

REVITALIZING INNOVATION FOR WORLD'S LEADING MEDICATION DELIVERY COMPANY

Value engineered infusion pump



INDUSTRY LANDSCAPE

The global infusion market is growing and ever changing with introduction of newer and improved devices incorporated with enhanced safety features, miniaturization, and innovation. It is pegged to be a US \$5.5 billion industry by 2017. As these are widely used and are class II medical devices, Food and Drug Administration (FDA) has moved in to establish additional pre-market requirements to address any problems.

THE OPPORTUNITY

Rapid business growth, increasing pressure from competition, innovations in design, and adherence to FDA requirements were some of the reasons the client took a voluntary step to re-engineer their existing infusion pump. The client wanted a cost effective partner to take this product and transform the R&D to react to the changing market needs and support them for documentation of 510(k) pre-market notification. This re-engineered product would carry all the features of the parent product with innovative additional features.

CLIENT BACKGROUND

The client is a multi-billion global medical device and pharmaceutical company, with broad portfolios in injectables, infusion therapy, and medication management solutions.

“An excellent engagement that showcases our capabilities in integrated product development in various aspects like hardware, software, mechanical design, electrical, testing, and regulatory compliance. Almost completely done by our team, the re-engineered design has many advantages over the parent product and is more efficient and accurate.”

Manimaran
GM, Medical Devices – PES,
Wipro

SOLUTION

Wipro set up a development center with over 60 people to completely re-engineer the product in all aspects like electrical, mechanical, software, regulatory and testing. The center is a state-of-the-art facility, the largest in the world outside of the US, and with capabilities to work across various product categories. Critical to Quality (CTQ) parameters were used to decompose broad customer requirements into more easily quantified requirements. All challenges were resolved to meet CTQs and satisfy the customer.

The Wipro team ascertained unidentified problems, completed design in 4 months and prototype in just 6 months. Component analysis, engineering design, adapting existing software to new hardware, testing with complete verification and validation were done to ensure that they are compliant with all the regulations and safety norms.

BUSINESS IMPACT

- Cost optimized by 40% compared to the parent product
- Product was made compelling and efficient by reduction in dimensions by 30%, decrease in volume of pump by 6 times and increase in speed of processing by 2 times
- Trust and confidence from client to complete the project in 18 months but was extended owing to regulatory guidelines and to add more features
- Form factor reduction of 15%
- Improved patient outcomes through higher accuracy
- Faster time to market- design and development

Reengineered the infusion pump in electrical, mechanical, software and regulatory aspects. Performed component analysis, engineering design, adaptation of existing software to new hardware and V&V testing

About Wipro Technologies

Wipro Technologies, the global IT business of Wipro Limited (NYSE:WIT) is a leading Information Technology, Consulting and Outsourcing company, that delivers solutions to enable its clients do business better. Wipro Technologies delivers winning business outcomes through its deep industry experience and a 360 degree view of "Business through Technology" ? helping clients create successful and adaptive businesses. A company recognized globally for its comprehensive portfolio of services, a practitioner's approach to delivering innovation and an organization wide commitment to sustainability, Wipro Technologies has over 140,000 employees and clients across 54 countries.

For more information, please visit www.wipro.com or contact us at info@wipro.com

DO BUSINESS BETTER

NYSE:WIT | OVER 140,000 EMPLOYEES | 54 COUNTRIES

CONSULTING | SYSTEM INTEGRATION | OUTSOURCING

Wipro Technologies, Doddakannelli, Sarjapur Road, Bangalore - 560 035, India Tel: +91 (80) 2844 0011, Fax: +91 (80) 2844 0256.

North America South America Canada United Kingdom Germany France Switzerland Poland Austria Sweden Finland Benelux Portugal Romania Japan Philippines Singapore Malaysia Australia China South Korea New Zealand

© WIPRO TECHNOLOGIES 2013

?No part of this booklet may be reproduced in any form by any electronic or mechanical means (including photocopying, recording and printing) without permission in writing from the publisher, except for reading and browsing via the world wide web. Users are not permitted to mount this booklet on any network server.?