



Specialty Industrials



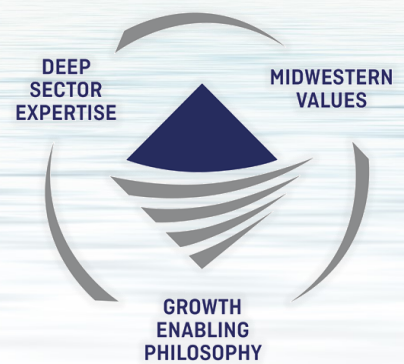
Life Science



Advanced Materials



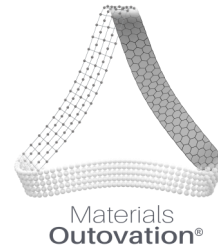
Specialty Chemicals



Investment Thesis:

Specialty Injection Molding

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Thesis Overview

Injection molding has been around for over 100 years and is a widely used manufacturing process encompassing polymers, metals, and ceramics. Edgewater's investing strategy emphasizes a high degree of technical differentiation. Thus Edgewater's specialty injection molding thesis pertains to only a narrow segment of the Injection molding space.

Examples of Differentiation in Injection Molding

1. Multi-shot injection molding (*Fig. 1*)
 - a. [An online article](#) highlights the ability to create products with "incompatible" materials
2. Ceramic materials (with polymer carriers) can be injection molded to high precision and to create products that may not be possible with classical techniques. The process has been refined and increasingly difficult multi-materials are being injection molded. (*Fig. 2*)
3. Custom tailoring of polymers (e.g. silicones or nano-fillers in epoxies) to promote curing either "*insitu*" (in the mold) or shortly after ejection (without a secondary processing step) (*Fig. 3*)
4. Use of modeling to precisely estimate the flow of material in the mold can reduce design iteration time. Computational modeling can help differentiate a company's offering from others with identical equipment.
5. End industry differentiation
 - a. Focusing on medical devices/medical market may offer significantly higher margins that are conventionally associated with automotive

Figure 1:
2 Shot Injection Molding

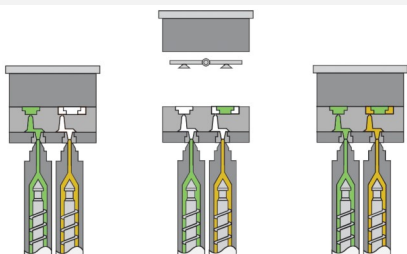
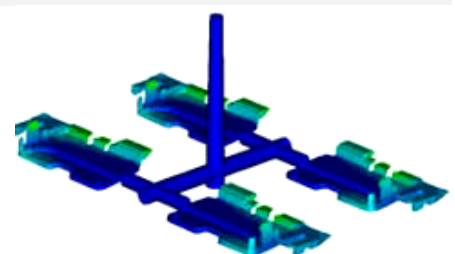
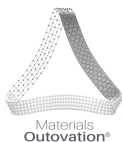


Figure 2:
Molded Ceramics (Coorstek)



Figure 3:
Fluid Dynamic Modeling (Gillette)





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Specialty Injection Molding



About Edgewater Capital Partners

Edgewater Capital Partners, headquartered in Cleveland, Ohio, is a sector focused private equity firm investing in lower, middle-market performance materials businesses. We have extensive experience and expertise in niche manufacturers of specialty chemicals, pharmaceuticals, and engineered substances. Twenty years of industry specific investing has allowed us to develop a deep understanding of the complexities and nuances common to performance materials businesses. As a result, we believe expertise in our target markets enables us to quickly and comprehensively understand a company's value proposition, customer relationships, and perceived or misunderstood risks.

About the *Materials Outovation*[®] Practice

Materials Outovation[®] Practice of ECP focuses on businesses whose core theme for growth relies on leveraging the composition, structure, properties, and processing of materials to provide customized performance in a material or a component for a specific application. Material families of interest include metal, alloys, ceramics, glasses, polymers, composites, adhesives, coatings, cements, concrete, and others. Phrases such as "mission critical", "enabling", "high performance", among others are often used to describe the materials and components produced by companies in this practice.

Materials Outovation[®] refers to the systematic process of looking "outside" the organization (at suppliers, consultants, other companies, customers, universities, experts, startups) to find ways of triggering innovation "inside" the organization for new markets, new applications, new customers and new technology – all of which enhances highly profitable growth. The professional networks of our operating partners provide a rich source for industry specific contacts.

The practice aspires to instill in each portfolio company world class business tools including environmental health and safety conscious culture, a lean operational culture inspired by the Toyota Production System and a streamlined supply chain – all in a spirit of continuous improvement, set in a backdrop of highly professional governance practices (adopted from the NACD guidelines).

We encourage a transparent open culture, emphasizing management team and employee empowerment including continually investing in the development of our people.

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