



Orchid Orthopedic Solutions

Increased throughput and inspection information

Orchid Orthopedic Solutions is a medical device manufacturer providing contract manufacturing services for OEMs and other companies within the orthopedic industry. Orchid's location in Oregon City, Oregon, specializes in the investment casting manufacturing process for knee implants, including 3D wax printing, machining and finishing knee femoral components and stemmed tibial plates. Ensuring the knee implant components meet the customer's specifications requires accurate and repeatable inspection. By using optical scanning, the company could increase throughput and inspection information.

Industry

Medical

Challenges

- Inspection of small parts with organic shapes
- More information in faster cycle-times
- Multi-part measurement

System

ATOS ScanBox

Solution

- Non-contact 3D measurement solution with inspection software
- Gage R&R study proved that ScanBox correlates with CMM technology
- Complete characterization with digital twin from 3D scan
- Multi-loading functionality of up to 24 parts per loading

Software

ZEISS INSPECT

Benefits

- Higher Productivity & cost efficiency (ROI < 12 month)
- Ease of adding additional measurement characteristics
- Reverse engineering for inhouse tooling
- Software ease of use visualization capabilities and reporting functionality