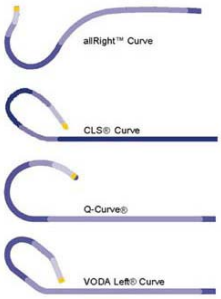


Cardiac Catheters

Cardiac catheters are intended for use in general intravascular and coronary applications. They provide a pathway through which medical instruments such as balloon dilation catheters, guide wires or other therapeutic devices may be introduced.

Business Benefits

- Zero-defect lines implemented for error-free manufacturing
- Reduction in lead time from 19 days to 11 days, reducing time-to-market
- Significant improvement in manufacturing processes and inventory management performance
- Reduction in direct labor cost with transfer to lower cost facility

Project Scope

Flextronics was engaged with the challenge to meet the following product objectives:

- Reduce cost by 25 percent
- Improve quality and eliminate field actions
- Provide turnkey manufacturing to enable customer to focus on product development
- Drive continuous improvements and ongoing cost reductions

Challenges

- Complex manufacturing processes with many manual assembly steps and over 1,600 SKUs
- Existing lines are not readily capable of zero-defect manufacturing
- Production involves hundreds of individual equipment items with significant validation hurdles
- Minimal allowance for buffer inventory resulting in ultra-tight timelines

Solution

Upon analysis of the situation and the customer needs, Flextronics duplicated model lines in a low-cost facility to facilitate validation and implemented Six Sigma practices to create zero-defect production lines. A single-piece flow using Lean principles was developed to minimize waste. The FlexFlow automation system was utilized to monitor/control lines with a 2D laser barcoding system to manage product dimensions, scan individual units and verify products electronically.

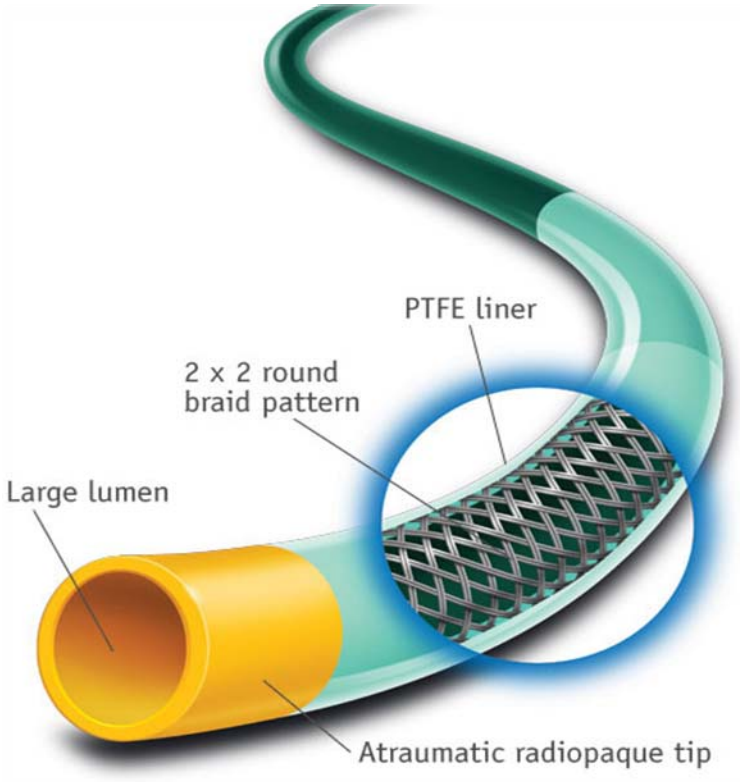
Key Success Factors

- Global footprint leverage, which allowed manufacturing transfer to a lower-cost facility
- Standardized product transfer process
- Development of effective zero-defect production lines
- Lean and Six Sigma practices eliminated waste and increased quality
- Quality tools, such as FlexQ and FlexFlow, maintain high degree of quality and control
- Experienced and skilled Customer Focus Team
- Management team understood requirements and delivered results

Results

The benefits of manufacturing with Flextronics were:

- $1.6 million in annual cost savings
- 100 percent implementation of zero-defect lines
- 15 percent annual yield improvement
- 19 day order lead time reduced to 11 days
- 50 percent reduction in direct labor cost
- 20 percent improvement in space utilization
- 30 percent reduction in touch-points
- 100 percent improvement on inventory turnover
- 25 percent reduction in raw material inventory



QUALITY
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For more information, please visit **www.flextronics.com** or contact **medical@flextronics.com**

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