

# Case Study

## Speedwell Reinforcement Ltd

60 employees, £3m turnover, based in Sheffield



### Terry Moorwood, Managing Director

We had been operating from our previous five acre site for over forty years. We decided to relocate to modern premises in the area, and wanted expert help to organise our move.

MAS advisor David Brannock took on the role of Project Manager. This included overseeing many aspects of the move: layout of the new factory, liaising and selecting contractors, working on planning schedules and (together with Speedwell) organising the removal of plant and machinery.

Seventy machines were transferred from the old site to the new factory, two overhead cranes were installed, and power, water and air supplies were routed to all of the machines.

“Contacting MAS made a huge difference. Without David’s knowledge and dedication the move would have been a logistical nightmare. When I look around I can’t believe we’ve only been at our new site for a matter of weeks. Everything is running so smoothly and production is almost back in full swing.”

### Company Profile

Speedwell Reinforcement produce welded mesh and reinforcement products for the pre-cast concrete industry. The business has established a reputation for both product quality and service, producing bespoke products to meet the demands of customers across a wide range of sectors including water authorities, railways, cable and telecommunications and construction.

Over the years, Speedwell has developed and expanded across a number of small buildings on an old site. But in September 2005 the Managing Director decided that the business needed to look at relocating to new premises with the aim of:

- Improving organisation of the factory and production processes to increase efficiency and reduce unnecessary handling and movement of materials.
- Using the move as an opportunity to review and upgrade manufacturing techniques and processes, to increase flexibility and reduce costs and cycle times.
- Establishing a factory layout and structure which would enable the business to deliver its objectives for the next 10 years.

New furnished facilities were identified nearby and in March 2006 the move was set in motion.

Speedwell contacted MAS for help with developing and implementing a relocation plan. This included creating a detailed operational layout for the new factory and exploring costings and suppliers for the new infrastructure (i.e. racking and material handling equipment) to ensure competitive prices and that the relocation went smoothly.

### Key Achievements

As a result of the project, Speedwell’s relocation was completed with minimum disruption and achievement of the following key benefits:

- £240,000 increase in gross value added;
- 80% improvement in space utilisation;
- 10% increase in overall equipment effectiveness; and
- 60 jobs safeguarded.

# Making it Happen

Before any plans were made a comprehensive review of current manufacturing requirements was undertaken. Particular attention was paid to the range of products being produced as flexibility and responsiveness are critical to Speedwell's business strategy.

Factory layout needed to allow for even better responsiveness and a key aim was to eliminate any historical anomalies in the production processes. It was an ideal time to deal with all of those "if you were starting from scratch you wouldn't put that there" issues. As a matter of course Speedwell deliberately carries quite a high volume of raw material – this helps with cost control as bulk buying is economical, and having raw material in hand supports their strategy of responding swiftly to customer demands.

Converting this raw material into finished product requires a large number of work stations – principally for straightening, cutting to length and bending the re-enforcing bar. Speedwell's new site is a single open plan area of approximately 33,000 sq.ft. A fundamental objective was to maximise the utilisation of this space to streamline product flow through the factory and eliminate waste caused by excessive handling and movement.

A new layout was developed in conjunction with the production team and this has enabled multi machine manning with 4 operators simultaneously operating 16 machines - a major improvement on previous practice.

During the planning phase it was recognised that a mezzanine floor would provide an efficient place to house staff accommodation and storage for light fixtures. It was also recognized that a high density storage system would be needed, in the absence of an external yard. An external compound was found next to the new site to cover this requirement.

Incoming electrical and gas supplies were adequate for business needs, but to make best use of floor space electrical power, compressed air, cooling water and gas for space heating were re-routed to accommodate the planned layout.

Specialist advice was sought on extraction systems for welding and wire straightening areas. Trials were carried out which showed that a combination of on torch extraction and overhead extraction would be required.

Once the information gathering exercise was completed, layout schemes were created and perfected to provide a final agreed layout. This allowed the production team to visualise the layout and create a detailed plan to ensure a smooth move.

This final layout allowed potential suppliers to quote against a detailed specification. Speedwell selected a proposal which included power, compressed air, cooling water systems, crane installation and physical removal and relocation of equipment. A separate contractor was selected for the mezzanine installation and steel coil racking design and installation. The MAS specialist then co-ordinated the activities of these separate contractors to ensure minimum disruption during the relocation.

The new layout has made visible the proportions of stock held as raw material, work in process and finished goods and highlighted the benefits of a different approach to planning and process control. As a further consequence, 3 machines for the wire straightening, cutting and cropping process were replaced by a single high speed machine, further improving efficiency.

## About MAS

MAS is a national DTI initiative, delivering practical, hands-on manufacturing advice and expertise to help you improve your performance. Delivered by experts with real-life knowledge and experience, MAS has already given advice to hundreds of businesses in Yorkshire & The Humber. Why not see how MAS can help your business?

## For more information

If you feel your business could benefit from MAS, why not complete your details below and fax to us on **0113 368 5261**. You can also contact: [enquiries@mas-yh.co.uk](mailto:enquiries@mas-yh.co.uk) or visit the website [www.mas-yh.co.uk](http://www.mas-yh.co.uk)

**Fax Back... Fax Back... Fax Back... Fax Back... Fax Back... Fax Back...**

Name: _____	Job Title: _____
Company Name: _____	Nature of Business: _____
Address: _____	
Telephone Number: _____	Email: _____

I would like MAS to contact me to discuss (please tick box/es):

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Hands on manufacturing improvement       | <input type="checkbox"/> Product development              | <input type="checkbox"/> Continuous improvement             |
| <input type="checkbox"/> Technical and materials issues           | <input type="checkbox"/> Managing organisational 'change' | <input type="checkbox"/> Workforce training and development |
| <input type="checkbox"/> Lean manufacturing                       | <input type="checkbox"/> Process analysis                 |   |
| <input type="checkbox"/> Manufacturing control and factory layout | <input type="checkbox"/> Improving workforce productivity |   |

- I would like to join the Manufacturing Network and receive a free monthly e-newsletter about funding opportunities and events

Saint Martins House, 210-212 Chapeltown Road, Leeds LS7 4HZ  
Helpline: 08700 111 875, Fax: 0113 368 5261  
Email: [enquiries@mas-yh.co.uk](mailto:enquiries@mas-yh.co.uk) Website: [www.mas-yh.co.uk](http://www.mas-yh.co.uk)



This project is part-funded by the European Regional Development Fund



YFM Business Development Limited is part of the YFM Group