L&T Technology Services

SURGICAL SERVICES

STATE OF THE MARKET

The medical industry is steadily gravitating towards robotics to assist surgical procedures. The market for surgical robotics is therefore estimated to double from $3 billion in 2014 to $6 billion by 2020.[1] For patients, robotics technologies yield several benefits, such as a reduction in pain and recovery time post-surgery. Surgeons too, are advantaged by faster, more accurate defect identification, and shorter procedural times through effective image guidance.

However, the burgeoning interest in surgical robotics poses a number of challenges for medical equipment suppliers. For instance, they require highly specialized resources and access to product performance intelligence to manufacture products successfully. Such expertise is a rarity in the current market, in which tighter regulations and compliance standards are straining product margins and development funding.

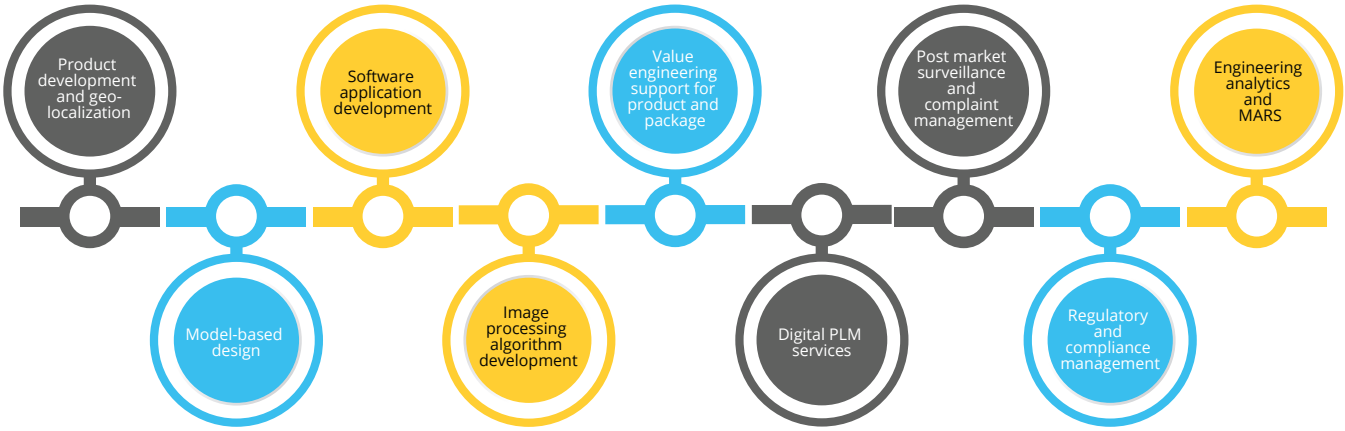
SERVICE OFFERINGS

L&T Tech Services (LTTS) offers a comprehensive suite of services and tools for the surgical and cardiovascular instrument, medical supplies, and obesity treatment device segments. These include electrosurgical and remote/robotic-assisted devices, electrical stimulation systems, and surgical ablation devices. We specialize in product development and geo-localization services, model-based design, software application and image processing algorithm development, and value engineering support for products. We also provide digital PLM managed services, post market surveillance and complaint management, regulatory and compliance management, and engineering analytics.

Footnotes:

1. Allied Market Research, Surgical Robotics Market by Component, https://www.alliedmarketresearch.com/surgical-robotics-market

SERVICE OFFERINGS



KEY DIFFERENTIATORS

- Understanding of geo-specific regulations, including FDA compliance standards, and MDD/MDR
- Over 3 decades of experience in designing and developing medical devices
- In-house lab infrastructure with mechanical testing, wet, imaging and VA/VE facilities
- Mature consulting practice that handles VA/VE implementation and the development of emerging products
- Dedicated manufacturing execution practice that focuses on cGMP
- Strong innovation culture with over 10 co-patents in surgical device engineering

BENEFITS

- Improve procedural accuracy through advanced image guidance
- Reduce compliance costs with our regulatory and compliance management services
- Minimize the use of invasive medical procedures by leveraging surgical robotics
- Lower plant and business integration costs through geo-localization and lean implementation

CASES

Implemented unique device identification (UDI) across multiple sites in the USA, Europe and Asia. Adhered to GS1 standards (1D and 2D) in design and integrated several SAP systems. Provided documentation support including installation guide, work instructions and, artwork labeling.

Updated risk files for two micro catheter products and guidewire, based on field failures. Analyzed 3 years of complaint data and identified failure modes. Took complete ownership of change management documentation.

Designed and developed a reusable linear surgical stapler, with safety and efficacy matching its disposable-predicate device. Reduced procedural cost and the number of components.

For more information visit us at www.lnttechservices.com

Reach us at info@lnttechservices.com

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About L&T Technology Services

L&T Technology Services Limited is a subsidiary of Larsen & Toubro Limited with a focus in the engineering services space, partnering with over 50 Fortune 500 companies. A leading pure-play Engineering, Research and Development services company, we offer design and development solutions through the entire product development chain, across various industries such as Industrial Products, Medical Devices, Transportation, Telecom & Hi-tech, and the Process Industry. We also offer solutions in the areas of Mechanical Engineering Services, Embedded Systems & Applications, Engineering Process Services, Product Lifecycle Management, Engineering Analytics, Power Electronics, Machine-to-Machine (M2M), and the Internet-of-Things (IoT).

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