Reaction injection molding and injection molding have almost the same name, so even experienced engineers and designers might think they are the same. But “Reaction” signals a big difference.

Unlike injection molding, RIM techniques utilize low-viscosity liquid polymers in low-pressure thermoset – not thermoplastic – processes. The polymers expand, thicken and harden after they’re injected into a heated mold, making possible much more intricate designs and large, lighter-weight polyurethane parts.

Imagine the reaction when your parts perform better and cost less.

With RIM, you get positive reactions not only from customers and end users, but also the people with their eye on your bottom line. You can achieve significant advantages over injection molding, vacuum-forming, pressure-forming and cast molding in design, flexibility and cost-efficiency, as well as wide ranges of part size, design uniqueness, and overall superiority.

Since our processes require lower temperatures and pressures than typical ones, RIM polymers can be injected into cost-efficient aluminum molds, costing as much as 70% less than steel molds and lasting longer. They may never need to be replaced and can be modified much less expensively.

We’ve lowered lead-time to production, and our parts costs are very competitive with other polyurethane processes and almost always less expensive for parts which are large or have high demands for structural integrity, unusual or complex geometry, and design tolerances. Over-molding and combining several parts into one can bring about further cost savings.

Get better reactions to your designs.

RIM gives you design options otherwise impossible. Accommodating small to very large parts, it imparts structural integrity, tight tolerances and greater ranges of wall thickness within the same part. Plus, several parts can be combined into one.

Design solid, elastomeric, rigid foam, or flexible foam parts with your precise characteristics of impact resistance, dimensional stability and strength, wear- and corrosion-resistance, 94V-0 and HB ratings, thermal insulation and more.

“Our first two projects together (Abbott Molecular and Therox) posed plenty of size and shape challenges and the end results are something we can all be proud of. We’re looking forward to our next collaboration and deeply value our relationship.”

– Earl Robinson, President, Omnica Corporation

“RIM Manufacturing is our go-to partner for this type of technology.”

– Rick Payne, Sr. Dir., Design and Engineering, Flextronics
Create polyurethane parts that over-mold other materials like metal, wood or glass or even other parts such as cable, valves or circuitry.

Reaction injection molding is generally most cost-effective for quantities of a few hundred to several thousand parts, but one RIM Manufacturing client has looked to us to produce more than 1,000,000 parts per year for 10 years.

With RIM Manufacturing, you can choose pigmenting or in-mold painting. Postpainting with Class A or Class B cosmetic finishes, silk screening, EMI shielding, hydrographic print finishes and more.

The way we work gets a very positive reaction.

Founded in 1979, RIM Manufacturing, LLC has grown to be one of the largest independently owned plants in the country specializing in custom Reaction Injection Molding. We have depth of experience in the industry’s widest range of materials chemistry and offer the greatest accuracy in mold construction.

We'll work with you in each phase of the production process – part and CAD design, mold design and manufacturing, part production, secondary processing, painting and silk screening, assembly, packaging, and shipping – to optimize your parts' design, fabrication and performance.

Achieving ISO 9001 and 13485 Certification for RIM Molding and a wide range of assembly services, from partial assembly to full, even incorporating parts we did not create. We can even manage the customization of shipping containers as part of the Full Assembly process.

While we are one of the most experienced leaders in the business, our operating plant floor space that exceeds 45,000 square feet and our three-acre site allow us to be flexible and nimble in our response to client needs. And our Central US location in the Dallas/Fort Worth area can save time and cost for transportation.

We're proud that some of the world’s most respected companies have chosen to work with RIM Manufacturing. 3M, Abbott Labs, AMF Bowling, Baker Hughes, Cirrus Aircraft, Diebold, Flextronics, GE Medical, Lancer, Molecular Device, National Oil Well, Plexus, Siemens, Sparton Medical, Toro, Varian Medical and many more know they can count on us year after year to help them achieve the reaction they're looking for.

Contact us today to find out how RIM Manufacturing can help you and your parts get the reaction you’re looking for. Scott@rimmfg.com · Steve@rimmfg.com · (817)599-6521

“We have only experienced commitment, honesty, and excellent customer service from RIM Manufacturing.”
— Mark Buchanan, VP Mackanan LLC

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