

MPA Health and Safety Awards

Aggregates, Asphalt, Cement, Contracting, Dimension Stone, Lime, Precast Concrete, Mortar, Ready Mix, Recycling and Silica Sand

Topic entry (tick boxes that are applicable) 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/>	
Entry number (MPA Ref)	22089
Title of Entry	Concrete Block Plant Board Exchange – minimising manual handling and falls from height.
Name of Company	Marshalls Plc
Location	Ramsbottom Works
Video <input type="checkbox"/> (if yes, please include URL for video)	No
Other resource <input type="checkbox"/> (if yes, please include description)	1 attachment
Fatal Theme (tick boxes that are applicable) 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 6 <input type="checkbox"/>	
BACKGROUND	
<p>Periodically (5-7yrs) there is a requirement to exchange the boards that are used during the manufacturing process to transfer the block through the concrete block plant at MLP Ramsbottom.</p> <p>This is not a unique activity, each of our concrete block plants throughout our Group share the same challenge.</p> <p>Historically, this activity was very labour intensive and required the individuals carrying out the task to invoke repetitive manual handling processes, with the potential to be struck by a moving or falling object, which we identify as No 5 of the MPA Fatal Six (struck by moving or falling objects).</p> <p>The boards being handled are approximately 30kg in weight and 900mm x 600mm in size. 300 of these boards require exchanging for new ones each period.</p> <p>Contact with moving objects/falling objects currently represents 22% of workplace injuries at Marshalls. This activity is carried out infrequently but carries out a high potential severity of injury.</p>	
MANAGEMENT OF PROCESS	
<p>An engineering team member, Nigel Tomlinson, was tasked with assisting the production team members with the board exchange. Nigel is a very experienced engineer at the Ramsbottom site.</p> <p>Knowing that he would be required to assist the team in this scheme of work during a planned shutdown, Nigel took a step back to assess the task to be performed.</p>	

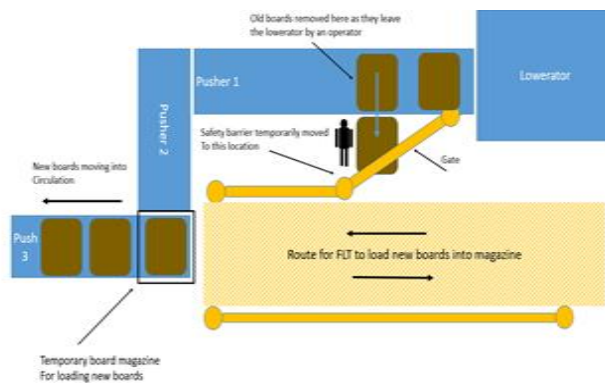
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In the days leading up to the shutdown when the department was operational, Nigel spent his time in between breakdown callouts in the block plant to consider a solution.

Through liaison with the production team members, analysis of the process, interaction with his engineering peers and anecdotal accounts of previous board exchanges, Nigel devised a theoretical alternative.

In his own time, Nigel produced the below engineering solution showing new process for changing boards. This provisional plan was seen as an opportunity to document the alternative board exchange in the company SOP format. This was actioned and sent to the site SHEQ compliance leader to review.



Nigel chose to use the existing mechanical features to process the boards through the system. Some slight modifications to the safety system were required, but Nigel's diligence allowed the exercise to remain as safe an activity as was reasonably practical. This incorporated interlock guarding, hatched floor markings, communication with mobile plant and teamwork. These formed the structure of the supporting risk assessment and the hazards identified within.

BENEFITS

Through this innovation he has been able to dramatically reduce the significance, weight, ergonomic aspects, and frequency of manual handling requirements of this activity. It was also recognised the potential for the boards (which are large - 30kgs) to fall at height

The work that Nigel and the team have done has significantly contributed to mitigating the risk of the boards falling from height and reflects the MPA's Fatal Six Rule No 5 – Struck by moving or falling object.

The scheme of work envisaged and orchestrated by Nigel has had a very positive affect on the production team members in the concrete block plant at Ramsbottom site. Through consultation, empowerment and engagement, Nigel has subsequently brought about a true culture shift within the department and has shown that it's OK for anyone to challenge an unsafe work activity no matter what their position is in the company or who they work for.

It has improved morale in the team as they feel empowered to make a real difference and they have!

The new method of working allows for this activity to be undertaken in shorter timescale, resulting in improved efficiencies, and has created an opportunity for a more detailed period of commissioning post shut down, ultimately being realised by the plant running in advance of planned downtime.

INNOVATION

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The team's attitude and approach to problem solving in general is now more proactive and unified thanks to Nigel.

The site has problem solving tools and improvement suggestion schemes in place through the implementation by the management team. However, for something to be so effective and well thought out by an individual on site was really great to see. The site has recognised this achievement and acknowledged Nigel in some recent communication to site.

The site management team make frequent reference to Nigel's engineering solution when discussing ways in which they can improve our engagement levels with the production team to glean similar innovative ideas for other issues identified.

DEVELOPMENT & TRANSFERABILITY

Since the introduction of Nigel's new method in the block plant, other operatives have sought his advice when faced with difficult situations or mechanical issues.

The focus on consultation, engagement and recognition has really lifted the morale of the site team members, resulting in an uplift of improvement suggestions and health and safety concern submissions.

The concept, now documented as an official SOP on site has been shared to other sites who have block machines as a best practice suggestion.

**NB if document has embedded images try and include these
If other documents provided say additional information available.**