

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) | 22012 |
| Title of Entry | Asphalt Load Out System – Improving Safety with Automation |
| Name of Company | Tarmac |
| Location | Birmingham Asphalt Plant |
| Video <input type="checkbox"/> (if yes, please include URL for video) | No |
| Other resource <input type="checkbox"/> (if yes, please include description) | |
| 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>Overview</p> <p>The old asphalt load out system was highly dependent on the operative mixing the material, using personal judgement to determine the position of the vehicle below the hot asphalt storage bins.</p> <p>This led to numerous near hits being reported, with asphalt spilling down the side of trucks when the truck was not in the correct position.</p> <p>On one occasion, material was unloaded from the incorrect bin where there was no vehicle present.</p> <p>Following these incidents, our team decided to implement a new automated load out system designed to negate these risks.</p> | |
| MANAGEMENT OF PROCESS | |
| <p>Our team came up with the idea to utilise a laser system under the hot storage bins, and only load out from that selected bin once a vehicle was detected.</p> <p>Emex control systems were contacted, and plans were discussed on site to determine whether or not this concept could be achieved.</p> <p>Demonstrable leadership was shown by management by involving the team in the root cause analysis process, identifying the issue and potential solutions to eliminate the source of the problem and following this through with implementation of the idea to mitigate the risk going forward.</p> | |

MPA Health and Safety Awards

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

The change management and training process was supported by a new safe to operate procedure and demonstration which was communicated during a team brief, allowing for any questions and queries to be addressed.

The system is now in place and has been utilised effectively for several weeks with great success.

Progression of system implementation was supported by weekly meetings with key stakeholders.

This entry reflects the MPA Vision Zero Values in the following ways:

Empowerment & Engaged Visible and Consistent Leadership - team actively encouraged to be involved in the root cause analysis process, through to implementing an idea and empowers them to actively participate in site safety improvement.

Zero Tolerance of Unsafe Working Conditions - site identified a safety concern, performed root cause analysis and implemented a solution to mitigate/negate risk.

Collaboration and Sharing - as a newly implemented process, we are hopeful that the MPA awards may provide a platform for sharing this innovative automated process.

BENEFITS

The newly implemented asphalt auto load out system prevents incidents of asphalt being unloaded when the load out vehicle is in the incorrect position/not in situ.

Benefits include;

- Improved safety at load out points by mitigating the risk of loading out on to the sides of vehicles
- Improved safety at load out points by mitigating the risk of load out in the absence of a vehicle e.g., during maintenance
- Reduces risk of human error by automating where possible
- Reduces risk of product loss by preventing accidental load out in the incorrect position
- Reduces risk of unnecessary waste which would be a result of accidental load out in the incorrect position
- Reduces risk of product delays; products loaded incorrectly would previously have to be cleaned out and re mixed prior to sending.

INNOVATION

The automated load out system is an innovative approach to solving an H&S issue harnessing the benefits of automation, thus relying less on human judgement.

This enhanced process is new to our site and to Tarmac as a company, demonstrating the willingness at both a local and wider level to optimise and improve, which we consider essential particularly when relative to safety.

DEVELOPMENT & TRANSFERABILITY

This idea could be implemented on several other sites and in the industry.

Auto load out asphalt systems have not yet been adopted at any other sites to our knowledge. We plan to share this system and its processes with others, both within the company and the wider industry, now it has been fully implemented and is proving to be successful.

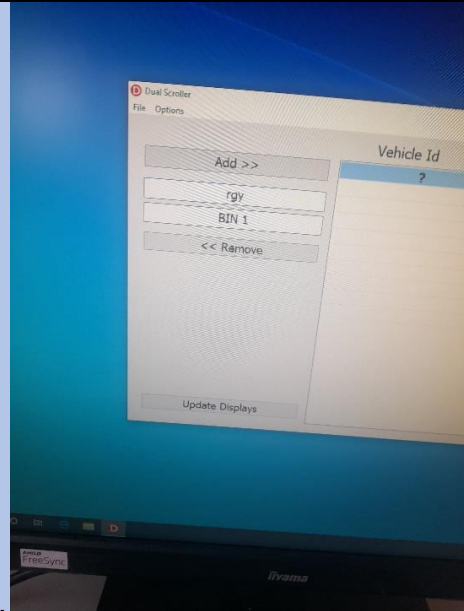
NB if document has embedded images try and include these

Support 'The Fatal 6' initiative by reviewing and acting on these high consequence hazards within your organisation:

1. Contact with moving machinery and isolation
2. Workplace transport and pedestrian interface
3. Work at height
4. Workplace Respirable Crystalline Silica
5. Struck by moving or falling object
6. Road Traffic Accidents

MPA Health and Safety Awards

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

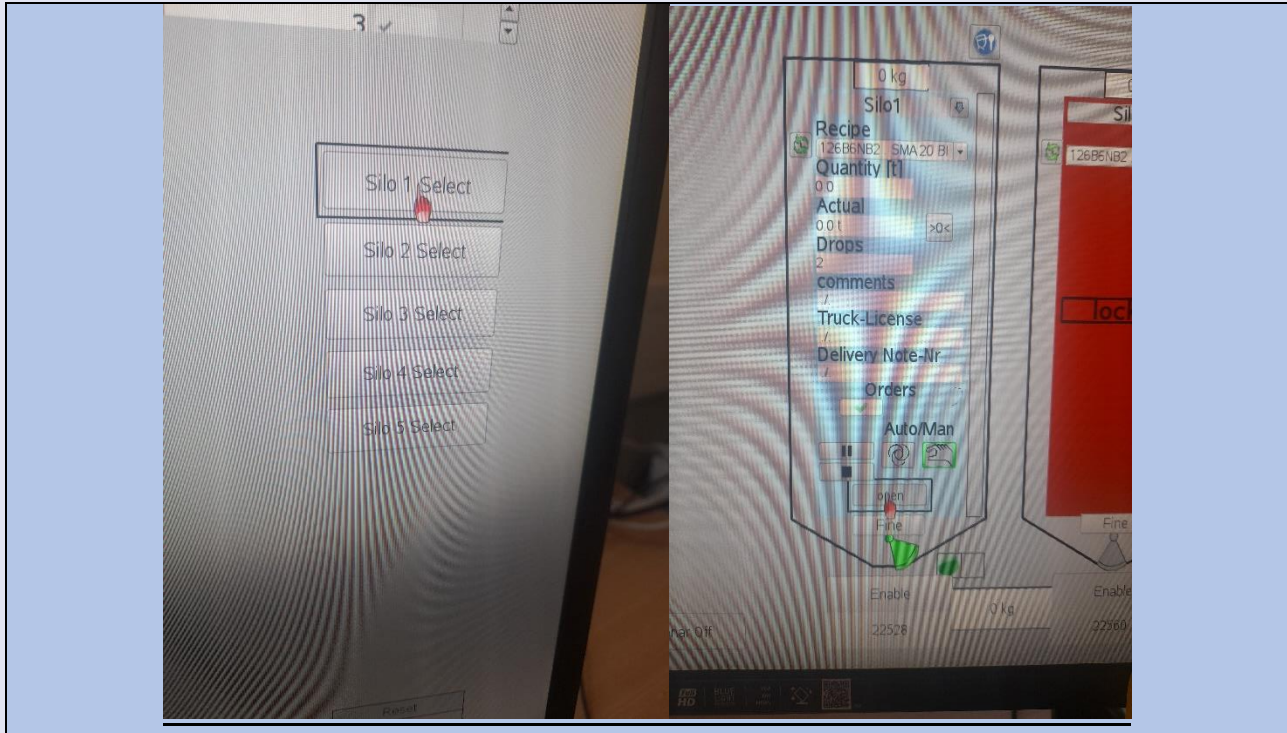


If other documents provided say additional information available.



MPA Health and Safety Awards

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



MPA Health and Safety Awards

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

