Engineered Solutions

High Precision Machined Parts

Equipment and Manufacturing Technology:

Swiss-type Automatic Machines

Multi Spindle Swiss CNC Machines

High-Speed Coil Fed Automatic Machines

CNC Machines with Sub-spindles and Live Tooling

Rotary Transfer Machines

Conventional Turning Stations

CNC 4 Axis Horizontal Milling

CNC 5 Axis Milling Centers

CNC 3 & 4 Axis Vertical Milling Centers

Robotic Manufacturing & Machining Cells

Material:

Titanium, Stainless Steel, Bronze, Brass, Carbon Steel, Aluminum

Specialty Alloys, Tungsten, Precious Metal (e.g. Gold, Platinum, Palladium)

Tungsten, Plastics (e.g. Radel, Peek)

Complementary Manufacturing Capability:

CNC Laser Welding, Cutting, Etching and Marking

Honing: Vertical and Horizontal

Grinding: OD, ID, Form & Centerless, CNC

Heat Treating: Annealing, Controlled Atmosphere, Tempering Case Hardening

Deburring: Micro Bead, Grit Blasting, Automated CNC handling, Thermal, Chemical

EDM Processing, EB and Resistance Welding

Part Serializing and Color Identification

Plastic Molding and Assembly Operations

Bending, Cold Forming, Wire Forming

Drilling, Slotting, Threading, Tapping, Knurling

Surface Treatments:

Polishing, Tumbling, Electro Polishing, Cosmetic Finishing

Anodizing, Titanium Nitride, Precious Metal Coating, Nickel, Electroless Nickel, Chrome, Black Oxide and Zinc

Citric and Nitric Passivation, Aqueous and Organic based cleaning, Micro-abrasion

Approximate size ranges from 0.011" (0.3mm) up to 1.65" (42mm) diameters and lengths up to 25" (635mm) and more depending

Customized packaging options, bar coding, kitting and inventory stocking



















Medical Machined Components



DENTAL **ENDOSCOPY** ORTHOPEDIC CARDIOLOGY OPTHALMOLOGY NEUROLOGY SURGICAL INSTRUMENTS LAPAROSCOPY ARTHROSCOPY **VASCULAR**



COMPLEX

DESIGNS















BENEFITS OF PRECISION MACHINING

- Flexibility and manufacturing optimization
- High volume production of complex components
- Ability to maintain demanding tolerance requirements
- Broad selection of material options
- Validated and secure processes

DESIGN AND ENGINEERING SUPPORT

- Turnkey support from design through production
- Comprehensive assessment with a focus on manufacturability
- Prototyping, evaluation, validation and production optimization
- Review & feasibility studies
- Expertise in micro and miniature components
- Material selection, secondary finishes, tolerancing
- Precision designs for accurate and repeatable results

QUALITY SYSTEMS AND MANAGEMENT

- Risk Management for product realization
- Capacity and Correlation Studies, Gauge R&R's, SPC Data Support, FMEAs
- Process Validation, Independent Testing and Certification Services
- Device Master Records, FAIR documentation and
- Preventative Maintenance and Continuous Improvement
- ISO Class 8 Clean Room, fully validated clean room, packaging and cleaning

ISO 13485 ISO 9001 ROHS CTPAT REACH











