CASE STUDY

THINK LIKE THE MACHINE

AEROSPACE SupplyMax™

OPTIS delivers real value for Rolls Royce

A JOINT VENTURE WITH TechSolve

Castrol

OPTIS

CASE STUDY – **Supply**Max™

OPTIS delivers real value for Rolls Royce

BACKGROUND TO THE BUSINESS

Rolls Royce designs, develops, manufactures and services integrated power systems for use in the air, on land and at sea. Operating in such demanding industries, the company faces the challenge of extracting maximum value from suppliers: a key requirement for success.

ISSUES FACED

In an increasingly competitive global environment, every element of the supply chain must be effective and efficient; to deliver the right quality products, on time and at the right price. Aligning all parts of the supply chain to work towards a common set of objectives demands cooperation, communication and a shared management of risk. This doesn't necessarily happen naturally.

Rolls Royce needed to think like the machine to define the optimum matchining resources required to manufacture two jet engine hot section components, both made from a cast nickel-base material, within its engines: the intermediate compressor case (ICC) and the diffuser. After defining the required resources, Rolls Royce wanted to generate improvements in quality, lead time reduction and on-time delivery of four full scale components.

SOLUTIONS PROPOSED

Now more than ever, OEMs are pressuring their suppliers to deliver quality products, on time, and at the right price. Suppliers have to be lean, fast, and innovative to meet their clients' needs. That's where OPTIS **Supply**Max™ comes in, to help develop and fortify supply chains by:

- Developing new or existing suppliers to be more aligned to company needs
- Finding the best suppliers and sourcing
- Improving the reliability and flexibility of the supply base
- Ensuring successful risk-sharing partnerships with strategic suppliers
- Improving competitiveness and profitability

IMPLEMENTATION

A detailed analysis of the critical path and the machinability of the four heat treat conditions when turning, milling and drilling was carried out by OPTIS experts. This identified the operating cycle of the machine tool that provides the optimum quality, cost and speed of delivery. After machining four full scale engine components, OPTIS then helped Rolls Royce to develop a plan to implement the optimized machining parameters to drive a real increase in profitability and customers.

BENEFITS

- Dramatic reduction in overall production and manufacturing process development, from one year to one month
- Reduced risk to cost and schedule by understanding the machining processes
- Provided a 'jump start' to process improvements and repositioning plans throughout the supply chain