

Job Description: Mechanical Designer

## **Summary:**

Highly creative SOLIDWORKS® expert with good hands-on mechanical skills, who will design and in some cases make assemblies for tooling, fabrication processes, and new custom machinery



### What You Do:

- Design 3D models of new machines and parts, metal and 3D-printed plastic tooling, and glass optics
- Oversee outsourced fabrication of precision-machined parts for new machines and tooling
- Oversee and execute fabrication of 3D-printed tooling and molds for plastic-formed containers
- Assemble and verify mechanical compliance of tooling for handling large glass optics in various machines and processes

### **Qualifications:**

- Expert knowledge of 3D CAD platforms, including SOLIDWORKS
- Strong hands-on knowledge of mechanical parts and assemblies as well as subtractive machining and 3D printing processes
- Experience with the design of large heavy-load assemblies, transport devices, and high vacuum systems
- Knowledge of Geometric Dimensioning and Tolerancing (GD&T)
- Familiarity with document revision and control, drawing release processes, and Mastercam® or NX®
- Strong computer literacy, including ability to use MS Windows, Excel, PowerPoint, and Word

### **Experience and Education:**

- At least 5 years of directly relevant work experience
- Education: minimum 2-year Associates Degree; other relevant formal training is highly desired

# **Apply online at:** <u>plymouthgrating.com/about-pgl/careers</u>

**About Us:** Plymouth Grating Laboratory is dedicated to making the highest-quality diffraction gratings available today. Our focus is on lasers and laser systems. PGL gratings offer exceptionally high diffraction efficiency and laser damage threshold, combined with superior wavefront error and uniformity over large areas. This performance is made possible by PGL's exclusive use of the Nanoruler, based on the proprietary Scanning Beam Interference Lithography technology developed at MIT, and PGL's industry-leading process expertise. The company occupies 20,000 sq. ft. of dedicated manufacturing, engineering, and office space in Carver, MA, just outside of Plymouth, and about 45 miles south of Boston.