BEST PRACTICE

LOCATION:	**Concrete products plant**	**ARTICLE YEAR**	**2015**
ACTIVITY:	**Manual handling and storage**	**COMPANY:**	**Leiths of Scotland**
SUB ACTIVITY:	**N/A**	**COMPANY LOCATION:**	**Lochton Precast**
BEST PRACTICE No:	**BP1923**	**COMPANY TEL:**	**01330 844444**
COUNTRY OF ORIGIN:	**United Kingdom**		

TITLE

The Lochton Wheel - safe handling of precast pipe racks

ARTICLE

DESCRIPTION

Leiths Lochton manufactures pipe racks for oil service companies. The racks are used to stack a wide variety of large, metal pipes of different lengths. The racks are manufactured using reinforced steel and high strength ready mix concrete. The design specifies that the rack base has to be heavier than the support structure.

The manufacturing process requires that the reinforcing cage is constructed and placed in the product mould for ready mix concrete to be poured onto the cage encasing the steelwork. As the mould is filled with the pipe rack resting at 180 degrees from upright, emptying the mould and handling/storing the finished product onsite was potentially hazardous. The task of rotating the pipe rack through 180 degrees was achieved using an overhead crane, straps and chain. The risk assessment for this task identified many potential risks that needed to be eliminated.

Stuart Fraser, the factory supervisor, took responsibility for finding a safer alternative. His solution was a set of easy to use “Lochton” wheels that enabled the racks to be easily rotated after being removed from the moulds. The wheels have internal steelwork mirroring the outline shape of the racks. They are slipped onto each end of the exposed pipe rack whilst it is held in position by a forklift. The wheels are then lowered onto a flat surface allowing the pipe rack to be turned into the right position for storage. During the process, chocks were used to ensure control over the wheels and minimise the risk of injury to the user. See video

BENEFITS

The ‘Lochton’ wheel has been in use for over a year and has been a great success.
• Minimises manual handling risks and potential for crush injuries
• Improves efficiency of the operation

ARTICLE IMAGES

Click image to enlarge



Click image to enlarge

