

## COMPANY PROFILE

Quality Engineering | [www.qes1.com](http://www.qes1.com) | (203) 269-5054 or 1-800-637-6809

# Quality Engineering Services: More Than Masking

**QUALITY ENGINEERING SERVICES** is known in the shot peening industry for its cast-urethane, molded-masking products. The aerospace industry, in particular, appreciates the company's extremely short lead times and competitive pricing. The "soft tooling" aspect of cast-urethane masking also offers the unique characteristics of resistance to abrasive wear, exceptional elongation and rebound, chemical resistance, cut-and-tear resistance and high-tensile strength.

In addition to shot peening applications, Quality Engineering's cast-urethane products are used for turbine blade and vane airflow and water flow testing seals, grit blast masking, cost-efficient prototypes, foreign-object prevention and more.

### More than Masking

Cast-urethane masking products are only one component of Quality Engineering Services' offerings: They specialize in the design and fabrication of precision tooling and gaging for the aerospace industry and other industrial manufacturers. The privately owned company is located in Wallingford, Connecticut and employs over 45 people. Their fully integrated management team is capable of handling projects from design conception through tool/gage tryout. Quality Engineering Services is an ISO 9001:2008 registered and AS9100:2009 Certified company. Quality Engineering is an approved tooling supplier to Pratt & Whitney, Sikorsky, GE Aviation, GE Canada, Lockheed Martin, Pratt & Whitney Aviation Canada, and many more.

### Fabrication

Quality Engineering Services' tool and gage manufacturing department is capable of producing fixtures and gages to tolerances of  $\pm .0002$ . They manufacture a wide range of items including Turbine Blade and Vane Tooling, EDM Fixtures, Location Gages, RTM Molds, Preform Tools, Lifting Devices, Vacuum Milling Fixtures, Assembly Tooling, CMM Nests, Tool Fabricating, Grinding Fixtures, Feather Seal Slot Gages, Holding Fixtures, Air Flow Fixtures, and more.

### Design

Quality Engineering's design department states that their designs are machine-shop friendly, reducing initial build costs as well as future repair costs. They use Unigraphics NX software, which allows the tools to be designed quickly and efficiently and changes can easily be incorporated. This is especially important when the tools are being designed concurrently with the product for which they are intended.

### Composite Tools

Quality Engineering is made up of highly experienced Class A Toolmakers, Unigraphics and Catia designers that have been designing and building composite tools for over 20 years. Their primary focus is on aircraft engine components, aircraft structures and missiles. Quality Engineering designs and builds complex resin transfer molds, autoclave, multi-piece release and compression molds for both the aerospace and commercial sectors. They produce all required secondary tooling, trim tools, and drill jigs.

### Prototype Machining

Quality Engineering has the technical capability to manufacture low-volume, high-precision machine components and special machinery within tolerances of  $\pm .0002$ . The company will custom manufacture special process equipment, integrated systems, semi-automated tools and assembly tools.

### Selective Laser Sintering

Quality Engineering designs and develops low-volume prototype SLS (Selective Laser Sintering) tooling for aerospace and commercial parts for a variety of applications. The SLS process is capable of producing snap fits and moving hinges. The maximum dimensions for a single piece item is: 26" x 14" x 21". Additionally, SLA (Sterolithography) parts are produced for fit, form, and function as well as demonstration and show model pieces. Approximate maximum dimensions for a single piece item is: 20" x 20" x 20". Larger two-piece constructed parts can be produced from both the SLA and SLS processes. ●