Why Design?

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All products are born from someone's imagination to satisfy a particular market need. Sometimes that need is functional, other times it's to reduce cost, or in certain cases it's purely a matter of style. No matter how a product idea is conceived, every product must be designed. Design has a major affect on the success of products and the companies that manufacture them. Think of everyday products like the I-Pod, a Coke bottle, a Swiss Army knife or a Blackberry. Each of these products provide you with a distinctive image within your mind because they were designed to do just that.

Design affects everything from cost to appearance, function, manufacturing and sales. Good design can make one company a marker leader while poor design can plunge another company into bankruptcy. The rapid growth of the plastics industry throughout the past 50 years can be attributed to great product designs spanning from furniture to fighter jets. Just think of the world we live in if plastics design did not evolve to the sophisticated levels it has attained in recent times. Design excellence has been demonstrated in every plastics manufacturing industry ranging from injection molding to composites and rotational molding. Ironically, rotational molding offers the most opportunities for design innovation, but is the least recognized by the design community, why?

Rotational molding has historically been associated with low cost tooling and functional industrial parts such as tanks. Due to the inherent benefits of the process and rapid growth of the industry during the past 30 years, there has been little incentive for the industry to embrace design as an investment.

Exceptions to the latter are the toy industry and kayaks which have created new markets for rotational molding. These markets, however, have evolved with their own specialized design expertise which is integral to the market and proprietary processing techniques. The remainder of rotational molders and OEMs have not benefited from adequate investment in design because of the misconception that relatively low tooling investments warrant minimal design investment.

Unfortunately, this rationale has stymied the rotational molding industry and restricted its growth into new markets. Good design should be considered an investment and may exceed tooling costs in some cases. The important business decision should be based on the return on investment versus actual cash outlays. If the return is justified, then an appropriate investment can allocated for proper design. Creative application of rotational molding with good design will open virtually untapped markets with high profits and growth. Good design will save money in production costs, tooling and product introduction. The benefits of proper design are unquestionable for injection molded parts because tooling investments, lead times and risk are often significant enough to justify investing in good design. Rotational molders must also convey this same message to their customers. As designs for rotationally molded products become more sophisticated, profits will increase and markets will expand.

The good news is that some progressive molders are beginning to realize this opportunity and are including design within their business plans. They are offering perspective clients innovative concepts based on rotational molding to penetrate new markets with higher growth and profits. These markets require improvements in aesthetics, structural performance and added functionality which can only be optimized with good design.

As designs improve and become more sophisticated, technology typically improves and the industry advances. The future of rotational molding depends on the dynamics of good design, advances in technology and new applications. That is why design is important and should become more significant to rotational molding applications.