

KI INDUSTRIES, INC.

INJECTION MOLDING

Capabilities

General Capabilities	OEM Custom Manufacturing
Industry Focus	Appliances Automotive Consumer Goods Decorative Electronics Medical

Specifications

Materials	ABS ABS/PC Blends Acrylic HIPS (Hi-impact Polystyrene) Nylon Polycarbonate Polyesters PBT (Filled and un-filled) PBT/PET (Filled and un-filled) PC/PBT Blends Polypropylene Polystyrene TPE (Thermoplastic Elastomers) Phenolic
Product Capabilities	Large Components Medium Components Small Parts
Mold Type	<ul style="list-style-type: none">• Two Shot Molding• Three Shot Molding• Molded-In Color • Gas Assist Molding <p>KI has been utilizing gas assist molding to provide solutions for those projects that cannot be produced with conventional molding. The use of gas, injected at the precise time in the injection cycle allows complex parts to be molded maintaining an acceptable aesthetic quality while providing excellent functional performance.</p> <p>KI, with the assistance of resin manufacturer Ticona, was the first to develop a hi-gloss thermoplastic handle for the range industry. This provided appliance manufacturers a cost effective alternative to thermoset plastic and painted metal handles for oven doors.</p>

	<ul style="list-style-type: none"> • Multi-shot and Insert molding: <p>We launched our first two-shot production part in 1992. With the addition of three-shot molding capability several years ago KI has the ability to meet the demand for high-quality, aesthetic parts that have the tactile feel that many of today's designs require.</p> <p>In addition to our multi-shot capabilities KI offers insert molding. This enables our engineers to design parts that may not be possible using only conventional molding processes. Insert molding allows us to incorporate components into the molded part, providing functionality without sacrificing aesthetic quality and eliminating the need for costly secondary operations.</p>
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Product Volume	High Volume Prototype
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Tolerances (+/-)	1/1000
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Maximum Clamping Force	450 Ton
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Additional Information

Product and Process Development	<p>Design for manufacturability begins with understanding your concept and continues through design, prototype and production phases of the project.</p> <p>Our engineers fully understand the raw materials available to our industry. From the latest resin technology to tried and proven materials KI can suggest the best material for your part design, finish and performance requirements.</p> <p>Working closely with our customer's design team at the concept phase allows for the concurrent design of the part, the tool and the manufacturing process. This approach provides the best design solution for our customers while our process validation procedure provides the strict attention to detail that ensures a successful product launch.</p>
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Environmental Policy	<p>We know that being a World Class Supplier requires we be a good corporate citizen and steward of the planet. KI is committed to providing our customers with products that are compliant with applicable environmental regulations. These regulations such as the European Standard RoHS calls for the elimination of the use of environmentally hazardous substances in electrical and electronic equipment placed in the market after July 1, 2006: All KI products are RoHS compliant.</p> <p>In addition to ensuring that the products we supply are safe for the consumer and the environment we make sure that our manufacturing processes are also. Our plating and painting systems meet all local Government Agency environmental requirements.</p>
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Global Operations and Supply Chain Management	<p>KI's Global Manufacturing reach enables our customers to expand their supply base into low cost countries. With over 40 years' experience manufacturing products in Asia and delivering them to customers in the U.S. and Mexico, KI has the resources in place to manage the necessary supply chain options for customers in all markets around the globe.</p>
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<p>Quality Systems & Certifications</p>	<p>KI's Quality Certifications:</p> <ul style="list-style-type: none"> • Berkeley IL.: ISO 9001:2008 • Taiwan: TS 16949, ISO 14001 • Queretaro MX: TS 16949, ISO 14001 • China Plating Facility: TS 16949, ISO 14001 • China PVD Facility: TS 16949, ISO 14001 • China Die Cast Facility: TS 1694, ISO 14001 <p>A strong quality assurance program has been vital to KI's growth and success over the years. Our systems and procedures have been developed to insure that our products meet our customers demanding specifications.</p> <p>Our employees receive regular training in the latest systems and quality techniques. From basic problem solving techniques to PFMEA, DFMEA and Six Sigma tools this training serves as the cornerstone of our continuous improvement efforts. All employees are focused on providing the highest quality products and service for our customers.</p>
<p>Additional Services</p>	<p>Engineering Mold Making Rapid-prototyping</p>