

OUR BENEFITS



Precision Machining Capabilities

- **CNC machining:** more than 40 pieces of equipment ranging from five-axis milling to live-tool turning centers with sub-spindles
- **Portable ISO 8 controlled environment rooms:** offering a high degree of protection from particulate contamination
- **A wide range of medical grade plastics:** implant grade UHMWPE, high temperature resistant engineering plastics, thermoplastic resins and biodegradable polymers

Materials Used

- UHMWPE – Ultra-high molecular weight polyethylene (including standard, Vitamin E impregnated and cross-linked)
- PEEK Polyether ether ketone (including carbon-filled)
- PPSU Polyphenylsulfone, or Radel®/Ultrason® (including R-5000, R-5500, R-5800)
- POM Polyoxymethylene, or Acetal/Delrin®
- PMMA Polymethyl methacrylate (including acrylic)
- PE Polyethylene
- PTFE Polytetrafluoroethylene, or Teflon®
- HDPE High density polyethylene
- PEI Polyetherimide
- PC Polycarbonate
- PBT Polybutylene terephthalate
- PA 6/6 Polyamide, or Nylon 6-6
- PVC Polyvinyl chloride
- ABS Acrylonitrile butadiene styrene
- Other materials available

ABOUT ORCHID

Orchid Orthopedic Solutions is a worldwide leader of medical device outsourcing services, providing expertise to partners in more than 20 countries through a complete offering that ranges from design and development to finished goods manufacturing. One of Orchid's goals is to be the market leader and our customers' strategic partner by providing reliable results, developing new technologies and creating the best total supply chain value in the industry.

CONTACT US TODAY

Make your ideas a reality.



Chelsea Office:
13800 Luick Drive
Chelsea, MI 48118 USA
Phone: +1 (734) 475-9165

E-mail: chelseasales@orchid-ortho.com
www.orchid-ortho.com



Plastics Technology and Manufacturing

High-Precision Plastics Machining

WHY ORCHID

- More than 40 years of orthopedic implant manufacturing
- Expert Design for Manufacture (DFM) advice
- FDA-registered contract manufacturer
- Value-based culture with engaged employees focused on satisfying customer needs
- Proprietary part holding techniques allow superior tolerance control while maintaining high cosmetic requirements
- In-house tool room for quick, low cost solutions to complex geometric requirements
- Multi-way part marking: laser, engraving and pad printing
- Visual workplace standards and metrics for real-time status updates and rapid problem solving
- Higher quality due to live statistical process control data
- A network of partners and vendors for greater customer value



Teflon® and Delrin® are registered trademarks of DuPont.
Radel® is a registered trademark of Solvay.
Ultrason® is a registered trademark of BASF.



PARTNER WITH US

Unparalleled experience and market-driven solutions to meet your needs.



Orchid serves the medical industry as a contract manufacturer of polymer-based products. We offer more than 40 years of orthopedic implant and instrument manufacturing experience in medical grade plastics, including PEEK, UHMWPE and PMMA. Skilled in precision machining, we are a full service partner that can also provide value-added assembly in an ISO Class 8 controlled environment.

By partnering with us, you can leverage our resources and experience to bring products to market more quickly, cut costs and better utilize your staff for greater efficiency and effectiveness.

OUR CAPABILITIES

Innovative technology meets value-added opportunity.

Engineering

Orchid works closely with our customers to ensure the final product can be made in a consistent and cost-effective manner. With more than 40 years of experience with plastic orthopedic implants, our engineering department understands and manufactures products to exacting specifications that exceed customer requirements.

CNC Machining

From our five-axis milling capabilities to live tool-turning centers with sub-spindles, our CNC equipment is here to service our customers' production needs. Proprietary part holding techniques allow superior tolerance control while maintaining high cosmetic requirements. Additionally, more than 40 years of implant machining expertise provides innovative techniques that drive low lead times and costs.



Quality and Regulatory

Orchid fully understands the regulatory requirements, quality assurance and quality control requirements specific to our industry. Our quality control department is equipped with state-of-the-art inspection equipment, including programmable computer-controlled coordinate measuring machines (CMM) and statistical process control software.

Orchid's unified quality management system has a distinct focus on continuous improvement, analyzing quality metrics to improve performance and identifying and implementing best practices throughout the organization. All Orchid divisions are ISO 13485 certified.



Plus we offer you the advantages of:

- Lean operating systems that provide single piece flow cells for higher volume products, yielding high-flow, low lead-time results
- Full value stream management capability through our Orchid facilities
- Ultra short lead times due to complete value stream Kanban and stocking agreements
- An engaged team fully trained in problem solving processes and fully committed to providing an opportunity for people to live a better life

