



Where medical devices come to life.

PEEK Machining and Molding

Expert machining and molding services to get your PEEK devices to market sooner

PEEK – the organic polymer thermoplastic polyetheretherketone – is an increasingly-used component of many implantable medical devices because of its biocompatibility. Tegra Medical excels in both PEEK machining and molding, and ensures that your PEEK-based devices are manufactured with the utmost efficiency, precision and quality.

Most customers choose machining for prototyping, low-volume production and newer designs, and molding for high-volume production of finalized designs. The kinds of orthopaedic products we fabricate from PEEK include tissue anchors, bone and suture screws, plates, and pins. We work with whatever kind of PEEK our customers need, including PEEK Optima®.

PEEK Machining

With two of the three Star SF-25 turning centers currently operating in the U.S., we're well equipped to handle large-capacity jobs for machining PEEK. These systems are excellent for machining complicated, odd-shaped parts with speed and precision.

To increase productivity, these systems include features that allow us to machine PEEK with a single set-up, which is also faster, more precise and cost-effective.

PEEK Molding

Tegra Medical has several dedicated molding machines that handle both horizontal and vertical molding for PEEK, allowing us to accommodate special requirements for delicate items or those with metal inserts, for example. We have both hot and cold runner processing.

Our expertise in molding tubes is unmatched, particularly when it comes to eliminating parting line flash where the two parts of a mold come together.

Convenient Cleanroom PEEK Molding

Choosing Tegra Medical as your partner in machining and molding your PEEK devices also brings the convenience of one-stop shopping. Mold your PEEK and non-PEEK items without ever leaving the Class 8 cleanroom environment. Other vendors may require you to ship your product elsewhere (even out of the country) for packaging. But at Tegra Medical everything is inspected in process, molded, and given a final inspection before going to our own Class 7 cleanroom for packaging.



How Clean is Clean Enough?

There's no such thing as too clean when it comes to medical devices. Tegra Medical offers validated cleaning systems that adhere to the highest requirements in the industry. And since most PEEK parts are implants, it's especially important to work with a contract manufacturer who knows how to ensure they are clean and contaminant-free.

Additionally, Tegra Medical machines PEEK on dedicated machines with no cutting fluids, allowing them to be machined dry. This makes cleaning simpler and reduces the chances of introducing contaminants.

A Partner with PEEK Expertise

The best designs yield the best products. At Tegra Medical we have the expertise to make recommendations on your design and perfect the molds to ensure top quality and the most efficient manufacturing process possible.

When it comes to working with PEEK, the quality of the final product depends on the skill of the operator. We ensure that our operators have been well trained, including onsite training with the manufacturer of the machines.

PEEK can be challenging to work with. It's abrasive, gets hot, and can wear out tools. But the PEEK experts at Tegra Medical know how to choose tools that can stand up to its challenges. We've even designed special tools that are customized to PEEK work.

Quality

You need quality without compromise, so we infuse stringent quality standards into every step. Our arsenal of quality tools includes ISO certifications, QSR compliance, FDA registration as a contract manufacturer, cGMP practices, SPC, lean manufacturing, Six Sigma, special validations, Black Belt-certified engineers, and tools for risk management.

Tegra Medical* offers an array of prototyping and manufacturing services with 200,000 sq. ft. of manufacturing in four locations. We use the latest in process controls to give you peace of mind and the highest quality product. Call us to find out how we can help you be more successful.

