Although SLA was a novel approach for its time, the first parts had visible lines showing individual layers and edges that were not uniform. Hand-finishing the prototypes by sanding was a common practice. As a result, the dimensions varied from part to part—and from the original designs.

Today, those challenges seem a distant memory. The most recent advances in SLA technology have dramatically increased both resolution and accuracy of the finished part. SLA machines now produce models with clearer definition and edges. Lines are less obvious, and corners and edges are more defined. Prototypes that require threads, pin holes and snap fits are more accurate.

One example is the high-resolution Viper™ si², manufactured by 3D Systems Corporation. The machine is ideal for small, precision builds with extremely detailed parts. When it comes to high resolution on a larger scale, 3D Systems’ Viper™ Pro takes SLA to a higher level, offering speed, accuracy, surface finish and a maximum part size normally associated with CNC machining.

Major advancements have also been made in terms of materials, providing finished parts with qualities such as heat-resistance, exceptional durability and flexibility.

Another development with high-resolution SLA is its use as a rapid manufacturing option. Realizing the cost-effective benefits and fast turnaround of accurate, functional parts, many product developers place SLA orders for up to 100 parts for finished production units.

Contact Laser Reproductions at 614-552-6905 to learn more about the benefits of high-resolution SLA—and the quality prototypes and production parts available.

The High-Resolution Solution

SLA has come a long way from its origins in the mid 1980s to becoming today’s leading solution for high-resolution prototypes and production parts.
behind the scenes

Profile: Paul G. Bordner II, President
Paul G. Bordner II has served an integral role in placing Laser Reproductions among the top-five percent of rapid-prototyping service bureaus in North America. A principal owner, Paul stepped up to serve as president in 2006, while company founder Jerry Bordner transitioned to the role of CEO and chairman of the board. Paul has extensive experience in prototyping and product development—working with a variety of specialized industries. He previously served as vice president of rapid prototyping, where he contributed significantly to the company’s strategic growth and operational efficiency.

Profile: Bret D. Bordner, Vice President
Serving as vice president, Bret D. Bordner is responsible for contracting manufacturing products to outside vendors for uses in injection molding, extrusion and metal stamping. Also a principal owner, Bret has been involved with the company since 1987. He has extensive experience in the industry and in several aspects of operation, including sales, product design, project management and engineering.

Experience the Laser Reproductions Difference
Laser Reproductions spent several months throughout 2005 and 2006 surveying our customers and conducting an extensive analysis of our company-wide performance. Our goal was to develop a service promise to our customers. The promise describes the heart of our operation and the key points of service that defines our commitment.

The message displayed to the right is what we promise to each of our customers. If you haven’t done so already, we invite you to experience the Laser Reproductions Difference.

in production

Profile: GLOBALTECH Ventures Inc.
John Schmidt is vice president of operations for GLOBALTECH Ventures Inc., a product development and manufacturing services firm. GLOBALTECH specializes in services from rapid prototyping, urethane casting and machining, to injection molding, tooling, stamping and die casting. The company is based in Farmington Hills, Michigan.

creating impressions

Profile: Paul G. Bordner II, President

in production

Profile: GLOBALTECH Ventures Inc.

creating impressions

Profile: GLOBALTECH Ventures Inc.

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