

## COMPLEX INSTRUMENTS

- Knee femoral cut guides
- Hip stem broach handles
- Knee, femoral and tibial trials
- Alignment guides
- MIS access components and assemblies
- MIS screw placement instruments
- Compressors and distractors
- Screwdriver assemblies
- Tubular dilators
- Shavers and cut curettes
- External fixation assemblies



## 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. Our mission 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.

**ORCHID**

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## Surgical Instruments

**Standard, Complex or Custom Instruments for Joint, Spine, Extremities and Trauma Surgery.**

## STANDARD INSTRUMENTS

- Drills
- Taps
- Reamers
- Cutting burrs
- Saw blades
- Awls
- Rasps
- Drivers (hexalobe, hex, cruciform, etc.)
- Wires, pins
- Impactors
- Mallets
- Inserters
- Tubes (coated and uncoated)
- Acetabular trials



**ORCHID**



# SURGICAL INSTRUMENTS

Advanced machining  
and finishing capabilities.

Vertically integrated facilities.

Lean practices to compress  
lead time and cost.



## The Latest Machining Technologies

- Multi-axis turning
- Milling
- Grinding
- Gun drilling
- Laser cutting
- EDM (wire and sinker)

## Turnkey Finishing Capabilities

- PVD coatings – Titanium nitride (TiN) and chrome
- Citric and nitric passivation
- Color-coding
- Controlled environment assembly
- Curing/annealing ovens
- Electropolishing
- Epoxy paint marking
- Grit blasting
- Hydra-hone and glass bead
- Sterile packaging
- Finish labeling



## Complete Prototyping Capability

Whether for fabrication of functional instruments or prototyping for user feedback and benchtop experimentation, Orchid facilities offer the following:

- Computer-aided engineering
- Design for manufacturing
- 3D printing
- Quality and regulatory compliance
- Complete traceability/certification
- Shortened lead times
- Small scale/pilot production

## Design for Manufacturability/Assembly

A design process that optimizes all the manufacturing and assembly processes for instrument creation, from fabrication, testing and procurement to shipping and delivery. As practiced at Orchid, the process assures the best cost, quality, compliance, safety and time to market, as well as the highest level of customer satisfaction.

## WANT TO KNOW MORE?

For further information on standard, complex or custom instrument design, prototyping, manufacturing, finishing and packaging, contact: [sales@orchid-ortho.com](mailto:sales@orchid-ortho.com)



## QUALITY SYSTEMS AND CERTIFICATIONS

### Quality Assurance

- Robust CAPA and document control system
- Full validation of low friction chrome coating, passivation and laser marking processes

### Quality Control

- Fully documented quality control plans, including the following when required:
  - FMEA
  - Gage R&R (MSA)
  - SPC data collection
  - Capability studies

### Quality Accreditations

- ISO 13485 and ISO 9001
- Facilities are registered with the U.S. FDA