



**YORKSHIRE  
PRODUCTIVITY**

“...driving manufacturing excellence...”



## Case Study

### David Brown — Lean In Action

#### Superb Members' Opportunity

Over 40 Yorkshire Productivity members recently participated in a members' event at David Brown Engineering in Huddersfield.

Yorkshire Productivity members' events provide an ideal opportunity for manufacturing companies, from many and varied industries, to network and benchmark themselves against other manufacturers.

David Brown, like other Yorkshire Productivity members, has embarked upon a lean manufacturing journey with the objective of achieving continuous improvement in efficiency and effectiveness.

Prior to a factory visit, Steve Watson, Operations Director at David Brown in Huddersfield, and his colleagues, set the scene by providing a review of this fascinating business and its progress along the lean journey.

**“I was aware of Yorkshire Productivity from a previous company and the help they could provide in terms of training and implementation support,” explained Steve.**

**“Driven by a need to establish a new system of continuous improvement management, we undertook various site visits and shared experiences to stimulate new ideas and a new vision of how we could sustain change.”**



**DAVID BROWN  
ENGINEERING**

**David Brown Engineering** has a long association with Huddersfield, dating back to the nineteenth century. Today, its Park Gear Works covers 25 acres and operates around the clock.



David Brown Engineering has a proud manufacturing tradition including 'extreme engineering' of items:

- weighing from 140 tons to 10 ounces
- for use 500 miles above the earth to 800 feet below the sea
- in temperatures of 130°C to -40°C

Quality is of paramount importance in these conditions and this is at the heart of all of the company's manufacturing operations.

David Brown Engineering started with the 'basics' - initiating training in 5S, Visual Management, Leadership and Gemba Reviews.

Continuous Improvement Manager, Nick Haigh, explained that, within the manufacturing plant, the introduction of 5S initiatives was well underway.

All together, Yorkshire Productivity had delivered 5S awareness training for 244 employees.

All of the team members in the 5S zones now had knowledge and awareness of 5S principles. One year on, there was still ownership.

In addition, 10 members of staff had completed an NVQ Level 2 in Business Improvement Techniques (BIT).

A further 10 people were now studying for a BIT NVQ - with 2 of them on Level 3.

#### Lean in practice

John Cliffe, Continuous Improvement Manager, illustrated how Visual Management tools were being used and how simple things help drive information from the top, through to the shop floor.

There were daily team briefs in 13 areas, around 'work to' boards and 'KPI' boards.

Yorkshire Productivity had produced KPI training for Lean Leaders whilst thirteen spot auditors had been trained for



weekly audits.

Team briefs were audited weekly to help sustain and improve the communication process.

Audit results were recorded as a score with comments to aid opportunities to improve and help the Team Leaders deliver the daily brief.

### Critical Success Factors

Steve Watson identified several Lean Deployment 'Critical Success Factors' :

- The business needed a clear, unifying goal
- It should be driven by Line Leaders with active, not passive, support
- There should be a real focus on 'what needs doing, not what we like doing'
- Standard foundations were required — processes, tools, disciplines and metrics
- The organisation should be value stream focused and look from a customer value perspective
- Execution should be continuous and relentless!



Steve explained how lean implementation was taking place in practice at David Brown:

### LEADERSHIP

- Top down approach — lean needs to be an important part of the agenda
- The business has to have the will to implement lean
- GEMBA walks help keep the 'finger on the pulse'
- People have to be released to do the work
- Understanding and support is required

### OWNERSHIP / RESPONSIBILITY

- Team leaders are engaged and drive 5S, kanban, lean system and maintain OPC / Team boards

### FUNDAMENTALS (helping people to see lean as the way)

- The shop floor and leadership have to have a real lean understanding
- Basics were implemented in a sustainable way
- Start simple and easy— not too ambitious
- Common metrics / start measuring



### COMMUNICATION

- Do 'what we say' and follow-up
- Explain action plans and steps
- Constantly answer the question 'Why change?'

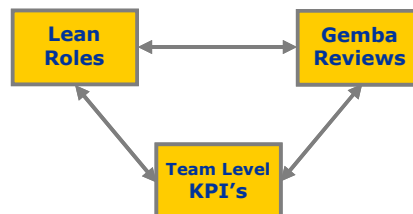
### PEOPLE

- Create a culture of engagement and develop morale

### Foundations, Leadership, Execution

Three mechanisms had been linked to address these:

**Gemba** is a Japanese term meaning 'the real place' - where the work is done.



Managing a lean system requires leaders to manage in gemba or 'go to gemba' as opposed to managing from the office or conference room.

At David Brown, the format of the Gemba Walk is adhered to rigidly. It helps:

- Understand the real problems
- Make two-way communication quick and clear
- Aid problem resolution and team ownership

To ensure every member of the team knows where they are against the target, Key Performance Indicators (KPIs) have been introduced.

KPIs are measures of the team's success in the eyes of their 'customer'. The five measures selected are: Safety, Quality, Cost, Delivery and People.

Each of these metrics is updated daily, with involvement from the teams, and reviewed during the Gemba weekly walk. The business had been reorganised into 3 value streams with a Leadership team created to underpin this.

There were four lean specialists on site but transfer of ownership to the Supply Chain managers was now the priority. Layout changes had been made to improve the flow of products.

### Lean Results to Date

- Improvement in on time delivery
- Increase in revenue
- Huge reduction in 'past dues'
- Won a major order from an established competitor

Steve Watson concluded that it was important to keep driving the correct leadership behaviours and clearly define Team Leaders' roles and responsibilities.

**Lastly—never give up or give in!**

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