HISTORY

In October 1968, Photofabrication Engineering, Inc. (PEI) was established in a 4000 square foot building in Holliston, MA. Today, PEI has a modern, 40,000 square foot facility in Milford, MA, which was designed and built specifically for photochemical machining. PEI has some of the most advanced equipment and state-of-the-art processes in our industry, and is dedicated to the highest levels of quality. We are recognized by the Commonwealth of Massachusetts as a "green" manufacturer, and all of our products are proudly made in the USA.

PEI’S PHOTOCHEMICAL MACHINING PROCESS

PEI's photochemical machining process involves the selective removal of a material by chemical action. Because the tooling used is a photographic image produced from electronic artwork created to meet each customer’s exacting product specifications, it is inexpensive, and it is easy to make tooling design changes quickly. Photochemical machining outperforms similar, more traditional manufacturing operations, and offers many advantages including:

- Rapid prototyping
- No burrs or stresses
- No effect on magnetic properties
- No deformation
- No tool wear – the 1,000,000th piece is exactly the same as the first piece
- Precise control of the "Z" (depth) dimension, including multiple levels

Using specially-designed equipment and proprietary methods, PEI can process almost any metal, including materials such as beryllium copper and titanium that are difficult to machine using other methods. Aluminum, brass, cold-rolled steel, Kovar, stainless steel—all the way through zirconium—PEI can handle it all, with metal thicknesses ranging from 0.0005 in. (0.0127 mm) to 0.125 in. (3.1275 mm).

QUALITY CERTIFICATIONS

PEI’s quality control methodology and expertise have been recognized by major national and international organizations. We currently hold ISO 9001 and AS9100 registrations. While AS9100 is for aerospace, PEI also meets quality standards such as ISO 13485 for medical and ISO TS 16949 for automotive products. In addition, PEI is ITAR registered to comply with the International Traffic in Arms Regulations. PEI’s manufacturing and quality control processes meet or exceed MIL-STD-45622, MIL-STD-105 and ANSI/SQC Z1.4 standards.
MARKETS SERVED

Photofabrication Engineering offers in-house photo-tooling and the opportunity to create precision metal parts at competitive prices with exceptionally short leadtimes. With over 45 years of engineering excellence, an in-house design staff, and quality certifications including ISO-9001, AS9100, PEI has earned a reputation for producing high-quality products for almost every industry, including:

AEROSPACE

SEMICONDUCTOR

ENERGY

BATTERY

TELECOMMUNICATIONS

MICROELECTRONICS

DEFENSE

MICROWAVE

AUTOMOTIVE

MediCAL PRODuCTS