisome especially considering the increasingly likely recession. Consolidation M&As allow companies to expand and improve operations to gain economies of scale which has been an important strategy for industries facing these rising costs, and even more so during a period of heightened price-based competition. More broadly, nine of the fifteen subsectors within Machinery Manufacturing have indicated they are experiencing increasing import threats due to more affordable machinery produced abroad, among other concerning trends, and many have combatted it through acquisitions.

Industry M&A Volume, Valuation Multiples, and Strategies

The Machinery Manufacturing sector has seen an active M&A market in recent years, reacting to different market trends and macroeconomic forces. There were 353 M&A transactions in the last three years (ending June 30th, 2022, with US based buyers only) driven by a mix of financial and strategic buyers. The Copier & Optical Machinery Manufacturing subsector leads the M&A count with 123 transactions in this three-year time frame. The next most active market during this time frame was Industrial Machinery Manufacturing (which includes Woodworking Machinery, Plastic and Rubber Machinery, Semiconductor Machinery, and Printing, Paper, Food, Textile & Other Machinery Manufacturing), followed closely by Metalworking Machinery Manufacturing, each with 51 and 34 transactions, respectively.

The average M&A transaction multiple for the Machinery Manufacturing industry is currently 6.7x times EBITDA with the HVAC

equipment manufacturing subsector having the highest average multiple of 7.9x times EBITDA. (See *Appendix C* for a sample of subsector multiples)

The most common motivations for acquisitions in order of frequency were Overcapacity and Market Extension (See *Glossary in Appendix E* for definitions). A clear example of an Overcapacity M&A is the September 2021 acquisition made by The Middleby Corporation which manufactures food processing, residential culinary, and food service equipment and generates roughly \$3.49Bn in revenue. Middleby acquired Spenuzza Inc. which generated roughly \$40MM in revenue pre-acquisition. Both of these companies are engaged in the manufacturing of industrial culinary machinery such as gas grills, fryers, broilers, and electric stove-tops and ovens. Both have global operations and customer bases which further indicates that Middleby Corporation pursued this acquisition to eliminate a healthy competitor and grow global market share.

Market Extension M&A is driven by the strategic objective to expand the geographical reach of the company through acquisitions. As seen in *Appendix D*, Alabama-based ADTRAN, Inc. completed its acquisition of ADVA Optical Networking SE, a German based company, on July 8th, 2022. Both of these companies offer network and communication equipment with very similar product offerings such as fiber optic cables, transceivers, fixed wireless access platforms, and other network related products to institutional and consumer markets. The similarities in these companies' product portfolios signal that this acquisition was made to allow ADTRAN to expand its geographic footprint to Germany and the rest of Europe.

These two categorizations of M&A have been prevalent in recent years, and examples of each are included in *Appendix D* which contains nearly all transactions from the last twelve months in Machinery Manufacturing industry with US-based acquirers.

Conclusion

M&A can be a wise strategic tool for acquirers with a healthy core business that can capitalize on key trends and increase shareholder value by improving profits. *Appendix A* shows the profit margins of the many sub-industries. If your company experiences below industry average profit margins, acquisitions of higher margined businesses may be a solution. In a looming recession, if you are a business owner that has

been contemplating an exit, you should act before the market shifts to favor buyers. Preparation steps include:

1. Receive a fair market valuation to verify assumptions of company's worth.
2. Evaluate timing of a transaction which takes into account, among other things, future financial projections.
3. Evaluate readiness of being able to endure through an acquirer's due diligence process.

If you are the buyer, taking steps now in what we call the Preparation Phase is advisable.

1. Evaluate your core business and its ability to withstand a recession that could last 12-18 months.
2. Revisit the composition of internal and external resources, acknowledging that missteps often occur in due diligence and integration planning and execution. Under-resourcing or overestimating your internal team's competencies in these areas can result in risking ROI from your acquisitions.
3. Revisit assumptions on which markets you prioritize to use M&A to grow. Are your assumptions still valid on those markets? Is the priority of markets in which to acquire still in the right sequence?
4. Revisit your target list. Do you have enough targets? Often, we find that buyers have a short list of 20-40 targets when in fact they should be considering 50-100+ per end market.
5. Design unique approaches to the top prospect targets. This is often where acquirers stumble, costing a loss of time and inefficiencies that keep a motivated acquirer from being able to move into a transaction phase with a motivated seller.

Watermark Advisors, a 20-year-old FINRA member M&A advisory firm, serves clients in all three phases of M&A: Preparation Phase, Transaction Phase, & Integration Phase through a unique approach called “The M&A Bridge.” If you are contemplating an M&A transaction, please contact Hagen Rogers, Executive Managing Director at 864-527-5960 to learn more about Watermark’s unique collaborative, comprehensive approach to M&A services.



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Appendix A: \$429Bn US Machinery Manufacturing Industry Financial Performance Overview

Industry	Industry Revenue (\$ in Bn)	Historical Annual Growth '16 – '21	Projected Annual Growth '21 – '26	EBIT Margin	Industry Revenue Breakdown
1. Power Tools & Other General Purpose Machinery Manufacturing *	\$55.6	0.7%	0.5%	4.3%	All Other General-Purpose Machinery-38.4%; Welding and Soldering Equipment-10.7%; Fluid-Power Cylinders, Pumps, Motors, and Actuators-22.1%; Packaging Machinery-16.1%; Power-Driven Hand Tools-7.6%; Industrial Furnaces and Ovens-5.1%
2. Heating & Air Conditioning Equipment Manufacturing	\$50.8	1.4%	2.2%	6.9%	Air Conditioning, Warm Air Heating, and Refrigeration Equipment-58.2%; Unitary Air Conditioners-17.4%; Heating Equipment-10.3%; Air Purification Equipment-6.5%; Industrial and Commercial Fans and Blowers-7.6%
3. Tractors & Agricultural Machinery Manufacturing	\$41.6	3.6%	0.0%	3.7%	Tractors and Attachments-26.1%; Harvesting Machinery-9.2%; Consumer Lawn, Garden, and Snow Equipment-23.6%; Dairy Farm Equipment-6.5%; Planting, Seeding, and Fertilizing Machinery-2.9%; Other-31.7%
4. Engine & Turbine Manufacturing *	\$41.3	-3.1%	1.3%	6.8%	Diesel and Semidiesel Engines-20%; Turbines and Turbine Generator Sets-25.7%; Mechanical Power Transmission Equipment-11.7%; Speed Changers, Drives, and Gears-8.4%; Natural Gas Engines and Other-34.2%
5. Construction Machinery Manufacturing *	\$37.3	0.9%	0.1%	8.4%	Power Cranes, Draglines, and Shovels-35.2%; Other Construction Machinery and Equipment-19.8%; Tractor Shovel Loaders, Dozers, and Other Tractors-23.3%; Parts for Other Machinery-10.3%; Graders, Maintainers, and Mixers-11.4%
6. Metalworking Machinery Manufacturing *	\$33.9	-1.6%	0.5%	6.6%	Special Tools, Dies, Jigs, and Fixtures-31.5%; Metal-Cutting and Machine-Forming Machinery-23.7%; Industrial Molds-15.5%; Cutting Tool and Machine Tool Accessories-17.9%; Rolling Mill Machinery and Other Products-11.4%
7. Forklift & Conveyor Manufacturing	\$33.8	1.4%	2.5%	4.8%	Forklifts and Industrial Trucks, Trailers, and Stackers-29.1%; Conveyors and Conveying Equipment-39.8%; Overhead Cranes, Hoists, and Monorail Systems-25.7%; Elevators and Escalators-5.4%

Source: IBIS World

*Indicates 2022 data ('17-'22 Historical and '22-'27 Projected growth rates)

Appendix A: \$429Bn US Machinery Manufacturing Industry Financial Performance Overview

Industry	Industry Revenue (\$ in Bn)	Historical Annual Growth '16 - '21	Projected Annual Growth '21 - '26	EBIT Margin	Industry Revenue Breakdown
8. Pump & Compressor Manufacturing *	\$29.1	-0.9%	1.5%	5.7%	Air and Gas Compressors-34.1%; Industrial Pumps-23.3%; Other Pumps and Equipment-42.6%
9. Copier & Optical Machinery Manufacturing *	\$24.8	-3.0%	2.9%	4.8%	Optical Instrument and Lens Manufacturing-22.3%; Photographic and Photocopying Equipment Manufacturing-3.6%; Commercial Laundry, Coin Operated Merchandising-3.5%; Commercial and Industrial Vacuum Cleaners and Automotive Equipment-3.7%; Electronic Teaching Machines-11%; All Other Machinery-30.9%
10. Printing, Paper, Food, Textile & Other Machinery Manufacturing	\$23.0	-3.0%	3.0%	4.9%	All Other Industrial Machinery-29.4%; Food Product Machinery-34%; Printing Machinery and Equipment-15.1%; Paper Industry Machinery-15.9%; Textile Machinery-5.6%
11. Semiconductor Machinery Manufacturing	\$21.3	2.1%	4.2%	5.6%	Wafer Equipment-Chemical and Physical Vapor Deposition-44.9%; Wafer Equipment-Plasma and Wet Etch-25.9%; Parts for Semiconductor Manufacturing Machinery and Other Products-19.7%; Ion Implantation Equipment-9.5%
12. Wind Turbine Manufacturing	\$16.5	12.9%	1.8%	4.2%	Nacelles-49.3%; Rotors and Hubs-28.9%; Towers-21.8%
13. Mining, Oil & Gas Machinery Manufacturing *	\$15.7	-1.0%	3.0%	5.2%	Mining Machinery-30.8%; Rotary Oil and Gas Field Drilling Machinery and Equipment-25.2%; Oil and Gas Field Production Machinery and Equipment Excluding Pumps-25.1%; All Other Including Portable Drilling Rigs, Well Surveying Machinery-18.9%
14. Plastics & Rubber Machinery Manufacturing	\$3.4	-1.8%	2.6%	4.6%	Plastic Molding Machinery-34.2%; Thermoforming Machinery-19%; Plastic Screw Extrusion Molding Machinery-12.4%; Rubber-working Machinery and Equipment-9.9%; Other Machinery for Working Plastics- 24.5%
15. Woodworking Machinery Manufacturing	\$0.8	-0.6%	-0.8%	4.9%	Sawmill Equipment-52.1%; Lathes, Planers, Molders, and Other Equipment-20.5%; Parts and Accessories-19.6%; Home Workshop Equipment-7.8%

Source: IBIS World

*Indicates 2022 data ('17-'22 Historical and '22-'27 Projected growth rates)

Appendix B1: Summary of Subsector Dominant Trends

Key	Number of Times Referenced
Demand Drivers or Changes	43
International and Domestic Competition	11
Changes in input costs	9
M&A References	6
R&D and Automation	6

Source: IBIS World

Appendix B2: Subsector Dominant Trends

Industry	Key trends				
1. Power Tools & Other General Purpose Machinery Manufacturing	The strength of the construction sector has mitigated the effects of lower demand	Industry operators are projected to experience solid demand from downstream manufacturing sectors	Moderate industry revenue growth will likely be met with an expansion in production	Longer-term trends indicate that price-based import competition has constrained profit growth	Imports have strongly contended with domestic operators during the period
2. Heating & Air Conditioning Equipment Manufacturing	Consistent disposable income growth has made consumers more willing to spend on remodeling projects	Housing construction for single and multifamily homes is expected to increase	Concerns about energy consumption and the environment will likely continue to aid the retrofit market	Industry revenue growth has been tempered by a widening trade gap	An anticipated push for innovation is expected to lead to an increase in wages
3. Tractors & Agricultural Machinery Manufacturing	Demand from domestic end users has fallen while demand from foreign markets has grown	Increases in crop prices have helped demand from downstream markets recover	Profit has been stifled by volatile input prices, namely of steel, during the period	Manufacturers are expected to continue increasing production line automation	This industry has benefited from ongoing technological changes in its product segments
4. Engine & Turbine Manufacturing	Severe fluctuations in commodity prices have offset export growth	China in particular has been an increasingly prominent source of demand for industrial turbines	Commodity price volatility and decreases in energy market demand have constrained profit growth	Private investment in industrial equipment and machinery is expected to increase	Foreign markets rely heavily on domestic industry operators since they are the sole source for certain diesel engines
5. Construction Machinery Manufacturing	Average profitability has increased over the past five years, largely as a result of increased sales volume in 2021	US construction markets are expected to strengthen, benefiting the industry	Imports are expected to increase over the next five years, despite the depreciating US dollar	The larger companies in the industry are expected to continue acquiring smaller operators	The industry has experienced significant consolidation activity during the period
6. Metalworking Machinery Manufacturing	Demand from SUV and light truck manufacturing has decreased similarly to demand from car and automobile manufacturing	Defense and aerospace manufacturing are expected to provide a steady source of demand	Increased demand for machines used for extraction has helped support industry revenue	Rising competition from affordable imports and volatile input prices are expected to hinder profit growth	Industry operators have reduced labor expenses in response to rapidly declining revenue

Appendix B2: Subsector Dominant Trends

7. Forklift & Conveyor Manufacturing	Weak commodity prices led to choppy performance in mining and natural gas extraction	Trade frictions between the US and China have resulted in a further reduction in exports	The volatility of oil and steel prices in recent years has weighed on demand from industrial markets	US companies are devoting significant resources to improving inventory management	Technological innovation is projected to keep downstream demand high over the next five years
8. Pump & Compressor Manufacturing *	International trade is an important part of this industry, with exports representing 30.3% of total industry revenue in 2022	When revenue in the mining, construction and utility sectors grows fast enough, demand for pumps and compressors rises	Industry revenue is driven largely by the performance of the mining, manufacturing, and utility sectors	Industry revenue is expected to grow, driven by rising demand from downstream markets	Large operators have increasingly invested in smart pumping systems
9. Copier & Optical Machinery Manufacturing	Establishment restrictions are expected to ease, and work in all sectors of the economy is anticipated to resume to normal production capacities	Catalysts for industry demand will likely include corporate profit and aggregate private investment	Industry products have suffered from import penetration and a rising trend toward digital cameras and video recorders	Operators will likely continue to offshore factories to emerging markets to capitalize on lower operating costs	Rising merger and acquisition activity has resulted in consolidation within the industry
10. Printing, Paper, Food, Textile & Other Machinery Manufacturing	Demand for manufacturing machinery is sensitive to industrial production levels and the value of the US dollar	Increased sales of high-margin products helped support industry profit midway through the current period and will likely help bolster margins over the coming years	The value of imports is projected to increase over the next five years	Manufacturers will have to try to increase profit by trying to achieve lower operating costs	Rising input costs had placed downward pressure on industry profit over the past five years
11. Semiconductor Machinery Manufacturing	Industry exports are expected to grow moderately during the outlook period, rising in line with expanded international demand	Growth in exports has been driven by rapid growth in consumer electronic industries in Asia, for which semiconductor manufacturing is required	Per capita disposable income is expected to increase over the five years to 2026, enabling a greater volume of consumer electronics purchases	Increasing antitrust regulations have made industry consolidation more challenging, resulting in many acquisitions being canceled recently	Many industry operators made strategic acquisitions to expand their product lines or acquire new technology

Appendix B2: Subsector Dominant Trends

12. Wind Turbine Manufacturing	The industry is driven largely by investment tax credits and other government incentives	In 2021 and subsequent years, the regulatory outlook of the industry is positive	Wind power is expected to become increasingly viable without public incentives	Operators will encounter strong competition from abroad for offshore wind projects	The rapid evolution of wind turbines and potential rise of offshore wind over the coming years has led to mergers
13. Mining, Oil & Gas Machinery Manufacturing	Unstable commodity prices have disrupted industry revenue and profit	Rising oil prices are expected to have a positive impact on the industry	The US drilling rig count is projected to stabilize	Price-based competition will likely temper profit	Growing demand for machinery and equipment will stimulate further exploration activity
14. Plastics & Rubber Machinery Manufacturing	Export sales consistently account for a major portion of industry revenue and are expected to continue doing so	Volatility in commodity prices could favor companies that best manage their purchase contracts	Industry operators have come under pressure as downstream manufacturers have increasingly offshored facilities	Rising raw material prices and substantial business disruptions have largely constrained industry profit	Volatile raw material costs for downstream industries have weighed on revenue
15. Woodworking Machinery Manufacturing	The majority of industry demand is derived from broader activity in residential and nonresidential construction markets	Rising per capita disposable income largely supported the sale of home workshop equipment	Nonresidential markets will largely support industry growth as housing demand slows	Import competition has been intense during the period and will remain an ongoing challenge for industry operators	Many operators have moved production overseas to leverage lower labor costs

Source: IBIS World

Appendix C: Average M&A EBITDA Multiples for Eight Subsectors

Sector	Average EBITDA Valuation Multiple	Time Frame Observed
Tractor and Agricultural Machinery Manufacturing	6.0x	2019-2021
Mining and Oil and Gas Field Machinery Manufacturing	6.0x	2018-2021
Commercial and Service Industry Machinery	7.5x	2018-2020
Industrial Machinery Manufacturing	7.5x	2021-2022
Metalworking Machinery Manufacturing	6.2x	2021-2022
Power Tools and General Machinery Manufacturing	6.2x	2020-2021
Forklift & Conveyor Equipment Manufacturing	6.7x	2020-2021
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment	7.9x	2019-2021

Source: GF Data - Derived from a sample of Private Equity driven transactions

Appendix D: List of Machinery Manufacturing M&A Transactions in the Last Twelve Months

M&A Closed Date	Buyer	Geographic Location - Buyer	Business Description - Buyers	Target	Geographic Location - Target	Business Description - Target	Total Transaction Value (\$USDmm, Historical rate)	Implied Enterprise Value/Revenues (x)
Pending	Ingersoll Rand Inc. (NYSE:IR)	North Carolina	Ingersoll Rand Inc. provides various mission-critical air, fluid, energy, specialty vehicle and medical technologies.	SPX FLOW, Inc.	North Carolina	SPX FLOW, Inc., together with its subsidiaries, researches, designs, develops, delivers, and services process technology solutions.	4,080.90	2.51
7/28/2022	Pentair Commercial Ice LLC	Delaware	Pentair Commercial Ice LLC manufactures ice machines and related components	Manitowoc Ice, Inc.	Wisconsin	Manitowoc Ice, Inc. manufactures ice producing machines and components.	1,600.00	5.19
7/8/2022	ADTRAN, Inc. (NasdaqGS:ADTN)	Alabama	ADTRAN, Inc. provides networking and communications platforms, software, and services.	ADVA Optical Networking SE (XTRA:ADV)	Germany	ADVA Optical Networking SE engages in the development, manufacture, and sale of optical and Ethernet-based networking solutions.	1,167.40	1.56
5/3/2022	CECO Environmental Corp. (NasdaqGS:CECE)	Texas	CECO Environmental Corp. provides industrial air quality and fluid handling systems worldwide.	Compass Water Solutions, Inc.	California	Compass Water Solutions, Inc. designs and manufactures water treatment, separation, and filtration equipment.	12.5	1.14
5/2/2022	IDEX Corporation (NYSE:IEX)	Illinois	IDEX Corporation, together with its subsidiaries, provides applied solutions worldwide.	Kz Co.	Nebraska	Kz Co., doing business as KZValve, manufactures electric valves and controllers used primarily in the agriculture sector.	120	4.29
4/8/2022	Cummins Inc. (NYSE:CMI)	Indiana	Cummins Inc. designs, manufactures, distributes, and services diesel and natural gas engines, electric and hybrid powertrains, and related components.	Jacobs Vehicle Systems, Inc.	Connecticut	Jacobs Vehicle Systems, Inc. designs, develops, and manufactures commercial vehicle retarding systems and valve actuation technologies.	346	1.78
4/7/2022	Otis Worldwide Corporation (NYSE:OTIS)	Connecticut	Otis Worldwide Corporation manufactures, installs, and services elevators and escalators.	Zardoya Otis, S.A.	Spain	Zardoya Otis, S.A., together with its subsidiaries, manufactures, installs, and maintains elevators, and escalators and moving walkways.	1,892.10	4.11
4/5/2022	Lone Star Americas Acquisitions, Inc.	Texas	Lone Star Americas Acquisitions, Inc. is a private equity and real estate investment firm	SPX FLOW, Inc.	North Carolina	SPX FLOW, Inc., together with its subsidiaries, researches, designs, develops, delivers, and services process technology solutions.	4,111.50	2.48

Source: S&P Capital IQ

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M&A Closed Date	Buyer	Geographic Location - Buyer	Business Description - Buyers	Target	Geographic Location - Target	Business Description - Target	Total Transaction Value (\$USDmm, Historical rate)	Implied Enterprise Value/Revenues (x)
12/27/2021	Ringfeder Power Transmission USA Corporation	New Jersey	Ringfeder Power Transmission USA Corporation provides shock absorbing and keyless connection technologies.	The Carlyle Johnson Machine Company, L.L.C.	Connecticut	The Carlyle Johnson Machine Company, L.L.C. designs, manufactures, and sells clutches and brakes.	16.5	1.57
12/1/2021	Columbus McKinnon Corporation (NasdaqGS:CMCO)	New York	Columbus McKinnon Corporation designs, manufactures, and markets intelligent motion solutions to ergonomically move, lift, position, and secure materials.	Garvey Corporation	New Jersey	Garvey Corporation manufactures and supplies accumulation tables and conveyors.	74	2.47
12/1/2021	Stanley Black & Decker, Inc. (NYSE:SWK)	Connecticut	Stanley Black & Decker, Inc. engages in the tools and storage and industrial businesses.	MTD Holdings Inc.	Ohio	MTD Holdings Inc. manufactures and distributes outdoor power equipment, including garden tractors, lawn trimmers, and mowers.	1,904.70	0.91
11/12/2021	Desktop Metal, Inc. (NYSE:DM)	Massachusetts	Desktop Metal, Inc. engages in manufacture and sale of additive manufacturing technologies.	The ExOne Company	Pennsylvania	The ExOne Company develops, manufactures, and markets three-dimensional (3D) printing machines, 3D printed and other products, materials, and services.	\$611.70	7.27x
10/26/2021	Alamo Group Inc. (NYSE:ALG)	Texas	Alamo Group Inc. designs, manufactures, distributes, and services vegetation management and infrastructure maintenance equipment.	Timberwolf Ltd	United Kingdom	Timberwolf Ltd manufactures professional woodchippers.	25	1.19
10/11/2021	The Carlyle Group Inc. (NasdaqGS:CG)	Washington, DC	The Carlyle Group Inc. is an investment firm specializing in direct and fund of fund investments.	Schaltbau Holding AG (HMSE:SLT)	Germany	Schaltbau Holding AG develops and supplies components and systems for the mobile and stationary transportation technology and capital goods industry.	611.9	1.22
9/24/2021	The Middleby Corporation (NasdaqGS:MIDD)	Illinois	The Middleby Corporation designs, manufactures, markets, distributes, and services a range of foodservice, food processing, and residential kitchen equipment.	Spenuzza, Inc.	California	Spenuzza, Inc., doing business as Imperial Manufacturing Company, manufactures cooking equipment.	127.3	3.17

Source: S&P Capital IQ

Appendix E: Glossary

Term	Definition
Overcapacity M&A	Referring to when a company acquires another industry participant to increase market share, eliminate competition, and increase operating efficiency.
Product Extension M&A	An acquisition made by the acquiring entity to expand to a new product line or segment.
Market Extension M&A	Referring to an acquisition aimed at expanding to a new geographic market, usually internationally.
Economies of Scale	Reducing operational costs by increasing production levels and gaining purchasing power.