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Recent Industry Performance

Metal forming companies use ferrous and nonferrous metals—including steel, copper, brass, aluminum, titanium and various alloys—to fabricate a variety of metal products that are utilized by industrial companies in products such as autos, planes, computers, appliances machinery. Fabrication is achieved through a number of metal processing operations, including stamping, laser cutting, punching, bending, welding, roll forming and coil processing. According to industry intelligence firm First Research, the metal forming industry consists of approximately 55,000 companies with combined annual revenue of \$340.0 billion.

Thus far in 2022, the manufacturing economy has been "stretched," according to *The Fabricator*. Since the COVID-19 pandemic began in March 2020, metal forming companies were faced with supply chain challenges. While many companies are currently able to acquire some raw materials, oftentimes, supplies are still hard to find. This has caused a slowdown in companies' ability to ship products. While the U.S. economy is not currently in a recession and many companies are

reporting growth, *The Fabricator* indicates that "...something feels a bit off."

Indeed, while many of the largest companies in the metal forming industry reported significant gains in the first three quarters of 2022, these firms also acknowledge the complications that have arisen from general economic conditions.

Mayville Engineering **Companies** ("MEC") – During the second quarter of 2022, MEC recorded net sales of \$138.3 million, up approximately 15.0% from \$120.2 million during the second quarter of 2021. Then, during the third quarter of 2022, MEC's net sales totaled \$136.3 million, up 25.0% from \$109.0 million one year prior. MEC notes that growth was driven mainly commercial pricing increases, improved volumes and contractual raw material price pass-throughs to customers. "Our team executed effectively this quarter, producing strong improvements across the board when compared to the same quarter last year," notes Jag Reddy, president and CEO of MEC. Overall, the firm anticipates that net sales will total between \$520.0 million and \$540.0 million in 2022. Reddy says, "Despite the



general macroeconomic concerns, demand for our services remains strong in the near-term across most of the end markets we serve, which has allowed us to stay within our original guidance for the year. We continue to monitor industry trends and are working with our customers to ensure our capacity is as closely aligned as possible with their needs going into the final two months of 2022 and beyond. We are maintaining a flexible posture and will be ready to take action quickly and as needed."

- Arconic Corporation ("Arconic") Arconic reports that sales totaled \$2.5 billion during the second quarter of 2022, up 41.0% year-over-year and up 16.0% when compared to the first quarter of 2022. In the third quarter, total sales were \$2.3 billion, up 21.0% compared to the same period in 2021 but down 11.0% from the second quarter of 2022. Arconic attributes the quarterly decline to lower sales volume that resulted from production outages and other operational challenges as well as sequential declines in metal prices. According to Tim Myers, Arconic's CEO, "The production outages and other operational challenges at the Tennessee and Davenport facilities that impacted third quarter results have been resolved and the affected facilities are now producing at expected rates. Maintenance scheduled for the end of the third quarter was completed successfully and the repaired equipment has been operating consistently for several weeks." The company anticipates that revenue will range between \$9.0 billion and \$9.3 billion in 2022.
- Worthington Industries ("Worthington") During Worthington's fiscal 2022 fourth quarter—which ended May 31, 2022—net sales totaled \$1.5 billion, up 55.0% from \$978.3 million in the fourth quarter of 2021. This increase was primarily driven by higher average selling prices in all segments as well as contributions from the acquisitions of Shiloh Industries' U.S. BlankLight business and Tempel Steel Company. Then, during Worthington's fiscal 2023 first quarter, net sales reached \$1.4 billion, up 27.0% from \$297.9 million in the first fiscal quarter of 2022. "We are off to a good

start in our new fiscal year with volumes in most of our key-end markets remaining healthy during the quarter," notes Andy Rose, Worthington's president and CEO. "Our teams continue to do a nice job navigating supply chain challenges and inflationary pressures to deliver value-added products and solutions for our customers." With regard to the outlook for the firm, Rose says, "Most of our businesses are holding up well despite increased market volatility and a murky economic outlook. Our teams are ready to respond to market demands, up or down, as changes occur. In addition, we are very excited to announce our plan to separate our Steel Processing business to create two market leading companies with a proud shared history and values. The separation represents a major milestone for our company, and I am confident that this move will position both businesses to capitalize on focused growth strategies to better serve their customers and unlock significant shareholder value."

Looking ahead, according to the October 2022 Precision Metalforming Association ("PMA") "Business Conditions Report," some metal forming companies forecast a decline in business conditions during the next three months. Indeed, 35.0% of respondents to the PMA survey forecast that economic activity will decline (up from 29.0% of respondents in September 2022), while 50.0% anticipate no change (down from 60.0%) and 15.0% project an increase (up from 11.0%). With regard to incoming orders, 18.0% of survey respondents anticipate an increase in the next three months (down slightly from 19.0% in September 2022); 43.0% expect no change (down from 54.0%); and 39.0% project a decrease in orders (up from 27.0%).

Meanwhile, First Research forecasts that revenue for the metal forming industry will be found to have grown by 11.9% in 2022, as the industry recovers from an 8.7% decline in 2021. Then, revenue growth is expected to moderate to 2.6% in 2023. Overall, First Research projects that industry revenue (in current dollars) will increase at an annual compounded rate of 2.0% from 2022 to 2026. However, the firm notes that both higher interest rates and increasing global trade tensions could reduce demand for

Prairie Industry Perspective | Metal Forming Industry



some types of machinery, thereby impeding growth for the metal forming industry in the near term.

Metal Forming Industry Trends/Drivers

Following are several major trends and drivers that are currently impacting the metal forming industry:

Steel Prices Fall – Due to the war in Ukraine, steel prices skyrocketed in March 2022, when hot-rolled coil ("HRC") prices rose \$435 per ton over the course of 31 days. The Fabricator notes that, by mid-April 2022, HRC prices reached nearly \$1,500 per ton. However, as new capacity ramped up and the initial shock of the war in Ukraine dissipated, prices fell, reaching \$800 per ton in mid-August 2022. Throughout September 2022, HRC prices stagnated at just below the \$800 per ton threshold. The Fabricator reports that, by October 2022, sentiment became "increasingly bearish after months of falling steel and scrap prices, uneven demand, increased capacity, and rising interest rates." At the same time, imports were down, and steel supply was at its lowest level since February 2022. Moreover, threats of strikes at major steel companies began to decline in October. The United Steelworkers ("USW") agreed to new labor contracts with Cleveland-Cliffs, Stelco and Algoma, and while the USW's negotiations with U.S. Steel have not been resolved as of this writing, analysts do not anticipate a strike or lockout at the company.

As a result of these factors, *The Fabricator* indicates that "many buyers no longer think that prices have bottomed." In a September 2022 survey, 27.0% of respondents told *The Fabricator* that steel prices had likely already bottomed out. However, in an October 2022 survey, just 9.0% thought the same; most respondents projected that prices will not reach a nadir until November 2022. In addition, survey respondents lowered their expectations for HRC prices in the latest edition of *The Fabricator*'s survey. In October 2022, 39.0% of survey respondents projected that HRC prices will be in the range of \$700 to \$749 per ton in the next

two months compared to September 2022, when 39.0% of respondents forecast that prices would range between \$750 and \$799 per ton in the next two months. Moreover, 22.0% of respondents anticipate that HRC prices will fall below \$700 per ton within the next two months, up from just 9.0% in the September 2022 edition of the survey.

- Lead Times and Shipping Levels at Metal Forming Companies Decline - According to the PMA's October 2022 "Business Conditions Report," lead times fell in October, with 17.0% of survey respondents reporting an increase in lead times (down from 20.0% in September 2022). At the same time, metal forming companies saw average daily shipping levels drop in October 2022 after rebounding in September 2022. In October 2022, just 27.0% of survey respondents reported an increase in daily shipping levels, down from 32.0% in September 2022. Meanwhile, 50.0% of respondents said that daily shipping levels did not change during October 2022 (down slightly from 51.0% in September 2022), and 23.0% reported a decrease (up from 17.0% in September). "The October report reflects the current volatility in manufacturing and the wider economy," notes David Klotz, president of the PMA. "During my visits to PMA members across the country over the past couple of months, while some companies certainly reported challenges, other companies have told me that their businesses continue going strong."
- Labor Shortages in the Metal Fabrication Industry Skills shortages abound in a wide variety of industries, including the metal forming industry. Notably, the American Welding Society estimates that the industry will experience a shortage of approximately 400,000 workers by 2024. The organization indicates that this need is not being communicated to graduating secondary school students by either career counselors or parents, even though the worker shortages in the manufacturing sector are widely known. Meanwhile, according to Manufacturing Tomorrow, young adults may not consider metal forming jobs "...if they perceive



them as dirty or dangerous or if family members or peers push them toward other options." However, metal forming companies that institute training programs with job guarantees are seeing success in finding workers. For instance, in October 2021, Goose Creek, SC-based metal fabricator W International launched a training program that guarantees jobs for its graduates. By December 2021, the company had hundreds of interested people on the training program's waiting list. Manufacturing Tomorrow notes that other companies are meeting labor shortage challenges by implementing collaborative robots ("cobots"). For instance, Vectis Automation provides a cobot welding tool that has a heavy-duty, water-cooled welding configuration to utilize when needed. Josh Pawley, vice president of business development at Vectis Automation, notes, "Teaching a single-pass weld, teaching point to point, plotting out a path, whether it's linear or a circle or compound pass, is relatively straightforward. You teach the robot that, and it just repeats it in production."

Fiber Lasers Increase in Usage - Metal forming companies are using fiber lasers in order to better compete in the market. Specifically, according to Laser Focus World, one of the most popular types of fiber lasers is the ultrahigh-power ("UHP") fiber laser, which has changed the way steel is cut; the UHP fiber laser replaces nitrogen and oxygen cutting processes with an air-assist process, which results in significantly higher productivity for companies that use them. Indeed, one UHP system can replace multiple lower-power systems. These systems also require fewer operators and facility preparations and have a much smaller footprint than multiple systems. Overall, this results in a lower cost of cutting per part. Notably, UHP fiber lasers in the 10.0-to-40.0-kilowatt range are being increasingly adopted for cutting, and the maximum laser power for cutting is projected to continue to climb over the next several years.

Recent M&A Trends for the Metal Forming Industry

Overall, the metal forming industry is highly fragmented, with First Research reporting that the largest 50 firms account for just 20.0% of industry revenue. Generally, though, market concentration is higher in specific product segments, such as springs, cutlery and hand tools, boilers and metal cans.

While the sector is fragmented, the metal forming industry has experienced an increase in consolidation in recent years. Some notable transactions that have taken place over the past several months include the following:

- Charlotte Pipe and Foundry Company ("Charlotte Pipe") Acquires Neenah Enterprises – In July 2022, Charlotte Pipe—a privately-held corporation that operates seven plants across the U.S. that produce cast-iron soil pipe and fittings as well as plastic pipe and fittings—acquired Neenah, WI-based Neenah Enterprises, a firm that fabricates construction and industrial castings. Neenah Enterprises operates three plants, located in Neenah, WI; Lincoln, NE; and Medley, FL. Hooper Hardison, president and CEO of Charlotte Pipe, notes, "This acquisition in an adjacent sector builds on our core competency in the manufacturing of grey iron castings. We believe that Charlotte Pipe's financial strength and manufacturing expertise will strengthen Neenah's portfolio."
- CGI Automated Manufacturing ("CGI") Acquires Tenere Inc. ("Tenere") Chicago-based private equity firm CORE Industrial Partners LLC ("CORE") announced the acquisition of Dresser, WI-based Tenere by CORE portfolio company and custom precision sheet metal fabrication solutions provider CGI in July 2022. Tenere manufactures custom mechanical solutions for renewable energy infrastructure, fiber and 5G installations, and data centers and operates four facilities—two in Wisconsin; one in Westminster, CO; and one in Monterrey, Mexico. This deal is the seventh add-on acquisition to the CGI platform that CORE launched in August 2021. According to Matthew Puglisi,



partner at CORE, "Tenere's unique combination of dynamic, early-stage collaboration capabilities and an expansive manufacturing footprint allows the Company to support customer innovation cycles and quickly deliver flexible solutions at scale, in alignment with the broader strategic direction of the platform. Further, the acquisition of Tenere helps expand the platform's geographic reach while appreciably deepening its presence in high-growth, technology-focused end markets."

- First Capital Partners and Willis & Smith Capital Acquires J&E Manufacturing In July 2022, First Capital Partners and Willis & Smith Capital announced the acquisition of J&E Manufacturing LLC and its affiliate J&E Coatings LLC (together, "J&E"). Based in Plymouth, MN, J&E provides precision fabrication and machinery services to a variety of markets, including the aerospace, medical, agricultural and commercial industries. The company operates six facilities across Minnesota, Wisconsin and Mexico. Eric Willis and Terrence Smith, co-founders of Willis & Smith Capital, note, "We view J&E as a world-class manufacturing organization, and together with the capabilities of our portfolio company R&B Grinding, LLC, the increased capacity and scale now available to our collective clients couldn't have been timelier." J&E's
- CEO Michael F. Hansen adds, "The transition of ownership went smoothly, and the experienced management team remains intact. We are prepared to work with Willis & Smith Capital on continuing the company's stated goal of expanding our reach and capabilities in both the domestic and Mexican marketplaces."
- Hudson Street Solutions ("HSS") Acquires Nexus Automation – Redwood City, CA-based HSS—an that automation technology services provider specializes in custom productivity solutions for job shops prototyping manufacturers—acquired Livermore, CA-based CNC machining and box assembly service shop Nexus Automation in September 2022. "We're excited to be at the forefront of a completely new approach to manufacturing technology innovation with the Nexus acquisition," says Ofer Maltiel, founder and CEO of HSS. "The Nexus team, top-notch shop, capabilities, and range of customer projects provide the best environment for HSS to build, test, and prove manufacturing automation and productivity solutions. We are proud to be the only technology provider delivering industry solutions based on the Onshape cloud CAD platform and built using an in-house manufacturing facility."



Notable M&A Transactions

Foundries, Forging & Castings

Year			
Closed	<u>Target</u>	Acquirer	Target Business Description
	Name:	Name:	
2022	Northern Iron & Machine	The Lawton Standard Co.	Manufactures grey castings and ductile castings
2022	Wellman Dynamics Corporation	TRM Equity	Produces aluminum and magnesium sand castings
2022	Tenere Inc.	CGI Automated Manufacturing, LLC	Manufacturers metal fabrication & injection molding product
2022	Neenah Enterprises, Inc.	Charolette Pipe and Foundry Company	Provides metal castings & steel forgings
2022	Monofrax LLC	Saint-Gobain Ceramics & Plastics, Inc.	Manufactures fused cast refractories
2022	DEE Inc.	Wisconsin Aluminum Foundry Company, Inc.	Manufactures aluminum castings
2022	TDE Group, Inc.	BrightView Holdings, Inc. (NYSE:BV)	Provides die casting services
2022	Cast Corporation	Métal 7 Inc.	Manufactures furnace and alloy castings
2022	R & B Grinding Co., Inc.	Willis & Smith Capital, LLC	Manufacturer of precision metal components
2021	Assets of US Foundry & Manufacturing Corporation	Neenah Enterprises, Inc.	Produces municipal casting products
2021	Midwest Die Corporation	Lateral Industries, LLC	Manufactures molds for the die casting industry
2021	Assets of Omaha Steel	Owen Industries, Inc.	Provides steel casting solutions
2021	Grossman Iron & Steel Co.	Advantage Metals Recycling LLC	Processor of ferrous and non-ferrous scrap metals
2021	Columbus Castings Company	Stonemont Financial Group, LLC	Manufacturer of steel castings
2021	Patriot Foundry & Castings, LLC/RDS Dock Hardware	Ermak Metals, Inc.	Manufacturer of nonferrous sand castings
2021	KT Acqusition LLC (Komtek Forge)	Crawford United Corporation	Manufacturer of highly engineered forgings
2021	Manufacturing Facility in Lawrenceville of Waupaca Foundry	Victaulic Company	Foundry production facility
2021	Elyria Foundry Company, LLC	Speyside Equity LLC	Manufacturer of iron castings
2020	PRL, Inc.	Compass Partners Capital LLC	Manufacturer of metal castings
2020	Certain Assets of Renaissance Manufacturing Group - Waukesha LLC	Grede Holdings LLC	Iron foundry business operations
2020	Damascus Steel Casting Company	Temperform, LLC	Manufacturer of steel castings
2020	Assets of Western Forge & Flange Company, Inc.	Pennsylvania Machine Works, LLC	Manufacturer of forgings and flanges
2020	Pennsylvania Machine Works, LLC	Wynnchurch Capital, L.P	Manufacturer of forged pressure fittings
2019	American Axle & Manufacturing, US Iron Casting Ops.	Gamut Capital Management	Manufacturer of automotive iron castings
2019	Mattco Forge Inc.	Blue Point Capital Partners	Manufacturer of forged metal products
2019	Cast Roll Manufacturing Facility of Ampco-Pittsburgh Corp	WHEMCO, Inc.	Cast rolling manufacturing facility
2019	Walker Die Casting, Inc./C&R Tool and Engineering, Inc.	Allison Transmission Holdings, Inc.	Manufacturer of aluminum die castings

Sources: S&P Capital IQ and public data



Metal Stamping

Year			
Closed	<u>Target</u>	Acquirer	Target Business Description
	Name:	Name:	
2021	Precision Tool & Die, Inc.	CORE Industrial Partners LLC	Offers metal stamping services
2021	Taggard Enterprises, Inc.	Phoenix Stamping Group, LLC	Manufacturer of metal stampings
2020	Incodema Inc.	CORE Industrial Partners LLC	Manufacturer of prototype sheet metal stampings
2020	Precision Industries, Inc.	Live Ventures Incorporated (NasdaqCM:LIVE)	Manufacturer of stampings and assemblies
2020	Traverse City Products, Inc.	Charter Capital Partners, Colfax Creek Capital, LLC	Manufacturer of roll forms, stampings and assemblies
2020	P-K Tool & Manufacturing Co.	Modineer Co., Inc.	Manufacturer of metal stampings for automotive applications
2019	Tooling Dynamics, LLC	Sigma Electric Manufacturing Corp	Manufacturer of metal stampings and machined parts
2019	Phoenix Metal Fabricating, Inc.	Canerector Inc.	Manufacturer of metal stampings
2019	Morris & Broms, LLC	Mearthane Products Corporation	Manufacturer of metal stampings and fabricated products
2019	Michigan Spring & Stamping LLC	Hugo Kern und Liebers GmbH & Co. KG	Manufacturer of metal stamped engineered products
2018	Defiance Metal Products Inc.	Mayville Engineering Company, Inc.	Manufacturer of metal stamped and fabricated components
2018	Prestige Stamping, Inc.	Auxo Investment Partners	Manufacturer of washers and small stampings
2018	Fanello Industries, Inc.	Ryerson Holding Corporation	Provider of blanking and stamping services

Metal Machining

Year Closed			Target Business Description			
Closed	Name:	Name:	Target basiness Description			
2022	Nexus Automation	Hudson Street Solutions, Inc.	Engages in CNC machining and box assembly service			
2022	Fabrication Concepts Corporation, Inc. (dba Fabcon)	Tide Rock Holdings LLC	Precision sheet metal fabrication and contract manufacturi company			
2022	Casey Tool And Machine Co., Inc.	Milton Industries, INC.	Prototype, hard tooling, and production run manufacturer			
2022	BendTec Inc.	United Weld Holdings	Provides steel bending and fabrication services			
2022	Mistequay Group, Ltd.	Textron Aviation Inc.	Provides manufacturing services in high end machining			
2022	Haven Manufacturing LLC	CGI Automated Manufacturing, LLC	Provides machined parts for medical devices and equipmen			
2021	Harliss Specialties Corporation	Vahterus Oy	Provides welding, machining and fabrication services			
2021	Engineering Manufacturing Technologies, LLC	Gladstone Capital Corporation	Manufacturer of machined components			
2021	Temple Steel Company	Worthington Industries, Inc.	Provider of precision machining components			
2021	Advanced Laser Machining, Inc.	CGI Automated Manufacturing, Inc.	Provider of machining services			
2021	Accu-Turn, Inc.	Marini Manufacturing Inc	Provider of precision machining services.			
2021	ATI Precision	Marini Manufacturing Inc	Provider of machining services			
2021	RMM Inc.	Blackwell Capital Group LLC	Manufacturer of high-precision cylindrical grinding produc			
2021	Tier One LLC	Arch Medical Solutions - Seabrook LLC	Provider of machining and assemblies for engineered parts			
2021	ProtoQuick, Inc./Peridot Corporation	Seisa Medical Inc.	Provider of machining services			
2020	Instrument Development Corporation, Inc.	BERKS Group	Manufacturer of precision machined components			
2020	Broad Peak Manufacturing, LLC	Oberg Medical	Provider of high-precision machining and finishing service			
2020	Axis Machine Company, Inc.	Rol-Tec, Inc.	Provider of grinding and machining services			
2020	G.S. Precision, Inc.	AE Industrial Partners, LP	Manufacturer of precision machined components			
2020	UMA Precision Machining, Inc.	Prather Capital Partners	Provider of precision machining services			
2020	Mill Creek Machining, Inc.	Consolidated Machine & Tool Holdings, LLC	Provider of contract machining and assembly services			
2019	Swiss-Tech, LLC.	BERKS Group	Manufacturer of precision machined components			

Sources: S&P Capital IQ and public data



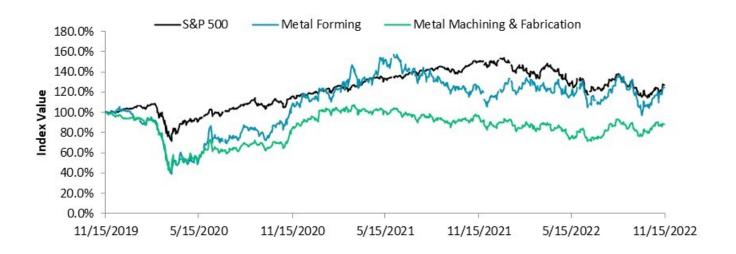
Metal Fabrication

Year			
Closed	Target	Acquirer	Target Business Description
	Name:	Name:	
2022	Benton Steel Fabrication, Inc.	Morton Industries LLC	Provides custom steel fabrication services
2022	E.P.M.P., LTD.	Cadrex Manufacturing Solutions	Manufactures, produces, and distributes fabricated sheet metal products
2022	George Industries, Inc	Behrman Brothers Management Corp.	Provides machining and sheet metal fabrication
2022	J & E Manufacturing LLC	First Capital Partners, LLC; Willis & Smith Capital, LLC	Manufactures sheet metal fabrications, stampings, and ma- chined components
2022	Petersen Inc.	Precinmac Precision Machining	Provides fabrication, manufacturing, and machining service
2022	Tensar Corp.	Commercial Metals Co.	Provides steel and metal parts fabrication
2022	Tiffin Metal Products Co.	Steele Solutions Inc.	Provides light sheet metal fabrication
2022	Volunteer Rebar, LLC	FABco, LLC	Provides rebar fabrication products
2022	R&M Manufacturing Co., LLC	Tri-W Group	Produces precision sheet metal components
2022	Quik Cut, Inc.	SOLV Holdings, LLC	Provides metal fabrication services
2021	Racine Metal-Fab, Ltd.	Midwest Products and Engineering, Inc.	Provider of sheet metal fabrication services
2021	BendTec Inc.	EPIC Piping	Provides steel fabrication services
2021	Engineering Manufacturing Technologies, LLC	Gladstone Capital Corporation (NasdagGS:GLAD)	Provider of sheet metal fabrication services
2021	CGI Automated Manufacturing, Inc.	CORE Industrial Partners, LLC	Manufacturer of precision sheet metal fabrication products
2021	Eidemiller Precision Machining, Inc.	Kyowa Industrial Co., Ltd.	Manufacturer of precision machined parts
2021	H&M Metals LLC	Momentum Manufacturing Group	Manufacturer of sheet metal products
2021	L & T Precision Corporation	The Partner Companies, LLC	Provider of sheet metal fabrication services
2021	BRT Extrusions Inc.	Corbel Capital Partners	Provider of extrusion and fabrication services
2021	Astro Shapes, LLC	Monomoy Capital Partners	Manufacturer of extrusions and fabricated products
2020	Buckeye Fabricating Company	LT Corporation, Inc.	Manufacturer of fabricated pressure vessels and process ta
2020	Substantially All assets of Shiloh Industries, Inc.	MiddleGround Capital LLC	Manufacturer of fabricated and stamped auto parts
2020	SMF, Inc.	Etnyre International Ltd.	Manufacturer of metal fabrication parts for OEMs
2020	Finnco Fabricating, LLC	Newel Capital, LLC; Optimus Capital Partners, LLC	Provider of metal fabrication services
2020	Mainstay Manufacturing Solutions, Inc.	IMH Products, Inc.	Provider of metal fabrication and machining services
2020	Delva Tool & Machine Corp	Consolidated Machine & Tool Holdings, LLC	Provider of contract fabrication, assembly services
2020	ReFab Liquidation, LLC	DeWys Manufacturing, Inc.	Provider of metal fabrication services
2020	Gerard Daniel Worldwide, Inc.	Graycliff Partners LP	Manufacturer of wire cloth, mesh and related components
2020	Business and Assets of Moz Designs, Inc.	Armstrong World Industries, Inc. (NYSE:AWI)	Provider of custom metal fabrication services
2020	CVIP Inc.	Air Products and Chemicals, Inc. (NYSE:APD)	Welder, fabricator, and assembler of process piping
2020	Pipe Fabrication Assets of McDermott and The Shaw Group	Shaw Acquisitions Holdings	Manufacturer of pipes
2020	Rainier Welding Inc.	Ranch Creek Partners, LLC	Provider of aluminum fabrication services
2020	Laser Access, Inc.	Blitzblow USA LLC; US Advanced Systems LLC	Provider of laser cutting and welding services
2020	Excel Fabrication, LLC	Alpine 4 Technologies, Ltd. (OTCPK:ALPP)	Provider of fabrication and installation services
2020	Fab-Tech, Inc.	Whiterock Capital	Manufacturer of sheet metal components
2019	Altair Technologies, Inc	Integrated Manufacturing Group, LLC	Provider of contract manufacturing and brazing services
2019	Porter's Group, LLC	Maysteel Industries, LLC	Manufacturer of fabricated metal parts
2019	MRK Industries, Inc	Armstrong World Industries, Inc.	Manufacturer of standard and custom metal products
2019	Global Brass and Copper Holdings	Wieland-Werke AG	Fabricator and processor of non-ferrous metal products
2019	Matrix Composites Inc.	ITT Inc.	Fabricator of metal composites
2019	Pierce Industries LLC	Enbi Global, Inc	Manufacturer of fabricated metal products
2019	CNC Products LLC	Parker Holdings, Inc	Precision sheet metal fabricator
2019	Seitz Stainless LLC	Caloris Engineering LLC	Custom and contract fabricator of metal products

Sources: S&P Capital IQ and public data



Performance of Metal Forming Indices vs. S&P 500



These indices have fully recovered from their pandemic-related dip, though they continue to lag the S&P 500.

Publicly-Traded Metal Forming Companies

(\$ in millions)	Stock	Enterprise		<u>LTI</u>		Revenue		LTM M		<u>EV /</u>		<u>EV /</u>	_
Company Metal Forming	<u>Ticker</u>	<u>Value</u>	Wk. High	<u>Revenue</u>	<u>EBITDA</u>	<u>1 Year</u>	3 Years	<u>G. Profit</u>	<u>EBITDA</u>	<u>Revenue</u>	<u>EBITDA</u>	<u>Revenue</u>	<u>EBITDA</u>
ATI Inc.	ATI	\$ 5,260	88.1%	\$ 3,591	472	33.4%	(4.6%)	18.1%	13.1%	1.5x	11.2x	1.3x	8.5x
American Axle & Manufacturing	AXL	3,762	86.9%	5,645	748	5.3%	(6.0%)	12.0%	13.3%		5.0x		4.5x
Arconic Inc.	ARNC	3,622	57.4%	9,157	591	34.1%	7.5%	10.6%	6.5%		6.1x		5.2x
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Kaiser Aluminum Corporation	KALU	2,453	87.5%	3,458	176	65.7%	31.1%	7.7%	5.1%		13.9x	0.7x	9.8x
Mayville Engineering Company, Inc.	MEC	321	63.7%	524	48	19.8%	1.0%	12.3%	9.2%	0.6x	6.7x	0.6x	4.7x
Worthington Industries, Inc.	WOR	3,757	90.3%	5,540	362	54.8%	15.2%	12.0%	6.5%	0.7x	10.4x	0.9x	8.3x
		Median	87.2%	\$4,566	\$ 417	33.7%	4.2%	12.0%	7.9%	0.7x	8.5x	0.7x	6.7x
		Mean	77.2%	\$4,865	\$ 385	35.9%	9.7%	10.9%	8.1%	0.6x	8.4x	0.6x	6.5x
Metal Machining & Fabrication													
Kaman Corporation	KAMN	1,159	43.9%	666	80	(7.4%)	(3.7%)	32.6%	12.0%	1.7x	14.5x	1.5x	14.2x
Magellan Aerospace Corporation	MAL	330	69.6%	546	21	8.6%	(9.9%)	5.3%	3.9%	0.6x	15.6x	0.5x	6.5x
Northwest Pipe Company	NWPX	510	99.1%	453	57	51.1%	19.7%	17.1%	12.5%	1.1x	9.0x	1.1x	7.3x
Proto Labs, Inc.	PRLB	523	39.0%	496	75	5.7%	2.6%	44.8%	15.1%	1.1x	7.0x	1.1x	7.5x
RBC Bearings Incorporated	ROLL	8,521	n/a	1,349	376	116.5%	23.4%	39.9%	27.8%	6.3x	22.7x	n/a	n/a
Spirit AeroSystems Holdings, Inc.	SPR	5,982	50.4%	4,780	143	27.1%	(14.8%)	2.5%	3.0%	1.3x	42.0x	1.0x	10.1x
The Timken Company	TKR	7,028	96.0%	4,422	781	10.1%	5.1%	27.7%	17.7%	1.6x	9.0x	1.5x	7.7x
Valmont Industries, Inc.	VMI	7,837	98.5%	4,177	511	25.2%	14.5%	25.6%	12.2%	1.9x	15.3x	1.7x	13.2x
		Median	69.6%	\$1,008	\$ 111	17.6%	3.9%	26.7%	12.4%	1.4x	14.9x	1.1x	7.7x
Note: Valuation data as of 11/15/2022		Mean	70.9%	\$ 2,111	\$ 255	29.6%	4.6%	24.4%	13.0%	1.9x	16.9x	1.2x	9.5x
Sources: S&P Capital IQ and public													

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About Prairie Capital Advisors

Prairie offers investment banking, ESOP advisory, valuations & opinions and financial reporting valuations to support the growth and ownership transition strategies of middle-market companies.

Headquartered in Oakbrook

Terrace, Illinois, Prairie is a leading advisor to closely-held companies nationwide

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Industry Experience

















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