

# Precision Metal Manufacturing

Market Snapshot

“Market Intelligence for Industry Players”

Q3 2008



**Capstone Partners**  
Investment Banking Advisors

# Precision Metal Manufacturing Market Snapshot



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## **Industry Overview**

Capstone defines precision metal manufacturers (PMMs) as companies providing value-added manufacturing services to produce finished metal components. These services include, but are not limited to, precision machining, grinding, laser cutting-marking-welding, electrical discharge machining, metal injection molding, stamping and surface treatment. PMMs are often referred to as machine shops, however, this classification is becoming outdated due to the fact that precision machining has become more automated and technically advanced. Machining is also just one of the many services provided by leading PMMs.

The precision metal manufacturing (PMM) industry has experienced growth as original equipment manufacturers (OEMs) have increasingly outsourced the manufacture of metal components and assemblies. OEMs are increasingly focusing on strategically core functions such as product design and marketing, and have turned to outsourced partnerships for manufacturing, engineering and assembly of the final product.

Capstone expects the PMM industry to continue experiencing solid growth as the fundamental growth drivers remain in place. OEMs face intense pressure to develop new products quickly while lowering production costs, which drives many to seek PMM partners capable of producing sophisticated parts and systems. To keep up with this increasing demand, many PMMs have responded by sharpening their expertise, increasing their capabilities and investing in cutting edge equipment.

The approximately \$35 billion U.S. PMM industry is highly fragmented, comprised of more than 20,000 independent companies. Most competitors are extremely small, with average annual sales of less than \$2 million per organization. There is no identifiable market share leader in the industry.

Capstone believes PMMs with annual revenues in excess of \$15 million stand out as established industry players that have achieved critical scale. These PMMs are large enough to invest in and maintain the latest equipment and design tools. In addition, their scale allows them to recruit, maintain and develop strong engineers, operators and machinists.

PMMs that do not have the necessary resources to invest in technology and talent are finding it difficult to compete for new business from an OEM universe with increasingly complex demands. PMMs that have established themselves as niche providers with highly specialized capabilities are an exception to this rule. However, the growing breadth of service offerings among leading PMMs is likely to increase the pressure on smaller, more specialized providers. Capstone believes that PMMs that have achieved scale will continue to gain market share at the expense of small industry participants.

**Key End Markets**

PMMs represent an important value-added link in the supply chain between material suppliers and OEMs. Demand for the services provided by PMMs is dependent on overall manufacturing activity and the amount of outsourcing utilized by OEMs. Capstone has identified the medical products and aerospace & defense markets as two of the premier PMM end markets in the U.S. Each industry has exhibited strong growth and an increasing reliance on outsourced manufacturing partners.

Capstone expects the aerospace & defense and medical products markets to continue to show strength. Both industries have displayed recent trends that indicate continued growth, as outlined below.

**Aerospace & Defense Outlook**

- Record-level backlogs at top aerospace contractors will fuel demand for outsourcing of high-precision components.
- In the past five years, revenue and earnings growth in the defense sector have been driven by increased U.S. military spending, which we believe will continue for the foreseeable future.

**Medical Products Outlook**

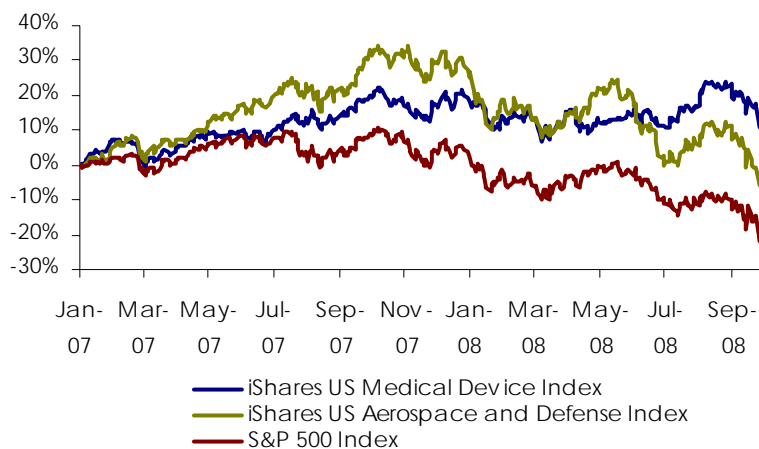
- Medical device contract manufacturing, which includes suppliers of electronic, plastic, and metal parts and assemblies, is expected to grow from \$13.9 billion globally in 2007 to \$25.4 billion in 2011, a 16.3% CAGR<sup>1</sup>.
- Approximately 30% of medical device manufacturing costs are currently outsourced. The market is expected to mirror the electronics sector, in which outsourced costs expanded from 20% to 90% over a 20-year period<sup>1</sup>.
- The aging U.S. population is driving growth in the medical device sector, particularly in the orthopedic and cardiovascular implant markets. These devices require sophisticated metal manufacturing and assembly.

*1) Source: Kalorama Information*

**End Market Indices**

Since the start of 2007, stock performance of publicly traded OEMs in the medical device and aerospace & defense sectors has outpaced the broader markets, which reflects expectations of above-average future performance. In addition, both industries historically resist recessionary pressures, which is extremely relevant in today’s macroeconomic environment.

**End Market Public Stock Performance**



*Source: Capital IQ*

Strength in the medical and aerospace & defense industries, coupled with the continued trend towards outsourced manufacturing, will create demand for best-in-class PMMs focusing on these markets. Capstone believes U.S. PMMs will be the greatest beneficiaries of these trends, as OEMs in the medical and aerospace & defense sectors often limit their use of offshore manufacturing due to quality and IP issues. Additionally, regulatory restrictions and frequent low volume orders favor domestic production.

## Value Drivers

Capstone has identified several key characteristics of PMMs that are desirable to potential partners and acquirers. These value drivers include: a focus on growing end markets; a diverse customer base; high-precision manufacturing capabilities and technology; financial and reporting system sophistication; and management team strength. Importantly, acquirers ascribe premium valuations to companies with robust revenue growth, strong margins and margin expansion opportunities.

**Customer End Markets:** Acquirers have demonstrated strong interest in PMMs serving the aerospace and medical device markets. Within the past 18 months, 41% of acquired PMMs served the aerospace industry and 36% served the medical market. Additionally, OEMs in the energy and semiconductor equipment industries have increased their reliance on PMMs as they continue to rationalize their manufacturing practices. Capstone believes that PMMs serving these industries will continue to outperform the overall market, making them attractive acquisition targets.

**Customer Diversification and Specialization:** Many acquirers are interested in PMMs that cater to specific market subsets such as orthopedic implants or turbine parts. Other buyers are interested in companies serving multiple end markets. In either case, acquirers are careful to analyze customer concentration when reviewing a potential acquisition. Increased risk associated with dependence on a limited group of customers can negatively impact the value of PMMs.

**Equipment:** PMMs that consistently invest in state-of-the-art equipment to support growth and broaden manufacturing capabilities are capable of achieving a premium valuation relative to less sophisticated competitors. As OEM demands continue to become more complex and require ever-changing manufacturing processes, PMMs that can offer advanced capabilities will achieve stronger growth and margins. It follows that these PMMs will also command premium valuations.

**Technical Capabilities:** Market-leading engineering capabilities are increasingly important to a company's value. OEMs select PMMs that distinguish themselves through engineering, technical, problem solving and manufacturing capabilities.

**Breadth of Services:** PMMs that combine CNC machining, grinding, finishing, laser cutting-marking-welding, fabrication, coating and assembly services separate themselves from the pack. These "one-stop-shops" are appealing to customers that are increasingly looking to shorten their vendor lists.

**Certification:** PMMs that achieve ISO and AS qualification will improve valuation and differentiate themselves from competitors. In discussion with Capstone, acquirers have identified ISO 13485-Quality Management for Medical Devices and AS9100-Quality Management for Aerospace as highly sought-after certifications.

**Enterprise Resource Planning (ERP):** Most top-tier PMMs have implemented software systems for tracking and coordinating manufacturing, financial reporting, project management and supply chain management. If properly utilized to drive efficient operations, these investments can be indicative of a PMM's relative sophistication, thus increasing company value.

**Team:** Overall team strength is a key value driver, especially for potential private equity buyers. Team attributes that add a premium to a company's value are top quality management with proven experience, a sales force with strong industry contacts, experienced engineers to solve complicated manufacturing challenges, and high-quality machinists and operators.

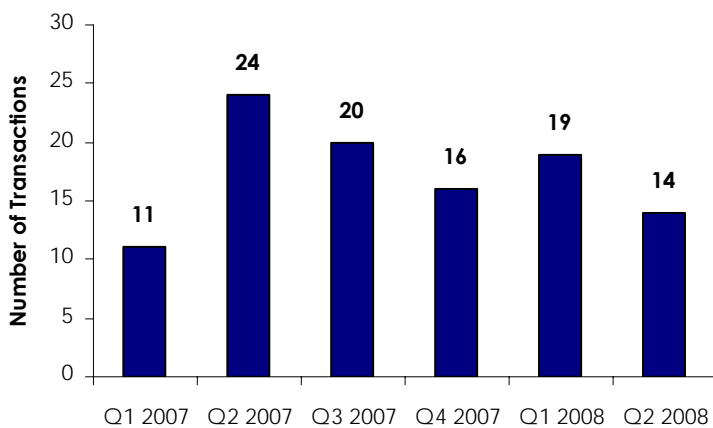
**Financial Strength:** Robust cash flow, demonstrated recent growth, good growth prospects and strong margins drive valuation. PMMs can achieve differentiation through operational efficiency, high-quality contracts, strong project management and cost planning capabilities. Due to the industry's fragmentation, companies that demonstrate these characteristics and have achieved significant scale attract the most attention from potential buyers and are viewed as premium assets.

## 2008 M&A Commentary

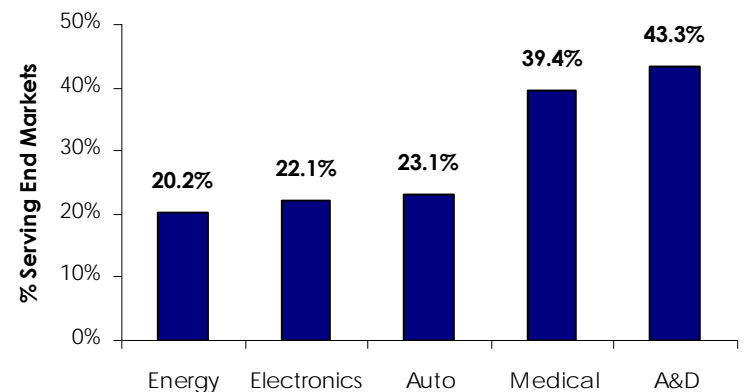
**Middle Market Transactions:** Despite a slowdown in overall M&A activity, transaction activity among U.S. PMMs during the first half of 2008 remained nearly unchanged from the same period last year. During the first half of 2008, PMM transaction activity declined 5.7%, compared to an estimated 18.2% drop in overall middle market transactions volume.

Capstone has identified 19 U.S. PMM transactions in the first quarter of 2008, an increase from 11 transactions in the first quarter of 2007. Transaction volume in the second quarter of 2008 decreased on a year-over-year basis from 24 transactions in the second quarter of 2007 to 14 transactions in the second quarter of 2008. The 33 transactions observed in the first half of 2008 is consistent with the 35 transactions closed in the first half of 2007.

**PMM Transaction Volume**



**U.S. PMM Transactions by End Market\***



Source: Capital IQ, Capstone Research

\*Includes transactions for FY 2007 and H1 2008; PMMs serving multiple industries may be double-counted

## Buyer Trends

**Industry Specialization:** Acquirers have shown a clear preference for a handful of target industries, with a focus on PMMs serving the aerospace & defense and medical sectors. PMMs serving these sectors represent 43.3% and 39.4% of transaction volume, respectively, over the past 18 months. This trend is largely driven by strong growth in these industries. Many of the transactions in the medical and aerospace & defense sectors have been completed by PMMs serving more mature, slower growth industries such as automotive.

**Service Breadth:** In addition to entering new markets, consolidation has been driven by increasing demands for PMMs with broad service offerings. PMMs with diverse capabilities are better equipped to deal with increasingly complex customer demands and serve as “one-stop-shops.” As a result, large PMMs continue to acquire companies with specialized manufacturing capabilities in order to offer more complete services to OEMs, which often prefer to deal with as few vendors as possible.

**Private Equity:** Private equity buyers have accounted for a significant portion of PMM transaction activity. In 2007, private equity buyers, including private equity-backed strategic acquirers, accounted for 47.9% of PMM transaction volume. This trend continued in 2008, with financial buyers comprising 48.5% of transaction volume. There is a large universe of private equity firms focused on the manufacturing sector capable of making platform investments in the PMM industry. Additionally, many private equity groups already own platform companies and are actively seeking add-on investment opportunities.

**Selected M&A Deal Briefs**

**Charlesbank Capital Partners, LLC acquires Tecomet, Inc. from Viasys Healthcare Inc.** The sale of Tecomet is a prime example of an OEM shedding an auxiliary business to focus on core competencies. The Wilmington, MA-based contract manufacturer of orthopedic implants and precision components for the aerospace & defense, communications and medical industries is a former subsidiary of Viasys Healthcare, which was acquired by healthcare products and services giant Cardinal Health in 2007. As a contract manufacturer with \$50 million in annual sales, Tecomet was a non-core asset for Cardinal, which has annual sales of greater than \$90 billion. Charlesbank partnered with two operating executives with contract manufacturing experience to acquire Tecomet and expects to use the company as a platform for further acquisitions in the precision metal manufacturing space.

**Ladish Co. Inc. acquires Chen-Tech Industries Inc. and Aerex Manufacturing.** Ladish is a family of companies that provide advanced metalworking capabilities to supply highly engineered parts to the aerospace industry. Over the last several years, Ladish has acquired four PMMs, including ZKM Forging of Poland in 2005; Valley Machining of La Crosse, Wisconsin in 2006; and Chen-Tech Industries of Irvine, California and Aerex Manufacturing of South Windsor, Connecticut in 2008. Chen-Tech Industries provides near-net forgings and CNC machining for titanium, nickel and iron-based super alloys for the aerospace and aircraft engine industries. With this acquisition, Ladish adds capabilities to produce high-precision titanium and nickel components for the small and regional jet markets. Total consideration was approximately \$59.5 million in cash and stock. Chen-Tech is projecting 2008 sales of approximately \$50 million. Aerex Manufacturing is a precision-machining company serving the aerospace and commercial airplane industries. The acquisition of Aerex expands Ladish's high-end niche manufacturing capabilities in their core aerospace market. Ladish and Aerex have had a long-term relationship and serve mutual customers. The purchase price of Aerex was approximately \$14 million in cash and stock. Aerex is expected to achieve 2008 sales of approximately \$15 million.

**Sandvik AB acquires Eurocut Ltd.** Over the last several months, Sandvik's MedTech group has made multiple acquisitions of PMMs that serve the medical device industry. The most recent acquisition was Sheffield, UK-based Eurocut Ltd., a manufacturer of medical instruments and orthopedic implants. Eurocut provides Sandvik with additional manufacturing capabilities in forging, casting, machining and polishing. According to a Sandvik company press release, "the acquisition is in line with our long-term ambition to be a strategic partner within the area and a complete supplier to globally leading medical technology companies." Eurocut reported annual sales of approximately \$9.1 million in 2007. Terms of the transaction were not disclosed.

**MultiSource Manufacturing LLC acquires Microgroup Blaine, LLC.** MultiSource Manufacturing is a PMM that focuses on industrial, medical and aerospace components. The company recently acquired Microgroup Blaine, LLC, which has experience making components for actuation, electro-mechanical, general aviation and navigation systems. It also has expertise in CNC machining, turning, grinding and complex assemblies. MultiSource has renamed the newly acquired company MultiSource Aerospace LLC. MultiSource Aerospace is AS9100b certified, which positions it as a high-end service provider to the aerospace industry. In the press release announcing the transaction, MultiSource Manufacturing stated "The new MultiSource Aerospace subsidiary is a company with a sterling reputation for its high-quality products. It's growth potential and strong management culture made it a natural fit for our growth strategy. We look forward to working with the MultiSource Aerospace management team to help take them to the next level and to provide our combined customer base with additional capabilities."

**Relativity Capital acquires Berkshire Manufactured Products, Inc.** Relativity Capital is a Virginia-based private equity firm that invests in companies that cater to the aerospace and defense industry. Relativity Capital acquired the assets of Berkshire Manufactured Products, Inc. in March 2008. According to the press release announcing the transaction, "Berkshire manufactures production and prototype parts for domestic and international customers, primarily for aerospace applications, but also for power generation, marine, high tech, automotive, communications and medical applications. Parts include a broad variety of precision sheet metal stampings, machined parts, and fabricated assemblies. The company is located in Newburyport, MA and current senior management, including President and CEO George Psychojos, will continue to lead the business and remain significant investors in the company." According to Relativity Principal Andrew Lodge, "we see considerable opportunity to leverage our extensive aerospace experience and relationships to accelerate Berkshire's internal and external growth."

## 2008 U.S. Precision Metal Manufacturing M&amp;A Transactions

Announced/ Closed	Target / Acquirer	Target Description	Implied EV (\$mm)	EV/LTM Revenue
8/22/2008 9/4/2008	<b>Chen-Tech Industries Inc.</b> Ladish Co. Inc.	Provides titanium, nickel and iron-based super alloy forgings and machined components for the aerospace industry	\$59.5	1.2x
8/22/08 8/22/08	<b>Utility Tool &amp; Machine Co. Inc. &amp; Pinnacle Precision Inc.</b> The Teneo Group Inc.	Manufactures precision molds, dies, plastic injection molded products and machined products	-	-
7/29/2008 8/6/2008	<b>AmeriCast Technologies, Inc.</b> Bradken Limited	Designs and manufactures ferrous sand castings, machined components and assemblies	\$296.3	0.8x
7/22/2008 9/26/2008	<b>Tecomet, Inc.</b> Charlesbank Capital Partners, LLC	Manufactures orthopedic implants, surgical instruments and precision components for various industries	\$0.0	0.0x
7/21/2008 7/21/2008	<b>Treat All Metals, Inc.</b> Charter Oak Capital Partners; High Road Capital	Provides heat treatment services for the industrial, agricultural, automotive and rail industries	-	-
7/16/2008 7/28/2008	<b>NeedleTech Products, Inc.</b> Theragenics Corp.	Manufactures and supplies needles and medical devices for medical device OEMs	\$47.8	2.8x
7/10/2008 7/10/2008	<b>Aerex Manufacturing, Inc.</b> Ladish Co. Inc.	Provides contract machining and subassembly services to the aerospace and commercial airplane industries	\$14.0	-
7/8/2008 7/8/2008	<b>BP Metals LLC</b> Protostar Partners LLC	Manufactures custom castings, metal components, metal forgings, and aluminum and plastic casings	-	-
7/8/2008 7/8/2008	<b>Sandy Bay Machine, Inc.</b> Thermal Solutions, Inc.	Operates as a contract manufacturer of precision machined parts	-	-
6/30/2008 6/30/2008	<b>R. &amp; R. Manufacturing Company, Inc.</b> MW Industries, Inc.	Manufactures electronic hardware components for the telecommunications, medical and aerospace industries	-	-
6/30/2008 6/30/2008	<b>Rathbone Precision Metals, Inc.</b> Tre Ci S.r.l.	Produces cold drawn shapes and cold rolled shapes for the medical, industrial, aerospace and agricultural industries	\$17.4	-
6/23/2008 6/23/2008	<b>Precision Gear Company</b> One Equity Partners LLC	Supplies manufactured gears and manufacturing services for the aerospace, automotive and nuclear industries	-	-
6/20/2008 8/29/2008	<b>Shumate Machine Works, Inc.</b> American International Industries Inc.	Provides close-tolerance machining of discreet parts and product assemblies for the oil and gas industry	\$6.7	0.8x
6/17/2008 6/30/2008	<b>On Time Machining Company, Inc.</b> Kyocera Industrial Ceramics Corp.	Manufactures standard and special indexable cutting tools, as well as carbide and cermet inserts	-	-
6/16/2008 8/4/2008	<b>PNA Group Holding Corporation</b> RSAC Management Corporation	Distributes steel products and provides value-added steel processing services	\$1,083.9	0.6x
6/5/08 6/5/08	<b>MicroGroup Blaine, LLC (nka:MultiSource Aerospace LLC)</b> MultiSource Manufacturing LLC	Provides machining services and manufactures metal components for the aerospace and defense industries	-	-
6/1/2008 6/1/2008	<b>Miller Welding &amp; Iron Works</b> Bismark Tool and Die Co.	Manufactures machined parts for mining machinery, oil rigs, wind components and farm equipment	\$40.0	1.5x
6/1/2008 5/30/2008	<b>The MedTech Group, Inc.</b> KRG Capital Partners, L.L.C.	Manufactures medical devices and components and provides supply chain management services	-	-
4/29/2008 4/29/2008	<b>Wire Works Inc.</b> Strandex Corporation	Provides machining services with a focus on electrical discharge machining	-	-
4/22/2008 4/22/2008	<b>Process Fab, Inc.</b> Vance Street Capital	Manufactures transporters, containers, composites, flight hardware and tooling for aircraft and space applications	\$82.0	-
4/17/2008 4/17/2008	<b>Consolidated Foundries, Inc.</b> Arlington Capital Partners	Manufactures super-alloy castings for the aerospace, military, medical, electronic and commercial markets	-	-
4/4/2008 4/4/2008	<b>Ajax Rolled Ring And Machine, Inc.</b> Prospect Capital Corporation	Manufactures carbon, alloy and stainless steel rolled rings for the oil and gas, wind and construction industries	\$6.3	-
4/3/2008 5/16/2008	<b>Taylor Equipment &amp; Machine Tool Corp.</b> Namasco Corporation	Provides manufacturing, machining and cutting services and manufactures steel plates and military armor	-	-

Source: Capital IQ, as of September 5, 2008  
EV = enterprise value; LTM = last 12 months

## 2008 U.S. Precision Metal Manufacturing M&amp;A Transactions (continued)

Announced/ Closed	Target / Acquirer	Target Description	Implied EV (\$mm)	EV/LTM Revenue
3/28/2008 3/28/2008	<b>Berkshire Manufactured Products Inc.</b> Relativity Capital	Manufactures complex precision stamping and machined components	-	-
3/27/2008 3/27/2008	<b>UltraFine Powder Technology, Inc.</b> Carpenter Powder Products, Inc.	Manufactures alloy metal powders used in medical device aerospace and defense applications	\$6.6	-
3/17/2008 3/17/2008	<b>AZ Automotive Corp.</b> AIG Investments; ORIX Corporate Finance Group	Manufactures metal-formed components, complex modules and mechanical assemblies	-	-
3/13/2008 3/13/2008	<b>KEF, Inc.</b> Coghlin Companies, Inc.	Provides precision-machined parts and assembly services for the defense, medical and communications industries	-	-
3/12/08 3/12/08	<b>Republic Fastener Manufacturing Corp. &amp; Van Petty Manufacturing</b> Alcoa, Inc.	Manufactures performance precision aerospace fasteners for engine and equipment manufacturers	\$276.0	5.4x
3/5/2008 Pending	<b>RM Precision Swiss Inc.</b> Swissmetal AG	Manufactures precision screw machine parts for the electronic component, medical and aerospace industries	-	-
3/4/2008 3/4/2008	<b>Bronco Manufacturing, Inc.</b> Crystal Ridge Partners	Manufactures OEM parts and associated components for drilling, workover and well servicing rigs	-	-
3/4/2008 3/4/2008	<b>Swiss-Tech, LLC</b> Cornerstone Industrial Group, LLC; South Franklin Street Partners, LLC	Manufactures machined components to the healthcare, transportation, industrial, defense and technology sectors	-	-
2/29/2008 2/29/2008	<b>Small Tube Manufacturing LLC</b> Standish Capital, LLC	Manufactures small diameter precision copper, copper alloy and brass tubing	\$25.0	-
2/29/2008 2/29/2008	<b>Saegertown Manufacturing Corporation</b> MacLean-Fogg Company	Produces precision parts and provides finishing services to OEMs in various industries	-	-
2/18/2008 2/18/2008	<b>Brasseler USA Inc.</b> Carousel Capital	Manufactures instrumentation for dental practitioners, hygienists and laboratory technicians	-	-
2/1/2008 2/1/2008	<b>Tubular Products Company</b> Samuel Manu-Tech Inc.	Provides tubular steel products such as wire carriers, tubing, components and sub-assemblies	\$33.0	1.1x
2/1/2008 3/3/2008	<b>Hodge Foundry, Inc.</b> Elyria Foundry Co. LLC	Manufactures iron castings for mining, plastic injection and die casting, and machine tools	\$32.0	-
1/29/2008 1/29/2008	<b>Giddens Industries, Inc.</b> Platte River Ventures	Manufactures machined and sheet metal parts for aerospace industry	-	-
1/23/2008 1/23/2008	<b>Missouri Metals LLC</b> Metalspinners, Inc.	Manufactures components and assemblies for the aerospace and power generation industries	-	-
1/18/2008 1/18/2008	<b>EL-Tronic Precision, Inc.</b> Remmele Engineering, Inc.	Provides contract manufacturing services for orthopedic, drug infusion and other medical devices	-	-
1/8/2008 1/8/2008	<b>Tri-Fab Associates Inc.</b> Cascade Consolidated Industries, LLC	Provides contract sheet metal manufacturing services to the electronics, medical and aerospace industries	-	-
1/3/2008 1/3/2008	<b>Distefano Tool &amp; Manufacturing Company</b> Behlen Mfg. Co.	Manufactures precision tools and machined steel components for various applications	-	-

Source: Capital IQ, as of September 5, 2008  
EV = enterprise value; LTM = last 12 months

## About Capstone Partners LLC

Capstone Partners LLC is a leading national investment banking advisory firm dedicated to serving the transaction needs of middle-market companies. The firm provides corporate sale & divestiture, merger & acquisition and private placement advisory services across three major industry practices: Specialty Products, Business Services and Technology & Media. Our team possesses significant experience spanning hundreds of M&A and financing transactions. All of our transactions are supported through industry-specific research and relationship coverage capabilities.



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