A.L.P. Reflek® Brand Specialized Capabilities

Manufacturing reflectors for today's lighting fixtures entail a delicate balance of art and science. Reflectors must provide for high efficiency and energy conservation while maintaining necessary aesthetics. With decades of experience producing reflectors for lighting OEMs, A.L.P.'s Reflek® brand is accustomed to meeting or exceeding expectations with each component manufactured.

A.L.P. Reflek brand is the lighting industry's leading supplier of made-to-order formed and fabricated components for recessed, high bay, roadway and other lighting applications. Products include high-performance reflectors, trim rings, and housings in a wide variety of finishes.

In addition to engineering, tooling, and prototyping services, A.L.P. Reflek uses multifaceted manufacturing technologies to produce precision components.

Precision Toolmaking

Spinning and Hydroforming are two examples of precision methods that Reflek utilizes for the production of reflectors. Each tool is used for precise vertical and horizontal CNC milling. This process reduces any chance of defective parts and creates a part that runs true to the forming tool to help manufacture the parts to the specification tolerances as set forth by our customers.

A spinning process is used to generate high-performance reflectors. A.L.P. starts with an aluminum blank. The tool (or chuck) must be present and fitted on an automatic CNC-based lathe. Then it must be spun at a very high rate of speed, as rollers pass the material over the instrument until a final shape is formed.

Spinning

CNC computer controlled spinning machines achieve precise, timeoptimized processes. The spinning process starts with an aluminum blank and finishes with the final shape produced as a precision tool passes over an extremely high-speed lathe.

All operators should be very experienced programmers, who understand how factors of size, material flow, and alloy, can impact the overall process.











Production Locations:

1401 Blairs Bridge Road, Lithia Springs, GA 30122 Customer Service:

Tel: 877-257-5841 | www.alpadvantage.com



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Hydroforming

Hydroforming works well for task lighting, high and low bay applications. It starts with an aluminum blank and a rubber diaphragm installed on top of the tool. A rubber diaphragm runs through the hydraulic housing; when under pressure, it forms the material around the punch tool to create the basic shape of the part. This extremely precise process needs just the right amount of pressure applied and requires significant expertise and experience. Hydroforming is uniquely suited to cost sensitive mediums for high volume production, and for parts with asymmetrical or irregular corners.

5-Axis Router

A.L.P.'s Reflek brand offers 5-axis router technology to streamline the production of high-performance reflectors and other related components. Our CNC, 5-Axis routers offer a low-cost option versus hard tooling for both prototyping and production needs.

5-Axis Laser Cutting

A.L.P.'s 5-Axis laser is available to fit individual customer's needs. Using various gasses, we can laser cut those parts that may need unique variations beyond the 5-Axis router's capabilities. Lastly, the 5-Axis Laser is an excellent choice to address prototypes.

Auto Polishing

Auto Polishing of semi-automated CNC polishing with Compubuf™ technology enhances the overall reflectivity of the surface.

Hand Polishing

The Hand Polishing of small intricate shapes requires polishing and buffing to achieve a jewel-like finish.

Painting, Fabrication, and Assembly

Powder and wet spray painting, CNC turret press and press brake manufacturing, along with sub-assembly offerings which include installation of springs, and brackets to go along with the main reflectors.

Our reflectors play a critical role in the performance of down lighting. The quality of A.L.P.'s Reflek components offers significant advantages over international imitators.

Contact your Sales Manager for complete details on Reflek brand products, materials, and artistry.











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