Perkins Engines

Case Study

Profitability through the development of a world-class supply chain

Background

Perkins Engines at Stafford intended to support rapid growth in volumes and to drive an increase in profitability by developing a supply chain capable of world-class performance.

The Challenge

Perkins Engines at Stafford produces medium-to-large size engines for the Electrical Power Generator industry, employs 500 people and has sales of £133m. Having seen a substantial increase in volumes in Year 1 to more than 2000 engines (from 600-800 in previous years), and plans to deliver a further 30% increase in Year 2, Perkins' supply chain was under pressure.

The Objectives

Key objectives for suppliers in Year 2 was to support Perkins' intention to achieve Class A re-accreditation:

- 40% reduction in both customer and supplier delivered quality defects
- Significant improvement in supplier delivery performance - currently 66%
- 30% increase in capacity in Year 2
- 100% increase in stock turns
- Further development of lean manufacturing capability

Perkins Engines

Case Study

The Industry Forum Solution

A 2 year project was delivered by SMMT Industry Forum under direction from Project Champion Paul Lloyd, one of Perkins 6 Sigma Black Belts. It built on the success of a pilot project that took place in Year 1, where Perkins worked with two key suppliers to increase their manufacturing capacity, overhaul their management control systems, deploy lean thinking and encourage a culture of continuous improvement. The programme was developed through a 6 Sigma DMAIC process (Define, Measure, Analyse, Improve & Control)

A Business Improvement Review was used to analyse supplier performance in terms of quality and delivery performance, spend, growth in spend since Year 0, and strategic importance. Subsequently, a 'supplier day' was held to fully explain the challenges that faced Perkins and its supply chain.

Key training and improvement activities:

- Change Agents underwent training and assessment during the lifecycle of the project
- 'Value Steam Mapping' was used to establish the current position, assess the future position and identify opportunities for improving QCO performance
- A Partnership Assessment survey was used to evaluate 'interface waste' and identify gaps in cross-functional relationships with suppliers
- The '7 measures of QCD' were implemented to analyse performance, identify gaps in Class A requirements and create action plans
- Quarterly Steering Committee Meetings reviewed progress against the activity plan and agreed KPIs

The Customer's View

"Significant growth in Perkins' business has put severe pressure on the Stafford facility and its workforce. Over the last 2-3 years we have invested several million pounds in new plant and equipment both at Stafford and within the supply chain. The issues now facing the Stafford business are the development of key processes and people to maximise the return on assets and assure future prosperity. We see the Supply Chain Group project as a cornerstone of future process development. Improved effectiveness of our suppliers will enable Perkins to operate a more lean and agile business."

Robin Mackness, General Manager, Perkins Engines

SMMT Industry Forum Ltd,
2680 Kings Court, The Crescent, Birmingham Business Park, Birmingham, B37 7YE
T +44 (0)121 717 6600 F +44 (0)121 717 6699 www.industryforum.co.uk