



PEAK

Launching the Next Generation
of Manufacturing Technology

Materials Science & Selection

Plastic Expertise: 20+ high-performance polymers

Metal Expertise: Stainless, aluminum, copper, castings

Industries Served: Aerospace, medical, semiconductor, energy, electronics

Services: Material testing, substitution support, reverse engineering



Overview

Choosing the wrong material can lead to product failure, missed certifications, or downstream manufacturing issues—especially in industries like aerospace, biomedical, semiconductor, and high-tech R&D. Engineers and sourcing teams are often forced to navigate this decision with limited supplier input or guidance. Material compatibility with process, environment, and end-use function is critical, yet many vendors simply take orders without helping evaluate tradeoffs in machinability, cost, or durability. Peak's customers need a partner who understands the science behind performance—and who can guide them from prototype to production with confidence.

Solution

At Peak Technology, material selection is a core part of our value-engineered approach. We help customers choose the right plastic or metal for their application—balancing performance, tolerances, thermal or chemical resistance, and cost. Our team supports a wide range of advanced plastics (like ULTEM, PEEK, TORLON, and PVDF) and metals (including stainless steel, copper, aluminum, and alloys), with deep experience in how those materials behave during machining, forming, welding, and finishing.

- **Material Behavior Expertise** – We advise on heat resistance, chemical exposure, machinability, and load-bearing performance.
- **Advanced Plastic Knowledge** – Includes ULTEM, DELRIN, PEEK, TORLON, PVDF, CPVC, Kynar, and more.
- **Metal Machining Proficiency** – Skilled in both ferrous and non-ferrous materials, including castings and precision alloys.
- **Cross-Process Compatibility** – We help ensure your selected material performs well across forming, welding, and polishing.

Peak Technology Enterprises is a woman-owned precision manufacturing company based in San Jose, CA, offering **additive** and **subtractive** manufacturing, engineering support, system integration, and full assembly services. With over **60 years of experience** and **ISO 9001 certification**, Peak partners with **global OEMs** and innovators to deliver high-performance components and complex builds—on time, on spec, and on budget.