

Case study Healthcare Equipment Manufacturer

CHALLENGE	REDUCED BY
Material handling	57%
Non-value added activities	25%
Production personnel required	19%
Distance travelled by products	34%

The scenario

This client is one of the UK's leading manufacturers of equipment used in hospitals within the National Health Service and around the world. Following a review of manufacturing operations, it was decided to relocate to a new factory in Ireland. WBS was tasked with reviewing the proposed move and managing the entire relocation project. The issues identified were therefore:

- Moving the existing manufacturing facilities in the UK to Ireland, while maintaining existing high service levels globally
- Reducing the level of non-value add activities within the current operation

The review

The project began with a WBS Company Assessment, analysing the methods used by the client to fulfil global demand. In the process, the supply chain was assessed from end-to-end, from forecasting and planning, to manufacturing and shipping.

The findings

Several areas of inefficiency were highlighted by the Assessment, including:

- Inconsistencies across similar manufacturing operations
- Excessive handling and moving of product within the manufacturing process
- Inconsistent product quality
- Unreliable equipment

The recommendations

WBS recommended a series of initiatives to address the problems:

- A Future State Vision, encompassing:
 - New factory layout, incorporating Lean flow principles
 - New improved manufacturing processes
 - A standardised approach to common activities across various product ranges
- Specifications for replacement machinery
- A series of steps for the achievement of specific savings and benefits:
 - Elimination of unnecessary, duplicated tasks
 - Reduced handling of product
 - Reduced distance travelled
 - Reduced number of machines required to perform certain processes

The recommendations also took into account costs, labour requirements and timescales for implementation.



The mechanism

It is usually easy to identify what needs to be changed when things are going wrong. It is much harder to actually make the changes that are needed. Making changes that lead to sustainable improvements requires a consultative approach, involving everyone affected by the process, in every area of the organisation.

To achieve this deep level of effective change, WBS creates an implementation team made up of WBS consultants, and representatives from the client's own people. In this instance, the client created a project team organised into three main groups:

- Manufacturing Processes – detailed evaluation of the processes involved in the manufacture of the products to be transferred, incorporating material flow, process steps, equipment used, inspection points, and levels of material handling
- Planning & Design – evaluating demand for individual products, and establishing demand patterns and volumes; this included calculation of required floor space for equipment and each process step, as well as designing the layout to ensure minimal and simplified material movements
- Organisation Structure – determining the headcount required within the new operation, and creating the appropriate organisation structure.

The benefits

Over a 12-month implementation period, which incorporated a lead time of nine months for new equipment, efficiencies and cost savings were achieved in four key areas. Material handling was reduced by 57%; reductions in non-value added activities of 25% were made; the number of production personnel required was reduced by 19%; and the distance travelled by products was cut by 34%. A further 35% increase in equipment utilisation was achieved by standardising activities across product ranges.

