

## DUDLEY TUBES

**Working in relationship with Cooper SH, and taking an innovative approach to steel handling, has seen steel stockholder, Dudley Tubes, drastically increase its production lead times across thousands of product lines, whilst simultaneously reducing its cost base and significantly increasing operator output.**

Dudley Tubes is the UK market leader in cold formed steel tubing, handling up to 30,000 tonnes of steel tubing each year. The family owned business has over 35 years' experience in the cutting, fabrication and stockholding of black and galvanised steel for applications spanning construction, piling, scaffolding, street furniture and lighting. When the company came to review its operations early this year, it soon realised that by taking an innovative look at warehousing it could significantly increase its business efficiency and add value to its customer base.

### Innovative Warehousing

Steel tubing is traditionally stacked in low rise posts on the floor of stockholder warehouses, often taking up a great deal of floor space. Overhead cranes are typically used to move the steel around the warehouse, which can be a cumbersome process. In addition, this method of operation hinders stock rotation as the last product in has to be the first out.

Dudley Tubes wanted to take a fresh approach to the storage and handling of steel and looked to the timber industry for inspiration. As a result, early in 2008 the company introduced a new concept in high racking throughout its 55,000 sq ft

warehouse. This included investment in a fleet of five specially designed Baumann Sideloaders to assist with its handling operations.

### New Cab Design

The 5t Baumann machines incorporate a new cab design which increases visibility and improves operator access; both of which are crucial in preventing accidents and improving safety when handling long goods in tight spaces. In order to meet the demands of handling heavy steel, the five sideloaders were modified by Cooper Specialised Handling to meet the high lifting requirements of Dudley Tubes.

As the sideloaders are usually designed to carry timber they needed stronger reinforcements in order to cope with the 18 metre-long heavy steel tubing, which can be lifted as high as six metres in the specially designed warehouses. Extra strengthening was needed in the form of a frame around the cab of the machine to protect the driver, while heavy duty guarding was placed around lighting to prevent damage.

Dudley Tubes' decision to use the specially modified sideloaders in high racking has enabled it to move away from using labour-intensive overhead cranes. This has meant that the company has been able to reduce the number of operators in its warehouse, thereby almost doubling operator productivity. At the same time it has virtually eliminated the risk of accidents.

“The time savings we have made in loading, unloading and storing steel has significantly increased our productivity and customer lead times,” says Wayne Peters, Director at Dudley Tubes Ltd. “Handling steel is a dangerous job and these trucks are the work engines of our business, yet the driver never has to get out of the cab. This helps provide a very safe environment for our operators.”

The strengthened cab, which incorporates the new cab design, also significantly reduces noise and vibration levels, ensuring compliance with new legislation and increasing operator comfort. To ensure that the trucks completely satisfied the demands of the steel stockholder's application, Cooper SH arranged a visit to the factory in Italy where Dudley Tubes could try out the new product and input into the final design process.

### Involvement in Design Process

Managing director of Cooper SH, David Cooper, comments, "It was essential to involve our customer in the design process. By custom-building this truck and keeping the comfort and safety of the operator paramount, drivers perform their day-to-day tasks more efficiently and productively."

To hold the 6,000 tonnes of galvanised steel and thousands of product lines, Dudley Tubes designed a warehouse with 2.7m wide aisles, at least three foot wider than typical steel holding warehouses, to accommodate the sideloader trucks. The racking is six metres high throughout; with such a new concept, an off the shelf racking solution was not available, so bespoke racking was designed and ordered.

The strong relationship between Dudley Tubes and Cooper SH meant that the solution evolved over time. "Our relationship with Cooper Specialised Handling goes back fifteen years, giving them in-depth knowledge of our business," adds Wayne Peters. "We were able to work with them from the early stages and design the warehousing and racking around the truck specifications. Cooper's expertise in bespoke machine design has ensured that we have a product that is perfect for our application."

Of the five sideloaders contracted to Dudley Tubes, four are on long-term rental and one is on short-term hire. The seven year all-in maintenance contract gives the company dedicated engineering support through Briggs Equipment, a

national materials handling service provider, assuring a three hour call-out time, if any maintenance is required. Briggs Equipment's team of dedicated engineers look after the trucks night and day, and a high first time fix rate ensures any breakdowns or damage is repaired on site, resulting in high uptime.

Working in-depth with a key supplier, from concept to completion of the project, helped secure business success for Dudley Tubes, which has seen its output double in the last four years through organic growth.

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