



Norman Noble Introduces Medtech Engineering and Testing Services

Engineering and Testing services meet growing demand for turnkey manufacturing of next-generation medical devices and nitinol implants

HIGHLAND HEIGHTS, OHIO – August 20, 2014 - Medical device contract manufacturer Norman Noble, Inc. announced it has begun providing additional engineering and testing services to its medtech customers. The expansion of services streamlines the product commercialization process for the company's customers, freeing up their internal engineering resources and enabling them to bring products to market more quickly and cost effectively.

Engineering and Testing services are essential to product development, product refinement, manufacturability, verification testing, and FDA approval. Norman Noble's Engineering and Testing Services offering includes the following technical services and capabilities for medical device original equipment manufacturers (OEMs) worldwide:

- Finite Element Analysis (FEA)
- Corrosion Testing per ASTM F2129
- Design Model Optimization for Radial Force, Design for Manufacturability (DFM), Fatigue Analysis, Raw Material and Process Optimization to ensure highest level of quality and yield
- Test Report Data to support customer requirements for FDA regulatory compliance
- Scanning Electron Microscopy (SEM) Analysis with EDX
- Nitinol Austenite finish (Af) analysis using Bend Free Recovery (BFR) per ASTM F2082, and Differential Scanning Calorimetry (DSC) per ASTM F2004

"We're experts in manufacturing vascular stents and medtech implants from exotic materials including Nitinol. We understand how to develop and execute efficient, repeatable processes. With our new engineering and testing services, we're applying the same level of expertise to a major part of the product development cycle," said Norman Noble COO Chris Noble. "Our assistance with engineering and testing enables our customers to heighten their focus on what they do best: anticipating, researching and conceptualizing innovative medical device technologies. Norman Noble then delivers their finished product."

The addition of engineering and testing services makes Norman Noble a fully integrated contract manufacturer able to support medtech suppliers from concept development to full-scale production in each of its process development centers (PDC's):

- [Laser Machining and Welding](#)
- [Swiss Turning and Milling](#)
- [NiTiNol Shape Setting](#)
- [5-Axis Contour Milling](#)
- [Surface Finishing and Electropolishing](#)

To inquire about Norman Noble's engineering and testing services or any of its other medtech contract manufacturing capabilities, visit: www.nnoble.com or call 800.474.4322.

About Norman Noble, Inc.

Established 68 years ago, Norman Noble, Inc. remains a family-owned and -operated company offering the most advanced processes for ultra-precision micromachining. The company is known for its exceptional ability to achieve subminiature precision beyond the reach of most manufacturers. Norman Noble is a supplier to most of the largest OEM's and well-known names in the medical device industry.

Norman Noble manufactures medical devices and implants to customer specifications in compliance with FDA regulations and ISO 9001 and ISO 13485. State-of-the-art processes include automated stent manufacturing, laser machining & welding, Swiss turning & milling, conventional and wire EDM, high-speed 7-axis contour milling, Nitinol shape setting and clean room assembly & packaging. Prototype services are available in separate and fully dedicated process development centers. For more information please visit www.nnoble.com.

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