

CASE STUDY

THINK  
LIKE  
THE  
MACHINE



**MACHINERY**  
**RightCost™**

OPTIS optimizes the cost of supplied parts for Emerson

A JOINT VENTURE WITH TechSolve



## CASE STUDY – RightCost™

OPTIS optimizes the cost of supplied parts for Emerson



### BACKGROUND TO THE BUSINESS

With its comprehensive product scope, Emerson Process Management is a world leader in pneumatic, hydraulic, electric, and gas-hydraulic valve automation products and services. The division provides valve automation products and services to complement Emerson's extensive capabilities in automation solutions for process industries.

### ISSUES FACED

Following a series of acquisitions of competitor valve manufacturers, Emerson was looking to implement several design changes to consolidate products. Emerson wanted to establish a 'should cost' and potential cycle times of the product, including an understanding of potential capital investments that a supplier would have required to make in order to meet demand.

At the product level, making each component in the most cost-effective way is vital to profitability and competitive advantage. Ever shorter product life cycles, OEM part cost reduction pressures, and tight design times using new materials, tooling, and processes, make it increasingly challenging. There are key influential factors – part design, materials, production processes, and equipment – and many other unknown factors involved that make up total product cost.

### BENEFITS

- Established a **RightCost™** 'should cost' price for the products – going beyond the imprecision of 'should cost'
- Provided an in-depth understanding of capital investments a supplier would need to make
- Established a supplier qualification for suppliers capability to meet cost and demand targets
- Streamlined and justified Emerson's supplier selection

### SOLUTIONS PROPOSED

**RightCost™**, OPTIS' part cost reduction service helps companies to think like the machine by identifying, prioritizing and implementing improvements for the design, sourcing and manufacturing of parts, to become more cost effective and competitive. Importantly, it facilitates 'make versus buy' decisions and prioritizes capital investment. All of these bring productivity improvements, competitive advantage and directly improve the bottom line.

**RightCost™** from OPTIS enables companies to implement the optimum formula for manufacturing parts at a lower cost while maintaining strict quality specifications.

**RightCost™** empowers design and production engineers to identify materials, machining steps and tooling that enable efficient part design, cuts lead times and meets or exceeds targets. To ensure existing operations are not disrupted, OPTIS tests different scenarios in its Eugene Merchant machining laboratory.

### IMPLEMENTATION

Combining powerful proprietary software and analytics with nationally recognized machining expertise, **RightCost™** was used to investigate and establish a baseline cost to process the pinion and housing of the valve actuator. The baseline included machining information and other operations within Emerson's process.

OPTIS considered several alternatives for process optimization above and beyond the baseline, including product groupings and alternative machining options. The process saw OPTIS build a business case for improvements to the design, sourcing and manufacturing of parts, with the promise of significantly diminished lead times and reduced costs.