

Sharing good practice 2024

WAYS TO MAKE YOUR WORKPLACE HEALTHIER
AND SAFER - ELIMINATING 'THE FATAL 6'



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How to use the Sharing good practice guide

The theme of 2024 Health and Safety Awards was 'Safer by Sharing'.



PLEASE – HELP TO EMBRACE THIS CORE VALUE

By sharing the ideas and innovations presented in this publication with your colleagues, contractors, suppliers or anyone else who can contribute to making your workplace a safer and healthier environment.

By helping to celebrate and recognise the success of the individuals, sites and organisations featured in the publication by sharing within your organisation and key stakeholders.

ASK YOURSELF THESE QUESTIONS

- Which of these ideas or innovations could be applied or adapted to mitigate a risk at our site/sites?
- Who in my organisation needs to be aware of this?
- What will I do to facilitate the sharing of these ideas and innovations?
- What will I do to help them to be implemented within my organisation?

WATCH THE VIDEOS TO FIND OUT MORE

The video symbol means that a short video provides more information about the entry. The videos show the individuals directly associated with its implementation. The videos can be viewed in the following ways;

1. By clicking on the symbol if viewing a digital version of this publication.
2. By going to Safequarry and looking for it in the 'Good Practice' section.
3. By going to the [MPA's You Tube channel](#).



REVIEW AND CONSIDER IMPLEMENTING THESE SUGGESTIONS

- Ensuring all site managers and supervisors have access to hard copy (copies can be ordered from david.yelland@mineralproducts.org) or digital version of this publication – ask them to look through it.
- Using one or more of the entries as basis for a toolbox talk or on-site safety discussion.
- Leave a copy in a messroom, restroom or other location where people may have time to browse through the publication.
- Ask your team to review and select one idea that could be implemented or adapted on your site/in your company.
- Give a copy of the publication to anyone of your employees who is featured or was part of the team that was responsible for the innovation or its implementation.
- Encourage your colleagues to look at the Safequarry website or App, or review some of the Guides from previous years.



VISION ZERO
SAFE & WELL EVERY DAY

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Safer by sharing

The mineral products industry's health and safety awards is a highlight of the MPA events calendar, a culmination and celebration of members' outstanding actions, initiatives and innovations that have made working environments safer and healthier.

This publication, which summarises the best entries and winners of the MPA awards 2024, epitomises one of the core values of MPA's approach to health and safety, that we are all 'safer by sharing'. This is a cornerstone of Vision Zero 'Safe and Well Every Day', the MPA's strategy to eliminate the most serious incidents and to raise health and safety standards across the industry. Sharing ways to make workplaces safer plays a critical role in keeping people safe.

Having experienced at first-hand the devastating impact of a workplace fatality, I don't want anyone in our industry to have to go through the pain and suffering that comes from a major accident in a quarry or other production site. Anyone who has experienced a serious event like that becomes an advocate for health and safety improvement, looking after people, looking after their wellbeing, and making sure that those who work in our industry in any capacity, go home at the end of their shift safe and well.

The entries summarised in this Guide are a great demonstration of this in action. They highlight the commitment and contributions that people at all levels in our industry are making.

These entries, which come from all the sectors within the mineral products industry, from small, single site operators to larger companies – reflect the improvements, innovations and practices that have been implemented to improve the wellbeing of staff and to make the working environment healthier and safer. Sharing them will enable others to embrace them, and this will make a huge difference.

I hope that everyone who has seen the **MPA Awards show**, watched the short videos that summarise each entry or reads this publication, will be inspired to think how one or more of these ideas could be applied or adapted to make their own operations safer.

Please share this publication either in hard copy or digitally with your colleagues, and take time to watch the videos which are available via **[Safequarry.com](https://www.safequarry.com)**, the **MPA's YouTube channel** or the links embedded in the digital version of this Guide.

We are all 'Safer by Sharing'

MPA Chair and Managing Director of Cemex UK, Lex Russell



Lex Russell

The Awards

This Guide is a compilation of the winners and finalists from the MPA Health and Safety Awards 2024.

They outline the solutions that MPA companies, contractors and suppliers have applied to minimise and, where possible, eliminate health and safety risks arising from their daily operations across all sectors of the mineral products industry.

The digital version of the Guide also includes links to short videos that show the innovation or new process in action, and interviews with site operators talking about the benefits that have been realised.

In addition to the eight topics, winners of other MPA awards are also highlighted in this publication. A common theme of all the entries was the application of some, or all, of the Vision Zero values.

- Eight Topic Awards
- John Crabbe Trophy
- Sir Frank Davies Award
- MPA Special Award
- Individual Recognition
- Young Leader
- 'The Fatal 6' Award
- The Eurobitume Award

VISION ZERO
SAFE & WELL EVERY DAY

142 entries from 33 companies – MPA members, contractors and suppliers:

AG Paving + Building Products	Clubb Sand & Gravel	Hogan Holdings	ProSpare Ltd
Banner Contracts	ConSpare Ltd	Holcim UK Ltd	Sibelco
Blue Phoenix Group	CPI Mortars	Ibstock PLC	Smith and Sons (Bletchington)
Breedon GB Materials	Creagh Concrete Products Ltd	Lhoist	Tarmac Holdings Ltd
Brett Group	D Wardle (Plant) Ltd	Macrete (Ireland) Ltd	Tillicoultry Quarries Ltd
Burlington Stone	Day Group	Mansfield Sand	Van Elle Limited
Buxton Lime Ltd	EPC UK Ltd	Marshalls	
Cemex UK	Forterra Building Products	Northstone Materials	
CleanSpace Technology	Heidelberg Materials UK	Pat Munro (Alness) Ltd	

Sponsors

MPA would like to thank the suppliers to the industry who have sponsored both our awards ceremony and this publication. The main sponsor was DAF Trucks.

Individual sections show the companies which have sponsored them.



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MPQC

Sponsor: Young Leader

MPQC's purpose is to fulfil the extractive sector's need for a safe, competent and sustainable workforce through the setting and maintaining of standards and qualifications, ensuring quality training and assessment.



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John Crabbe Trophy



This award is made to a MPA member company with over 250 employees that has achieved an outstanding health and safety performance.

Brett Group impressed the judges by the way it has embraced the values of Vision Zero and shown real determination to eliminate 'The Fatal 6' from its operations.



Strong leadership has been shown from the Managing Director down, with all levels of management engaged in delivering Brett's health and safety strategy.

At the core of Brett's strategy to help change behaviours and improve the health and safety



Brett safety day



culture, has been an extensive programme of roadshows run at six monthly intervals at each site. Progress is tracked based on direct feedback from employees.

The mental health and wellbeing of all employees is clearly a priority. This is reflected in initiatives such as the appointment and training of health and wellbeing champions across the business.

The company has been innovative in the use of technology, for example, in the use of automated braking systems on mobile plant.

Employees have been encouraged to embrace the core values associated with Vision Zero, such as knowing that everyone is empowered to intervene and stop any activity if they believe that something is unsafe or unhealthy.

Brett has ensured that the systems and processes are in place to support everyone in going home safe and well every day and this is reflected in its safety statistics.



Richard Baldry Managing Director, Brett Landscaping

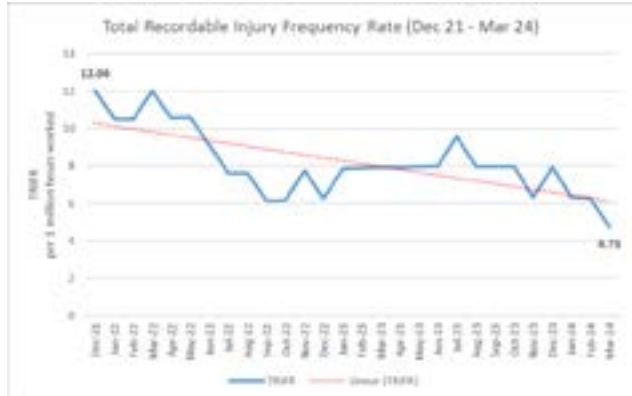
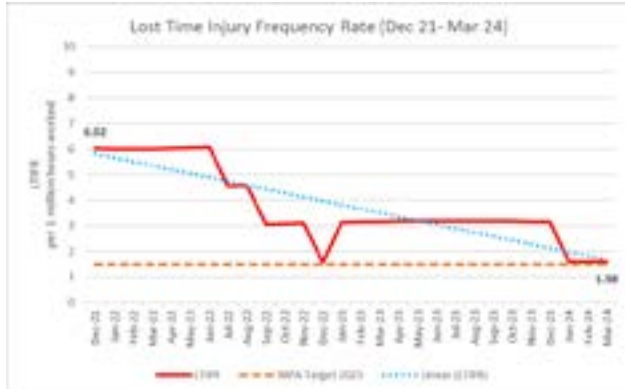
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Graphics showing improved safety performance

BRETT LANDSCAPING

REDUCTION IN LOST TIME INJURY FREQUENCY RATE SINCE LAUNCH OF OUR VISION ZERO PROGRAMME IN Q1 2022



Finalists ● CEMEX ● Tarmac

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Sir Frank Davies Trophy



The Sir Frank Davies Trophy is awarded to a company with fewer than 250 employees that demonstrates excellence in health and safety performance.



AG Paving + Building Products core vision was reflected in three words 'Go Home Safe', and this was supported by a range of initiatives that embraced the spirit of Vision Zero.

AG Paving have gone to great efforts to 'make safety personal' and ensure that the staff know that the company cares about their safety. Their communications seek to engage with employees and to help them understand that incidents can happen to people just like them.

The drive to improve the wellbeing, health and safety culture at AG is backed up by excellent initiatives such as 'Lock – Tag – Live – Improving safety in moving machinery' (Winner of **'The Fatal 6 Award'** and **Topic 1 Finalist**) and 'Activ8 mental health and wellbeing programme' (**Winner of Topic 7**).

The company's holistic approach to wellbeing includes support for volunteering, community engagement with local schools and other organisations, charitable work, a range of sporting activities, and advice on mental health and other personal issues.



AG's 'Good Catch' initiative encourages employees to submit hazards or improvement ideas via an App. These are then actioned with a monthly 'good catch' winner chosen by AG Board of Directors.

AG have achieved significant reduction in incidents associated with 'The Fatal 6' through the many initiatives, campaigns and general focus on hazards associated with them. There has been a 90% reduction in injuries, 50% reduction in overall incidents, 40% reduction in 'The Fatal 6' incidents (which includes near misses). There were no injuries related to 'The Fatal 6' in 2024.

AG Paving is a smaller company on a mission to eliminate the awful consequences that so often accompany workplace incidents and especially those associated with 'The Fatal 6'.

SPONSORED BY



CONGRATULATIONS



Mark Wilson
Winner of Good Catch of the Year 2024



Steven Atchinson – CEO, AG Paving

Steven Atchinson, CEO of AG Paving said " Since 2020, we have made it our mission that everyone goes home safe every day".

Runner Up ● Burlington Stone



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VISION ZERO

SAFE & WELL EVERY DAY



Vision Zero

MPA and its members have committed to Vision Zero – to ensure that everyone goes home – Safe & Well Every Day

Vision Zero is built around eliminating the causes of 'The Fatal 6'. These are the high consequence hazards that analysis has shown are responsible for the majority of the fatalities, serious injuries and long term ill health in the industry. The strategy is to focus on these hazards in the work environment and, through a wide range of measures, achieve zero serious incidents or fatalities associated with 'The Fatal 6' by 2025.

6 strategies for MPA and its members to follow

- An unrelenting approach to **eliminating the things that can kill or seriously harm people** through adoption of industry safety principles and good practices focused on 'The Fatal 6'.
- Developing **competent and committed leaders** at all levels.
- Promoting **recognition** as a means to support a positive culture within the workforce.
- Creating **forward looking measurement systems** which **balance** the measurement of 'the presence of safety' with the 'absence of incidents'.
- Helping members to create workplaces where **health and wellbeing is protected and promoted**.
- Actively promoting and facilitating **engagement** from all member organisations.



6 values to keep everyone safe



Empowerment

Every worker has the right to stop any job if concerned it may be unsafe or unhealthy to continue.



Engaged Visible and Consistent Leadership

Committed to achieving the vision of Zero Harm.



Zero Tolerance of Unsafe Working Conditions

That pose a significant risk of injury or to health.



High Quality Implementation

Developing clear health and safety principles, clarity of expectations, clear simple smart initiatives, no 'box ticking'.



Collaboration and Sharing

Building effective relationships & sharing knowledge and good practices.



Compliance

As a minimum with legal/regulatory requirements and MPA policies and aspiring to world class.

One Vision, One Outcome, Everyone, Safe & Well Every Day

'The Fatal 6'

Analysis has identified six high consequence hazards in the mineral products industry that account for 94 % of all fatalities.

MPA has set up a working group for each theme. They are tasked to develop recommendations and resources to help the industry to eliminate the causes of 'The Fatal 6'.

Information about the 'The Fatal 6' and the resources available to help mitigate them are all accessible on 'The Fatal 6' section of Safequarry.

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

Mitigating high consequence hazards

Leading and Lagging Indicators

MPA will monitor the following:

Leading indicators – are those activities which are likely to lead to a reduction in fatalities and serious incidents in the future.

Lagging indicators – record what has actually happened – these include **MPA's hard targets** which show whether we are succeeding in making our workplaces safer and healthier.

Leading

Achieving more of the following:

- Auditing of isolation and implementation of remedial measures.
- Driver and contractor competency/skills cards.
- Participation in H&S Leadership workshops.
- H&S Good Practice awards submissions.
- Sharing of high potential incidents.
- Occupational health screening.
- Routine monitoring of silica exposures.
- Engagement in MPA H&S events.
- Engagement in MPA Safety Days.
- Engagement with MPA's 'Safer by Sharing'.

Lagging

- **Hard Target 1** – A 50% reduction in Lost Time Injury Frequency Rate (LTIFR) to 1.5 by 2025.
- **Hard Target 2** – Zero Reportable Incidents (fatalities or serious injuries) relating to 'The Fatal 6' by 2025.
- **Hard Target 3** – Zero incidences of uncontrolled personal exposures to RCS above the Workplace Exposure Limit (WEL).

Resources explaining Vision Zero



Safequarry website



3 Powerpoints



4 videos



Employee Guide



Reminder card

Individual Recognition Awards

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These awards acknowledge the important and critical role played by people in the workplace. These are the individuals who make things better for everyone. Nominated by their companies, these people are the industry's health and safety heroes. Their nominations may have been based on one or more of these achievements.



- They have played a pivotal role in the delivery of a H&S initiative.
- They made a material difference in the outcome of an incident or event.
- Obtaining qualifications or completing training in health and safety.
- Their role in supporting colleagues in respect of health, safety and wellbeing.
- Their willingness to share their knowledge and expertise.
- Their leadership either by example or other actions.
- Their behaviour reflects the H&S values in Vision Zero.

Breedon GB Materials	Alex Nolan
Breedon GB Materials	Lukasz Toczyski
Breedon GB Materials	Rob Wells
Cemex UK	George Howell
Cemex UK	Julie Welch
Forterra Building Products	Kerry Meacham
Forterra Building Products	Sharon Woodall
Heidelberg Materials	Rob Neville
Hogan Holdings	Rhodri Williams
Holcim UK	Andy Carter
Holcim UK	Adam Lee

JB Riney	Anthony Dinnegan
Macrete (Ireland) Ltd	Cara Budzynska
Pat Munro (Alness) Ltd	Grant Garrick
Sibelco	Alex Prandi
Tarmac Holdings Ltd	Dougie Aitchison
Tarmac Holdings Ltd	Troy Colling
Tarmac Holdings Ltd	Matt Gibbs
Tarmac Holdings Ltd	Tracy McGown
Tarmac Holdings Ltd	Sophie McNeill
Tarmac Holdings Ltd	Derek Morris

Topic 1

Safer production



This award covers extraction, manufacturing and processing for all product groups.

- A new innovation or engineering solution.
- New systems or control measures.
- A change in a process or procedure.
- New warning system or training programme.
- Investment in new plant.



WINNER	
Marshall's Plc	New safety measures and videos for safe operating procedures when processing natural stone
FINALISTS	
AG Paving + Building Products	Lock – Tag – Live – Improving safety in moving machinery
D Wardle Plant Ltd	Site Foreman's QSHE Portal on mobile phones
HIGHLY COMMENDED	
Blue Phoenix Group	Mini sample crusher
Cemex UK	Mould oil concrete build up prevention
Cemex UK	Crusher access single level platforms
Mansfield Sand Co. Ltd	Handling reject bagged products
CERTIFICATE OF MERIT	
Blue Phoenix Group	GRP conveyor guarding
Cemex UK	Bin liner to prevent sticking and build up
Cemex UK	Hydrolog access platform
Cemex UK	Virtual reality 3D tour
Forterra Building Products	Hazard perception test
Marshall's	Roadmap to compliance for high risk activities
Sibelco UK	Sample collection baskets
Tarmac Cement & Packed UK	Hydraulic room fire detection alarm & suppression
Tarmac Holdings Ltd	Traffic Management – Site information and vehicle specific inductions
Tarmac Holdings Ltd	Improved RAP ramp edge protection



WINNER
MARSHALLS PLC

Runner-Up – The
‘Fatal 6’ award

New safety measures and videos for safe operating procedures when processing natural stone

Marshall's Plc > Cromwell Saws > Halifax **5**



DESCRIPTION

Cromwell Saws is a producer of natural stone paving products. The process involves the raw blocks being delivered into the factory direct from the quarry; each block can weigh anything from 5 to 18 tonnes each. Once delivered into the factory by a loading shovel, they are transferred by cranes to the machines to be cut into flat slabs. Due to the nature of natural stone many of the blocks will have cracks and defects that can cause them to split, or pieces fall off before or after being cut. These defects are not easy to see.

In the last two years, there have been four accidents or incidents in this area involving operators being hit by falling stone whilst being machined. Being struck by falling or moving objects has been identified as one of 'The Fatal 6'.

To explore ways of eliminating this hazard, a monthly quarry safety meeting was established with relevant stakeholders such as the quarry management and members of the operations team who worked with the stone on a daily basis. This working group led to the following initiatives being implemented.

Block inspection process – When a block comes into the factory it is washed down on all sides and then inspected under lights. All cracks and defects are sprayed with red paint to highlight possible dangers when working with that block.

Everyone involved has been instructed to stop work immediately and liaise with their line manager if they have any safety concerns.

New lightweight inspection poles – Operators have been issued with poles to check blocks for loose pieces of stone after the cutting process, without putting themselves at risk should a piece of stone break off and fall.

Recording safe operating procedure – Videos of all these operations and possible scenarios associated with these tasks have been produced. A QR code links to these and to the written SOPs. This ensures clarity on how the tasks should be performed and task sheets have been created to facilitate this.

Communications of recent improvements – Regular safety briefs are now included in Toolbox Talks and Safety Stand-Downs. All site operations teams were shown the videos at the launch of the new safety campaign.

Resources – Posters were positioned around the site on being struck by moving or falling objects, and new safety signs designed to improve safety awareness in this area.

Marshall's stated that this campaign reflected many of the values incorporated within MPA's Vision Zero.

Visit www.safequarry.com for more details or email: info@safequarry.com



Before



After

BENEFITS

- No further incidents since campaign launched.
- Improved training & learning experience.
- Engagement of the workforce as they were involved in the production of videos.
- Better retention of safety messages and SOPs.
- Greater clarity on tasks, especially if people have language or literacy issues.
- Improved communications & relationships between quarry and stone cutting sites.
- Improved safety culture and safety processes within the operational teams.

DEVELOPMENT & TRANSFERABILITY

The new safer working practice videos have been implemented within the stone cutting sector and have been a huge success. Marshalls are going to implement and roll out the same approach to reviewing other tasks within Marshall's Cromwell Saws site where applicable.

The video format of SOPs will be used at other sites in Marshalls.

Other companies engaged with the cutting of large blocks of natural stone might be interested in adopting this approach.

Task : Safe Positioning of Blocks onto Bogeys / Safe Unloading of Cut Blocks from Bogeys: Multi Wire

C. Harbottle, D. Towner, B. Farmer, A. Simpson, D. Pyatt

Procedure	Yes	No	Yes	No	Yes	No	Yes	No
1. Loading of blocks onto bogey	Yes	Yes	Yes	No	No	Yes	No	Yes
2. Unloading of blocks from bogey	Yes	Yes	Yes	No	No	Yes	No	Yes

Overview

This SOP applies to the loading of all blocks onto & unloading of all cut blocks off the multi wire saws (Festa & Subeca's)

Safe Working Practice Videos

Please scan the QR codes below to watch the Safe Working Practice Videos for the

1. Loading of blocks onto bogey
2. Unloading of blocks from bogey
3. Fractured block when lifting with chains

Safety Critical Work Instructions

PPE	SAFE
	Manual Handling, Lifting & Lining, Multi Wire Saws, Overhead Cranes, Flat Wire Meshing Slings, Plaster of Paris

Sign with QR codes linking to videos and SOPs



'The Fatal 6' Award Winner

Lock – Tag – Live – Improving safety in moving machinery

AG Paving + Building Products > Fivemiletown **1**



Personalised tag

DESCRIPTION

AG Paving + Building Products is a family-owned business, established over 60 years ago, AG specialises in hard landscaping and building products.

AG categorise their total incidents (near misses included) into 'The Fatal 6' categories. In 2022 and 2023, AGs performance HSEQ stats showed that nearly 20% of incidents were related to **'Fatal 1 – Contact with moving machinery and isolation'**.

Following this analysis, AG decided to implement a campaign that focused on this issue. The campaign had the full commitment of the senior management and the AG Board of Directors, all of whom were actively involved in the communication and implementation of the changes needed. They each completed a series of Visible Felt Leadership (VFL) tours, on-site meetings and observations.

A critical factor was to ensure that all the internal stakeholders from all levels within the business, and external stakeholders such as local contractors were involved.

The campaign incorporated the following initiatives;

- An update of AG Lockout and Isolation Policy.
- Employee awareness sessions using presentations which involved a practical element.
- Implementation of a self-auditing process across all sites deriving actions.
- Enhanced focus on improving the 'Tag' element of LOTOTO and personalisation of Tags.
- Communication through the use of digital notice boards, communication Apps, teams channels, toolbox talks and quarterly communication huddles.
- During the AG's October Safety Month, a week was dedicated to isolation and LOTOTO, in addition, the first day back to work in January was also dedicated to LOTOTO and Isolation.
- Locating LOTOTO and isolation stations on all sites which are accessible to employees.

The individual site self-isolation audits were completed involving HSEQ, production operatives, supervisors and site managers. These audits were derived using the MPA isolation self-audit guidance and the HSENI pro-forma inspection guidance. As part of the auditing process, actions were raised which included items such as additional fixed guarding, light barriers and improvements to the existing processes.

As part of the enhanced isolation and lock out procedure, new personalised lock out tags were introduced that included employee photos. This aspect of worker involvement encouraged employees to prioritise the safety of their colleagues and instilled a sense of individual responsibility for safety among each team member. By emphasising the human connection, AG aimed to create a robust procedure that prioritises employee wellbeing, mitigates potential hazards and fosters a culture of collective responsibility for safety.

Actively involving teams in the trialling and refining of the new tags, AG replaced the initial ones with smaller, more flexible tags based on employee feedback. These were then enhanced to include the nine steps of isolating on the back to give employees an additional reminder (see image).

Awareness was raised through communications placed on digital notice boards and on the AG employee App (Yammer/ Viva Engage). Employees are encouraged to submit their ideas to improve health and safety. For example, Martin Wilson was awarded 'Good Catch' of 2024 for his concept of adding either a red or green sign (Good to Go) to mobile plant to say whether or not they were safe to use (see image below).



My Life is on the line!
DO NOT OPERATE

NAME: Alex McCosh

Lockout + Isolation Trained

DANGER
Equipment Locked Out
EG
#GoHomeSafe

AGs nine steps to LOTOTO

BENEFITS

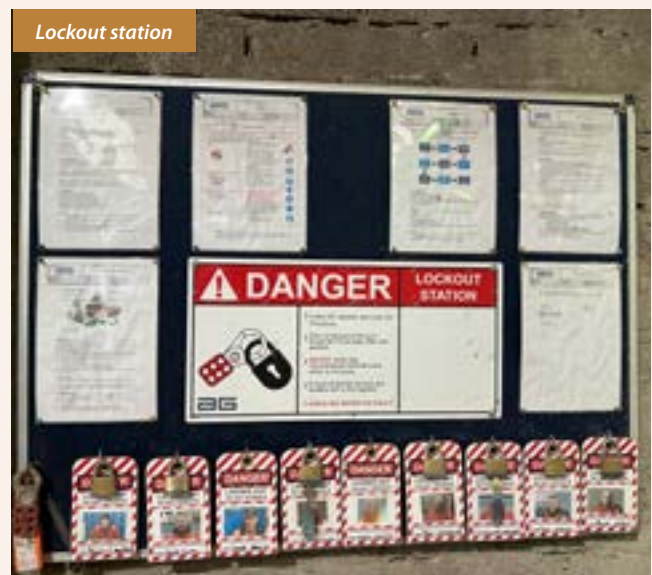
- Zero incidents, near misses or dangerous occurrences involving moving machinery/isolation or lockout for the first four months of 2024.
- Employees submitting more safety observations and improvement ideas.
 - 15 Moving machinery/Guarding/Isolation improvements in 2022.
 - 39 Moving machinery/Guarding/Isolation improvements in 2023.
 - 15 Moving machinery/Guarding/Isolation improvements in Q1 2024.
- Employee survey reflects belief in management's commitment to health and safety.
- Improved awareness of all 'The Fatal 6'.
- Employees feeling more empowered and that their ideas are being actioned.
- Improved staff engagement and accountability for their own and colleagues' safety.
- Reduced downtime.
- A more productive and happier workforce.

DEVELOPMENT & TRANSFERABILITY

The significant improvement to AG's tagging system, elevated personal accountability, instilling ownership by incorporating staff photos to reinforce the personal safety message. Adding the nine steps to safe LOTOTO on the reverse helps to constantly remind people about the correct process. AG have added the #GoHomeSafe logo to the tag, reinforcing the personal accountability for each employee.

While lockout tags are commonplace across the industry, these straightforward measures, encompassing awareness campaigns

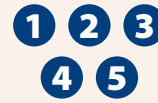
and audits, have significantly bolstered staff safety and resulted in a notable reduction in incidents – sometimes the simplest of measures are the most effective.





Site foreman's QSHE Portal on mobile phones

D Wardle (Plant) Ltd > Earthmoving Contracting > Warrington



DESCRIPTION

D Wardle (Plant) Ltd operate and maintain a large fleet of heavy earthmoving equipment throughout the UK, predominantly in quarrying and materials handling. The nature of its work is safety critical. The company has 150 employees, in roles covering admin, QSHE, contract management, field and workshop engineers as well as plant operators and foreman who work at its client's sites.

Over the years, the company has developed a few simple QSHE systems and processes which worked effectively for the business. However, it was recognised that improvements were required to make the systems work more efficiently and ideally, to eliminate paperwork, to facilitate real time reporting from the sites and provide feedback to site foreman on progress.



Using the App on-site

Wardle organised a working group which included the earthworks foremen from its largest contracts to obtain their views on how a mobile phone App should work. Their feedback highlighted the importance of keeping it simple, with minimal typing required and maximising the use of pre-populated fields. A software company, Future Solutions, were contracted to develop the App. They helped by asking challenging questions about the activities involved in the operation and refining the application until it was truly streamlined and functionally simple.

Throughout the development of the App there was a high level of worker consultation, with constant testing and feedback from the field as the App's different functions were refined.

Before rolling it out to all sites in the company, testing and trials were run on the biggest sites. This enabled Wardle to stress test

the transition from a paper-based system to on-line, and the co-ordinating role at HQ to manage the new system.

Emphasis was placed on reassuring those involved in the project that they could not 'break the system'. They were assured that they should not have any fear about making mistakes as they adopted the new system. This level of consultation and focus on reassurance, facilitated a high level of engagement with the business.

Training material was developed in tandem with the new App.

The information included in the App was key QSHE information such as a full set of daily defect reports for mobile plant, toolbox talks, near misses and responses to them.

Two of the key objectives were:

- To ensure that a new site foreman, or someone providing holiday cover, would be able to instantly update themselves.
- To ensure that all reports and checks are effectively dealt with, and nothing goes astray as with the paper-based systems.

The new system has practically eliminated the issue of missing defect reports and ensures all the stray items like fuel tanks and bunds, and welfare are checked weekly with just six focused questions, without the need for endless check sheets.

BENEFITS

- Effective two-way feedback on progress for employees, contractors and customers on items such as near misses, daily defect reporting on mobile plant and confirmation of site orders and deliveries.
- Information flows in real time ensuring remote sites kept up-to-date.
- Accurate and improved daily defect reporting and the ability to check progress until completed.
- Improved quality and tracking of near miss reporting; it is easy for foremen to incorporate images with reports and monitor how issue has been addressed.
- More comprehensive range of defects now being reported, not just those on mobile plant.
- Improved competency of the foremen as they have an enhanced tool to manage all checks required on-site and seek further guidance if required, and it is easier to keep track of location and nature of damage with images.

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- Improved planning, consultation and collaboration across the business.
- Minimised paperwork, postage costs eliminated and improved efficiency of entire system.
- Since implementation, 100% of reports submitted on-time, well above the previous KPI of 75%.
- A much safer and efficient working environment for all.

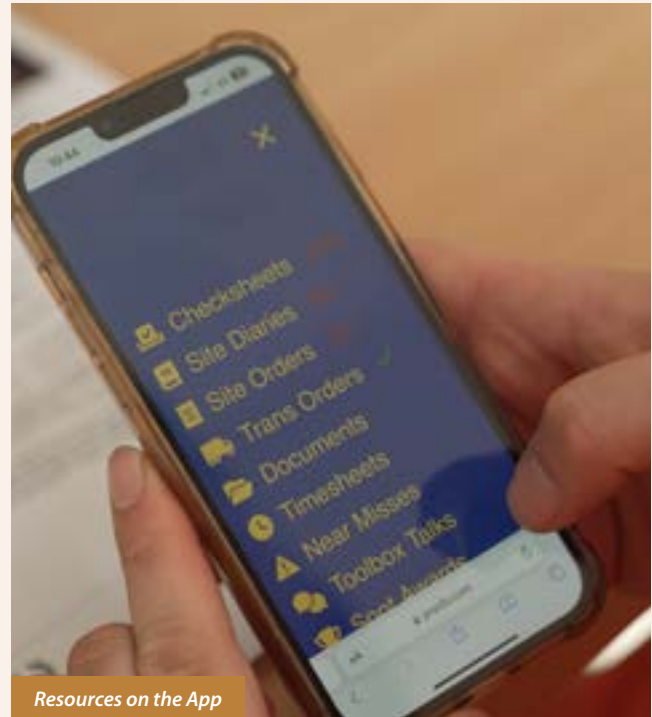
DEVELOPMENT & TRANSFERABILITY

This initiative illustrates what smaller companies can achieve in safety by streamlining the paper flow process and allowing pictures to replace paperwork being stuffed in envelopes and posted into the HQ on a Friday afternoon.

The consultative approach helped overcome a reluctance of some foremen who were fretful about the transition from solely paper submissions to doing tasks digitally. As many of the staff at Wardle were not 'IT savvy', the simplicity of the App, the well-designed training and implementation process, secured its success with the users.

The methodology used to create the Foreman's Portal has now been applied to create a Contract Portal, Engineers Portal and Hire Portal with a goal that all sites will be paper free in 2025.

This project has been shared with external audiences – notably Cemex with comparisons to 'Checkproof' and Blue Phoenix Ltd who now use this system to manage their own mobile plant daily defect reporting with us.



Safequarry.com

The health and safety hub for the mineral products industry. Search for and download industry guidance and resources from organisations that include:

- 'The Fatal 6' – Working Groups
- BMAPA
- British Precast
- Eurobitume
- HSE
- MPA
- NEPSI
- National Freight Safety Group
- QNJAC
- Safer by Design – Mobile Plant safety specifications

Helping you to make your workplace safer and eliminate hazards associated with 'The Fatal 6'.



MPA Special Award



Lucy Forster – Cemex Human Resources UK



The MPA would like to recognise a company for its pioneering work in relation to the wellbeing of its workforce.

Cemex established a 'Well Being Strategy Group' in 2023. The members of the group are drawn from every part of the business and meet on a quarterly basis. The group's remit is to agree topics/themes and initiatives which will improve the wellbeing of employees.

Cemex's commitment to its employees' welfare is reflected in the eight entries that they submitted to the MPA awards under Topic 7 – Safer through improvements in health and wellbeing. These entries reflect the campaigns that Cemex is supporting and their holistic approach to the health and wellbeing of all their employees. A key element of its welfare strategy is ensuring

that everyone knows how to access information on a wide variety of health and welfare issues.

MPA was particularly impressed by the initiatives undertaken in relation to the welfare of women in its workforce, for example the 'Hey Girls' entry which was a finalist in [Topic 7](#).

Lucy Forster from Cemex's Human Resources UK said, "We have realised that people's wellbeing and how they are feeling is very closely connected to their health and safety. Cemex wants to look after its employees, create a sense of belonging, and support them when things might be difficult".



Image from 'Hey Girls' initiative

Topic 2

Safer maintenance and housekeeping



This award covers all aspects of maintenance and housekeeping for all product groups.

- Safer methods of carrying out a maintenance process.
- Safer ways of cleaning all types of equipment.
- Innovations that have made a maintenance process unnecessary.

VISION ZERO
SAFE & WELL EVERY DAY

WINNER	
Cemex UK	Isolation videos and SSOW
FINALISTS	
Cemex UK	Improved washer barrel access
ConSpare Ltd	Automated concrete mixer cleaning innovation – improving operator safety and wellbeing
Hogan Holdings Ltd	Self-Locking skip track safety hook: enhancing asphalt plant safety and efficiency
Holcim UK	Improving employee & contractor safety with training for current and new plant installations.
HIGHLY COMMENDED	
Blue Phoenix Group	Better access for re-fuelling excavator
Blue Phoenix Group	Bi-fold guarding
Blue Phoenix Group	To reduce interaction with the apron, utilize crusher jacking point as necessary and reduce downtime
Blue Phoenix Group	Binder screen safe entry & working
Breedon GB Materials	Cement silo replacement programme – safe access
Brett Group	Eliminating live working during mould changes on automated wet-cast line CMS1
Cemex UK	Isolation – Personal key retention
Cemex UK	5S The Shining – Safety is improved by 5S, for positive results
Holcim UK	Totally integrated maintenance portal (TIM Portal) CMMS
Lhoist	Maertz kilns lance shroud modification
Mansfield Sand Co. Ltd. – Brick Division	Dust extraction during precast mould cleaning
Tarmac Cement & Packed UK	Mobile elevated work platform basket alarm – Sky Beacon
Tarmac Holdings Ltd	Feed hopper tipping grid improvement

CERTIFICATE OF MERIT	
Blue Phoenix Group	Finger screen fall arrest system
Blue Phoenix Group	Isolation of mobile plant
Blue Phoenix Group	Removable steps to access separator table
Blue Phoenix Group	Harness board
Blue Phoenix Group	Isolation and lock-off board – ‘The Fatal 6’
Cemex UK	Remote lubrication system
Cemex UK	Working at height/Sizing screen access
Cemex UK	New walkway on ship to shore tripper to reduce working at height
Cemex UK	Manual handling – Cement chute
Forterra Building Products	Safer access & working above vertical aggregate storage bins
Forterra Building Products	Safer access to electrical components on top of site water storage tanks
Holcim UK	PPM scheduling board – Concrete Products
Holcim UK	Looking from the outside in. Electrical panel viewing – Concrete Products
Sibelco UK	Improvement of isolation system removing need for complex isolation
Tarmac Holdings Ltd	Improved control of Respirable Crystalline Silica
Tarmac Holdings Ltd	Increased operational efficiency of lifting tasks
Tarmac Holdings Ltd	Wash down system for scalping chutes

MPA
HEALTH & SAFETY
AWARDS
SAFER BY SHARING



WINNER CEMEX UK MATERIALS

George Howell nominated for Young Leader Award

Isolation videos and SSOW

Cemex UK Materials > Midlands and Southwest

1



DESCRIPTION

Readymix Midlands & Southwest operates 27 locations, primarily 24 concrete plants and three wharfs.

The sites were reliant on paper systems, requiring people to regularly update the paperwork following changes to processes. This could make it confusing for both staff and contractors when trying to follow written procedures on often complex systems.

Correctly following procedures is particularly important when undertaking high risk isolation activities such as entry into mixers which can be complex requiring both upstream and downstream isolation.

Recent incidents within the industry involving fatalities and serious injuries through contact with moving machinery, had highlighted failures to adhere to isolation procedures as the primary causes of these incidents.

In recognition of the potential high risks associated with the use of the paper-based procedures, a small team was established to look at how this issue could be addressed. The team included an apprentice electrician, George Howell who was nominated for a Young Leader Award, the local operations manager, plant

staff, the maintenance team and the local health and safety department.

The solution they developed was based on the use of QR codes which are displayed on various items of plant across the site, such as by the mixers, aggregate bins, aggregates radial belt, batch belt, silo tops and other working areas. By scanning the relevant QR code on their phone, the operative is able to watch a video that demonstrates how to isolate the equipment and test that isolation has been effective. After watching the video, you can then review the SSOW on the mobile device. Each video is site specific and created to reflect the specific isolation procedures and SSOW for that section of plant or equipment.

The management provided isolation training at the end of 2023 involving all the area's staff. It explained the new procedures, how the QR codes linked to the videos and SSOW, and how this would enable them to review the processes on location prior to commencing any task.

This approach to isolation will be shared with the wider Cemex business following a successful trial period and any enhancements based on the feedback from all stakeholders.



BENEFITS

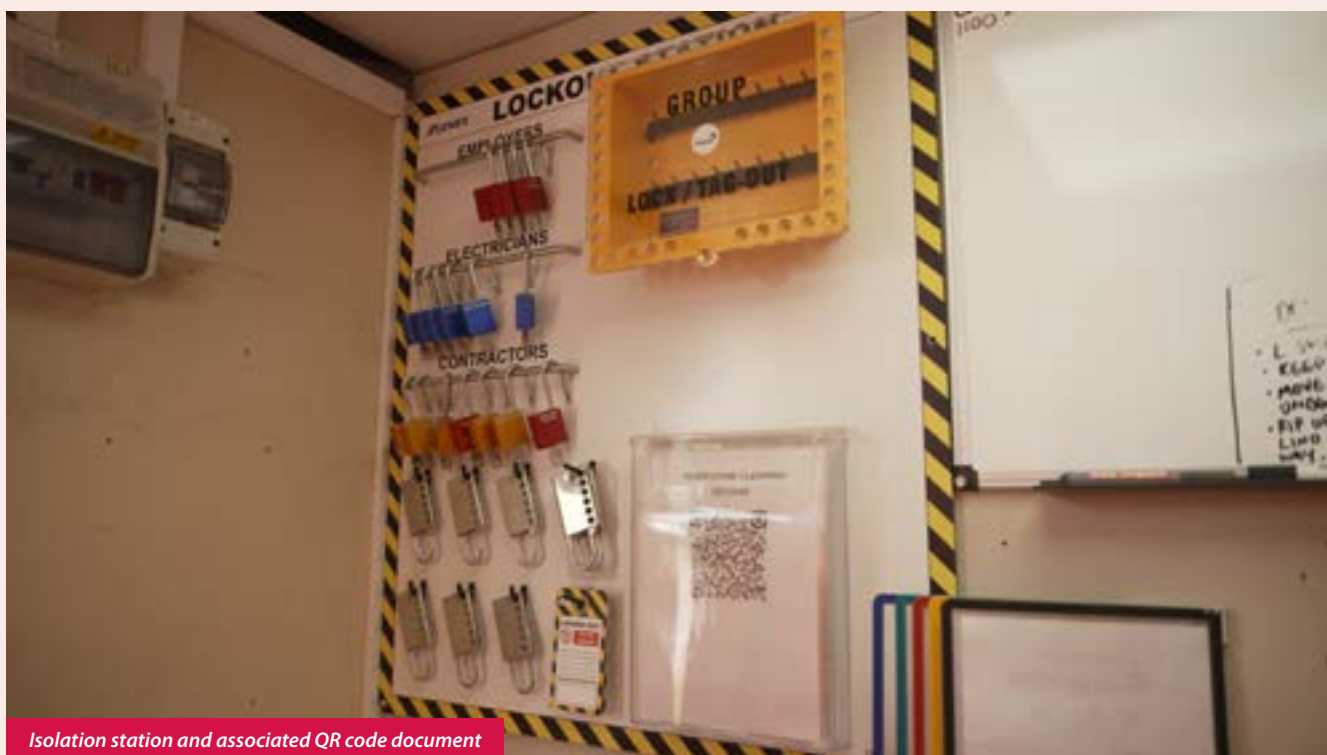
- Ensures that all staff and contractors know how to isolate any piece of equipment both up and down stream.
- Significantly reduces the risk of coming into contact with moving machinery (Fatal 1).
- Operators can clearly see how to test that isolation has been effective.
- Feedback has shown that following a video is easier than a written SSOW.
- As the QR codes are in the work area and the videos are watched in the work area, they have a better feel and understanding of what they need to do.

DEVELOPMENT & TRANSFERABILITY

Conversations with contractors involved in testing this initiative have said they are not aware of any other company in the industry doing anything similar. This is the first Cemex business in the UK taking this approach.

This system has been rolled out across the Midlands & Southwest which is Cemex's largest area in the UK. This approach could easily be replicated at other Cemex operations and across the wider industry.

Cemex will share this approach further following the completion of an appropriate trial period.



Isolation station and associated QR code document



Mobile phone reads QR code to download video



Eurobitume Award Winner

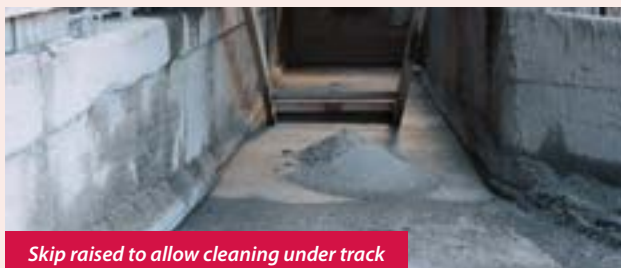
Self-locking skip track safety hook

Hogan Holdings Ltd



DESCRIPTION

To remove spillage at Hogan's asphalt plant it was necessary to raise the skip track using the loading shovel bucket. Once the track was raised, a worker manually hooked the chain onto the track to hold it in place whilst the spillage was removed. This method posed several hazards, including precarious positioning for the worker and reliance on a single securing point.



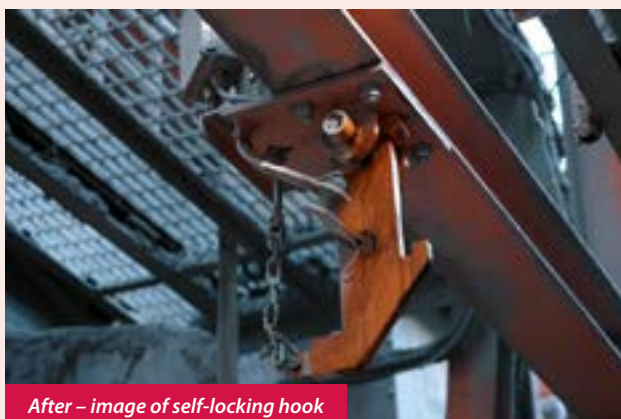
Skip raised to allow cleaning under track

The safety concerns were compounded by the discomfort experienced by the asphalt plant operatives during cleaning tasks. Dusty, awkward, and potentially hazardous conditions made this essential daily maintenance task challenging.

A site technician devised an innovative solution: a self-locking hook system coupled with a fixed winch for safe skip track elevation. This system provides dual securing methods, ensuring the skip track remains firmly in place during maintenance activities. The introduction of automated controls further streamlines the process, enhancing both safety and efficiency.



Before – operator attaches hook by hand



After – image of self-locking hook

MANAGEMENT OF PROCESS

During the development of the solution there was a high level of consultation with all operatives involved in the process. Feedback was sought throughout the development and implementation stages. The management were actively supportive of the project ensuring that resources were available and were prioritised for this safety related project. Regular communications ensured that everyone on-site was kept up-to-date with progress.

The initial testing was done on the bench, and then while the plant was shut down and the area secure, the tests were carried out in a controlled and safe manner allowing the development to be fine-tuned. One-to-one training was provided to operatives and managers by the technician who developed the self-locking hook system. New risk assessments, safe systems of work (SSOWs), and audit templates were produced to ensure that the implementation of the self-locking hook system complied with regulatory requirements and industry best practices.

BENEFITS

- Enhanced safety and efficiency of operations.
- A secure and reliable method for elevating the skip track.
- Reduced risk of accidents and injuries associated with manual handling and precarious positioning.
- Eliminated risk of operator being struck by skip.
- Quicker and more efficient process.
- Loading shovel only required when ready for cleaning.
- Project has reinforced the culture of safety.
- Experience has increased operatives' vigilance and adherence to safe working practices.
- Operatives more willing to identify other potential improvements on-site.

DEVELOPMENT & TRANSFERABILITY

While the concept of using hooks for securing equipment is not new, this adaptation of the concept to meet the specific needs of Hogan's site represents a noteworthy innovation. The integration of a self-locking mechanism adds an extra layer of safety and reliability.

Hogan are exploring opportunities for further enhancements and refinements to the processes and systems across the company. Plans include incorporating additional safety features and integrating the system with other aspects of its operations to create a more holistic safety solution.

The system is highly transferable to other companies within the industry and potentially to other sectors facing similar safety challenges. The self-locking hook system's modular design allows for easy adaptation to different equipment configurations and operating environments, making it suitable for a wide range of applications.



Improved washer barrel access

Cemex UK > Swinderby Quarry **3**



DESCRIPTION

Access to washer barrels is required for routine inspections and maintenance. However, due to poor design, access to these units often involves tough climbing through a trommel or via some locally devised means of access from a nearby walkway which, in most cases, have not been designed specifically for accessing the barrel and therefore, are not fit for purpose.

At Cemex's Swinderbury site, during the design phase of a new processing plant, the opportunity was identified to implement improved access into the washer barrel by way of a drawbridge design.



The drawbridge allows easy and safe access to the discharge end of the washer barrel. When needed, the drawbridge is lowered into place using a winch system, providing a solid walkway into the discharge end of the washer barrel. This facilitates safer maintenance and inspection routines.



When the walkway is not in use, it is winched into a vertical position and securely fastened. The provision of this new access method significantly mitigates risks associated with accessing and working in the washer barrel and will be a vital component should any emergency develop requiring a rescue.

BENEFITS

- More efficient maintenance and inspection with easy access.
- Improved function of the washer barrel due to improved maintenance and cleaning.
- Reduction in downtime during maintenance.
- Operators no longer required to squeeze through tight spaces or crawl into confined area.
- Minimises physical strain and lowers the risk of accidents or injuries.
- Improvement in emergency response as rapid access now possible.
- An accessible washer barrel allows for timely intervention and rescue.
- A safer working environment for all.

DEVELOPMENT & TRANSFERABILITY

The approach to the plant design was rooted in the ERIC (Eliminate, Reduce, Isolate and Control) principle: by eliminating common hazards around access into enclosed and confined spaces Cemex significantly reduces the likelihood of incidents or accidents.

This standard will be embraced in all Cemex's new washer barrel installations moving forward, resulting in a mitigation of risks associated with working in enclosed or confined spaces.

The improved access design concept can be extended to other processing plants where washer barrel access is required and is currently restricted or obstructed. It should serve as a specific design criterion for new plants during the design and 3D modelling phase. This approach has already been shared within Cemex and could potentially benefit the entire industry.





Automated concrete mixer cleaning innovation – improving operator safety and wellbeing

ConSpare Ltd > Coventry Readymix Plant 1 3 4 5



Before – Image of concrete build up before system installed

DESCRIPTION

Maxi Readymix was experiencing issues with concrete building up in the single shaft mixer at their Coventry site, this was affecting the batch plant's productivity and impacting operator safety and wellbeing.

Keeping concrete mixers clean is key to ensuring they remain effective, and often the task of cleaning the mixer remains a manual operation and relies on the efforts of site operatives. Critically, cleaning a mixer exposes staff to risk in a confined space, and also directly impacts their welfare and wellbeing.

The build-up was routinely forming on the mixing shaft, arms and blades, as well as below the inlet's sliding door which was restricting it from closing. To combat this build-up, site staff would get into the mixer to clean it every day, spending two or three hours on the task with hand-held breaker tools, exposing the team to HAV risks, dust, noise and injury in a confined space environment.

A severe build-up required two/three maintenance staff to undertake a deep clean of the mixer, which would typically happen on a monthly basis and take a full day to complete, with all of the attendant risks for the maintenance fitters. This downtime significantly reduced the availability of the plant. Site management asked ConSpare to provide a solution so that site teams no longer had to enter the mixer for cleaning.

ConSpare had never installed a system in a single shaft mixer before due to the design of the internal mixing tools. In consultation with Walter Cleaning Systems, it was agreed that a new RD3maX high power cleaning head would provide the cleaning performance required. Following further experimentation, to optimise the cleaning process, a Walter DAB pump assembly with two RD3maX cleaning heads was specified.

The double pump 120 bar unit outputs 100 litres of water per minute sequentially from each head, and the RD3maX technology ensures even the furthest reaches of the mixer are cleaned effectively. Housings were fabricated to mount the RD3maX cleaning heads at a 30° angle and extensions were utilised, all of which ensured optimum cleaning angles and geometry were achieved.

An additional hand lance at ground level was also installed to facilitate other cleaning tasks. The system now operates on an automated cleaning cycle twice a day, alongside a wash down with the hand lance.

BENEFITS

- Site staff no longer have to enter the mixer to clean it.
- Exposure to HAVs considerably reduced.
- Exposure to dust significantly reduced.
- Exposure to noise significantly reduced.
- Circa 1-2 hours per day cleaning the mixer has been saved.
- A further one day each month saved as deep clean no longer required.
- The inlet door is no longer obstructed.
- The welfare of site staff has significantly improved.
- Ailments associated with cleaning have reduced significantly.
- Team now finish their shifts on time.

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- Mixer operates more efficiently, and productivity on-site has improved.
- Improved morale and wellbeing on-site.

DEVELOPMENT & TRANSFERABILITY

Walter cleaning systems are well established in the market, with ConSpare having supplied and safely installed over 400 systems since 2000.

However, the technology could not be applied to all mixer designs. Through the application of their cleaning system expertise and cleverly re-engineering the RD3maX cleaning head, the core part of the mixer cleaning system, Walter have now enabled their award-winning cleaning technology to be applied to a far

wider range of mixer designs, thereby contributing to making the industry safer.

The new RD3maX cleaning head also enhances the cleaning performance in more challenging applications involving large twin shaft mixers, sticky materials, or high-volume production.

The new design also brings benefit when cleaning mixer discharge chutes as the extra cleaning power effectively increases cleaning jet penetration over longer distances. Mixer discharge chute cleaning is known to be very challenging for site staff.

The increased breadth of ConSpare's range following the launch of RD3maX increases the scope of this technology's rollout in this and other industries.



Image of new jet cleaner



After – image of cleaning now achieved



Improving employee & contractor safety – training for current and new plant installations

Holcim UK > North End Farm Works > Swindon **1**



DESCRIPTION

Holcim UK's North End block plant was being refitted with new machinery in May 2024.

This was an extremely difficult and costly project, with many contractors and systems requiring complete synergy to ensure the project succeeded. During the installation of the new machinery, there were many new people on-site, both employees and contractors.

It was recognised that this would significantly increase the risks and hazards to individuals during both the decommissioning and installation stages of the project. Personnel would potentially be exposed to hazards associated with moving machinery, pedestrians, lifting equipment, working at height and other risks.

Andy Carter, one of the Masterblock team leaders, was asked to list the isolation points and guarded areas within the plant, together with the appropriate procedures to isolate different sections of the plant.

Project members would need a series of documents to enable everyone to operate safely together, gaining, retaining and documenting their knowledge of plant and associated systems. The documents required included risk assessments, SSOW's and isolation procedures, they would need to be presented in a way that would be clear and understood by everyone.

Having worked in the factory for many years, Andy realised that this was a great opportunity to improve all operations, as there was a gap in their procedures for documenting employee knowledge, something which traditionally had been passed down verbally through generations of operatives.

Andy designed a simple birds-eye-view (PowerPoint schematic) of the factory. By using colours and photos in different slides to designate the various LOTOTO areas, project members, current employees, new staff or contractors could utilise it to identify and learn the synergy between the different sections of plant and the isolation points for the equipment involved.

Combining this document with the factory quantitative risk assessments and SSOW's, which Andy had previously drafted, he created a new training matrix for employees to document their knowledge and accolades.

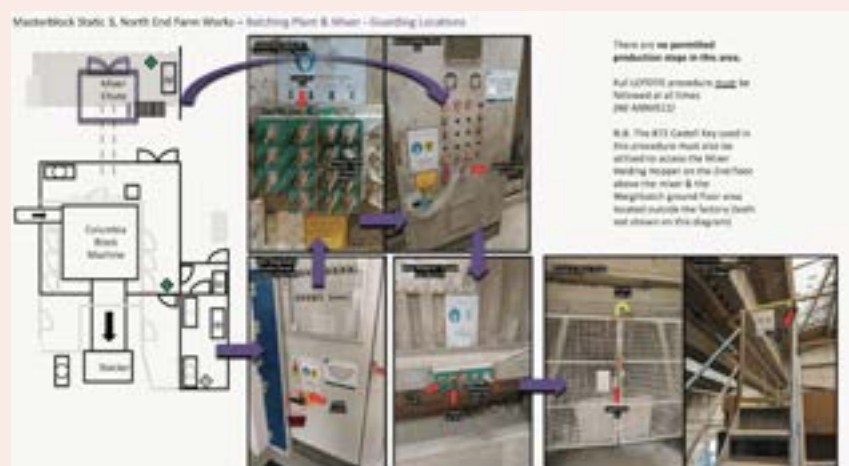
All employees, contractors and visitors to the factory now have a complete training guide, encompassing all factory procedures, in a written and visual guide. Current employees have tailored tuition on all plant aspects and impacts using this design. Training accolades and certifications are documented with expiry notifications helping to ensure that all employees' skills remain current.

BENEFITS

- Cost effective solution for mapping isolation locations.
- All safety systems identified.
- All new staff, employees and contractors/visitors can operate, maintain or view the plant safely.
- New installations can take place ensuring effective identification of plant isolation, communications and improved implementation of solutions between Holcim, suppliers and contractors.
- Knowledge documented through training matrix and easier to keep skills updated.
- Comprehensive suite of risk assessments and method statements ensuring everyone is aware of plant hazards.
- Operators are better equipped to carry out their daily tasks to a high safety standard.
- Contractors can be trained on plant operations and isolation procedures either when inducted on site or before work commences.
- Enhanced safety culture and wellbeing for all working on-site.
- Further step towards achievement of zero harm.

DEVELOPMENT & TRANSFERABILITY

The training matrix has been rolled out to other sites and the isolation maps can be easily replicated. The full document will be updated to reflect changes upon new plant installation. These designs could be easily replicated in other industries with static plants or adapted for other applications.



Example of schematic produced for plant

Topic 3

Safer handling of inbound and outbound materials



This award covers the unloading/delivery of materials and their storage to a site such as:

- Bitumen, fuel, aggregates or cement.
- The storage of finished products and their loading for transit such as precast products.
- Product testing on-site.



WINNER	
ProSpare Ltd	Starclean belt cleaner improves safety on asphalt plant
FINALISTS	
Heidelberg Materials UK	Retractable bay covers – concrete plant
Smith and Sons (Bletchington)	Safe access and egress into tipper bodies – Light vehicle workshop
HIGHLY COMMENDED	
Breedon GB Materials	Focus on the safety, health, and wellbeing of mobile plant maintenance workers
Brett Group	Safe access to fill colour pods
Tarmac Holdings Ltd	Out of hours cement deliveries
CERTIFICATE OF MERIT	
Cemex UK	Safe delivery of inbound liquid admixtures
Cemex UK	Steel fibre adding platform
Heidelberg Materials UK	Safe work means for bulk filler tanker hatch access
Tarmac Holdings Ltd	Vacuum excavation for removing rail wagon contamination
Tarmac Holdings Ltd	COSHH QR Codes

'The Fatal 6'

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

Mitigating potential high consequence hazards



WINNER
PROSPARE LTD

Belt cleaners in place

Starclean belt cleaner improves safety on asphalt plant 1 3 4 5

ProSpare Ltd



DESCRIPTION

Although a comparatively small part of the overall asphalt plant, belt conveyors are critical for efficient operation. Problems with conveyors severely affect the production process, maintenance and safety. The maintenance and housekeeping associated with solving these problems expose plant operatives and maintenance staff to a variety of hazards, many of which are directly related to 'The Fatal 6' including:

- Manual handling of waste product.
- Slips, trips and falls.
- Airbourne dust.
- Moving machinery/isolation of equipment.
- Working at height.
- Confined spaces.
- Entrapment.

Express Asphalt was having issues at one of their plants with excessive maintenance required on the main incline belt conveyor. The scraper installed on the conveyor couldn't clean the belt effectively, which led to fine material adhering to the belt in the form of carryback. This accumulated under the conveyor, in piles measuring up to 1.5m high, and required 30 minutes of clean-up daily. When the material became damp, it

would build up faster than it could be cleaned, a loading shovel was then required to assist with the clean-up.

Mechanism for easily adjusting blades



The team had to maintain the scraper on a weekly basis, taking around 30 minutes to back-off, clean and reset, whilst working in a confined space.

ProSpare were requested to find a solution to this carryback issue. They installed a Starclean primary belt cleaner with quick release tensioner and 85n tungsten carbide blades. The overlapping blades were mounted directly onto the head drum.

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**Key features of this scraper system are:**

Every blade is independently tensioned. This is a critical development, as it means that each blade is not constrained by the others and can move separately to maintain optimum contact with the belt. This prevents the typical 'smiley-face' wear pattern which prevents effective cleaning.

No tool blade change. Each scraper blade slots securely into the blade base without the need for bolts or clamps. This makes installation, maintenance and cleaning far more user friendly and safer.

The system is completely modular. A range of standard components can be simply configured to suit any application challenges.

The quick release ratchet tensioning device. This allows disengagement and re-tensioning in seconds, minimising downtime and making maintenance and cleaning quick, simple and safe.

Extended blade life. Independently tensioned blades last longer, therefore reducing the need to carry out maintenance.

Effective at removing fines and moisture. More effective at maintaining a clean belt.

BENEFITS

- Significant reduction in operatives' exposure to risks associated with these tasks.
- Clean-up on this belt is now a bare minimum.
- The loading shovel is no longer required.
- Housekeeping tasks now only take circa 10 minutes per week, resulting in a total saving of 350 hours over three years.
- Maintenance of the scraper saving a further 72 hours over three years.
- Improved efficiency of entire operation.
- System is simple to adjust and maintain.
- Significant reduction in spillage.
- Extended life of the scraper blades.
- Elimination of unpopular task improves operatives' wellbeing.

DEVELOPMENT & TRANSFERABILITY

Holcim UK shared the innovative design features and safety improvements with its National Best Practice Team, to raise awareness across the group and facilitate rollout of a proven safety improvement.

Any development which makes operating, managing and maintaining conveyors safer will have a huge impact on safety across the whole industry. The Starclean technology is now being successfully applied to all sectors, including quarries, sand and gravel, asphalt, mineral processing, marine wharves, glass, concrete, recycling and many more.

Modularity is the key to versatility, which underpins the potential for rollout wherever belt cleaning is posing problems. The modularity of the Starclean design means that it can simply be configured to suit any application in any industry.

Prospare's CEO, James Bullock, presented a paper at the UK Concrete Show 2024 addressing the impact on the health and wellbeing this belt cleaning and spillage removal causes for site staff and how this can be significantly reduced with this system.



Before: Typical spillage collected under conveyor

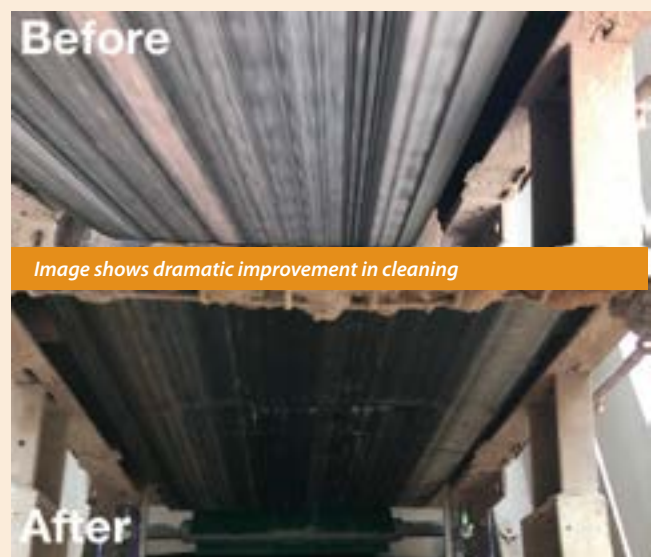


Image shows dramatic improvement in cleaning



Retractable bay covers – concrete plant

Heidelberg Materials UK > Plymouth Concrete Plant 1 2



DESCRIPTION

Plymouth Concrete Plant secured a major contract to supply aggregates to the nuclear industry. The guidelines specified that all aggregates for production must be kept covered to stop contamination.

With space already limited for aggregate storage and truck movements, and the potential of 30 tipper deliveries a day, planning how to meet the contract requirements safely was a primary focus. It was recognised that the construction of traditional, static roof storage bays was not an option due to the additional height and space this type of structure would require. In addition to this, further limitation of the yard space would create a significantly increased risk of collision involving delivery vehicles, mobile plant or pedestrians at the site.

Following consultation with hauliers, engineering, and specialised roof manufacturers, it was decided to install retractable roofs for the aggregate bays.



Retractable roof

The design minimises the risk of collisions between vehicles and the storage bay structure, eliminating the possibility of the tipper body colliding with a static roof and tipping over if not centred. The retractable roof design allows for seamless clearance of tipper trucks and front-end loaders (FEL) during operations, ensuring a safe material handling process.

Collaborating with plant supervisors and tipper drivers, the system was fine-tuned with the introduction of three integrated control points for each bay. This comprehensive control system includes access points in the batching office, at each bay, and a key fob system for FEL operators. A state-of-the-art HD CCTV camera system provides continuous surveillance of the entire operation. With these controls in place, operatives have full oversight of roof operations from any location within the yard, optimising its operation whilst minimising risk.

New training processes were developed specifically tailored to the unique design of the bays. Additionally, a comprehensive risk assessment and traffic plan were devised to accommodate the altered yard layout and traffic patterns. The installation of a traffic light system further optimised vehicle movement, especially during tipping or when the FEL was in operation within the area.

Operating with roof retracted



BENEFITS

- System has significantly enhanced safety within the operations.
- Minimised the risk of collisions with tippers or FELs during aggregate movement.
- Minimised the potential for tipping over of vehicles.
- Minimised the risk of damage to both equipment and personnel.
- Ensures better quality control and environmental efficiency.
- More effective management of moisture levels, reducing wastage and optimising product quality.
- Able to meet the stringent regulations of the nuclear sector.
- A safer working environment for everyone involved.

DEVELOPMENT & TRANSFERABILITY

While standard storage bays are prevalent within the industry, the introduction of retractable roofs on storage bays in concrete plants represents a groundbreaking concept.

The successful implementation of retractable bays, coupled with the efficient management of traffic movements, the prioritisation of environmental and quality considerations, has led to these roofs being installed at two additional plants in the area.

Recognising the transformative potential of this initiative, it is believed that the adoption of retractable roofs should be considered as best practice within the industry. By championing safety and innovation, Heidelberg aim to contribute to a safer and more sustainable future for aggregate delivery operations.



Operating with roof retracted

Visit www.safequarry.com for more details or email: info@safequarry.com



Safe access and egress into tipper bodies – Light vehicle workshop

Smith and Sons (Bletchington) > Enslow workshop **3** **5**



DESCRIPTION

At Smith's Enslow workshop there is a requirement to gain access into the tipper trailers to undertake maintenance work on items such as sheet covering mechanisms. The work involves a variety of body configurations including two, three and four axled vehicles. The mechanics utilised a combination of steps or platforms fitted to the vehicles, and stepladders from ground level.

This method of work was inherently unsafe with the potential for a high degree serious injury, should a fall occur. A team was set up that included the workshop manager, fleet manager and the mechanics to find a safer way of accessing the trailers and minimising the associated risks.

The team contacted vehicle manufacturers and suppliers to see if there was anything currently available to allow easy access and egress to and from a tipper body. It concluded that there was no off-the-shelf solution available.

Following this review, Chase Ladders of Newport were commissioned to design and manufacture an access system which was mobile and could be utilised on all body types.

After various trials and adaptations, a mobile access system was introduced to the workshop. New safe systems of work were written and a PUWER assessment was created. Further trials and testing were carried out until the system was fully adopted by Smiths.

The final concept allows for the assembly to be easily moved and positioned by the tipper; a brake is then locked to prevent movement alongside a tipper body. Keys from the tipper are secured in a LOTOTO lock box to prevent the possibility of the vehicle being moved.

Once at the top of the platform the operative pushes the levers which lowers the inner steps into the tipper body. The access gate is then opened, and he descends the steps into the tipper. This system allows a 'seamless' transition from the outside to the inside of the tipper, whilst maintaining three points of contact utilising the handrails on either side of the platform.

BENEFITS

- The platform provides safe access and egress into the tipper body.
- It has been produced using lightweight materials and is easily manoeuvred.
- The system is suitable for a wide variety of tipper configurations and designs.
- Significant reduction in the potential for a fall from height.
- Efficiency of operation improved with easier access and egress.

DEVELOPMENT & TRANSFERABILITY

The new system provides an innovative approach at minimal cost, which has greatly reduced the risk, and has improved the efficiency of the work being carried out. The system could be adopted to allow safe access into a variety of vehicles including articulated trailers. There is a potential to develop a 'collapsible' which would enable it to be easily transported for use off-site.

This system could be used in any workshop within any industry.



The new access system



Descending safely into body

MPA Safer and Healthier by Leadership - IOSH Leading Safely Accredited Workshop

Book your place now on a workshop that is:

- Industry-specific and tailored to your needs
- Will help you develop world class health and safety performance
- Based on interactive discussions with your peers
- Aligned with the Vision Zero H&S values
- Online 8-hour workshop
- Workshop fulfills IOSH Leading Safely requirements
- Workshops delivered by a minerals industry H&S specialist

MPA has developed this popular workshop which over 500 industry professionals have already attended. Feedback from all sizes of organisations and industry sectors within the mineral products industry has been extremely positive.

An organisation can elect to either have a company-specific workshop which is tailored to their employee's needs or to send individuals on a workshop where they will be participating with their peers from other companies.

Who should attend?

MDs, Directors, Owners, Managers and those already on the career path to move into one of these leadership roles.

Why should you attend the workshop?

- To develop a strategic understanding of the true value of health and safety
- To enhance your ability to plan and implement effective risk control
- To learn about and apply good practices from leading global organisations
- To position your organisation's health and safety performance
- To identify and quantify the opportunities that good performance brings - and the consequences of poor performance
- To help your organisation deliver Vision Zero



Darren Broadhead
– Workshop Leader



Approved
training
provider
3776

What do previous attendees say about the workshop?

"It was a very good course, well-structured and had great content. Questions weren't closed, it had a good balance between literature, theory, practical discussions and video which was enhanced by an energetic presenter. I feel energised and motivated to empower my team off the back of it. I will recommend this for all of my management team to enrol at their earliest convenience."

Tom Herrick, Quarry Manager, Mansfield Sand

"The course overall far outweighed my expectations and was extremely useful. I personally found a lot of value in the mix of people participating and the many open discussions where we learnt other people's experiences and models for working." **Danielle Thorpe, Head of Marketing & Product Development, Brett Landscaping**

"It has been a long time since I've been in a training / learning environment that left me thinking about the content and how I can apply it weeks after the event." **Glenn Henry, Aggregates Operations Manager, Whitemountain**

"Although I have been a champion of health and safety for many years – I found this course was transformational. I urge MPA Precast and MPA Masonry members to send their leaders, managers and health and safety specialist on this course. We have committed to Vision Zero and this course will help your organisation deliver it."

Phil Cox, Director, MPA Precast and MPA Masonry

When is the next workshop being run?

Please check with either Colin Mew (colin.mew@mineralproducts.org) or Amy Harris (amy.harris@mineralproducts.org) for the dates of the next workshop.

What is the cost?

Cost per person is £350 +VAT.

Topic 4

Safer management of pedestrians and transport on-site



This award relates to the safer management of people (employees, contractors, suppliers, customers and members of the public) and vehicles on-site. This could include:

- Site induction.
- Traffic management.
- Pedestrian zones.
- Control systems.



WINNER	
Heidelberg Materials UK	Mobile Plant CCTV incorporating immediate near hit alert system
FINALISTS	
Brett Group	Lift truck – ‘Stop & Think’ dynamic risk assessments to reduce fork lift truck incidents
Cemex UK	Keeping pedestrians safely segregated from plant with AI human form recognition
HIGHLY COMMENDED	
Buxton Lime Ltd	Replacing a heavy hinged lid with a sliding unit for greater safety
Cemex UK	Bletchley Site pedestrian route upgrade
CPI Mortars	Improved traffic management and warning system
Sibelco UK	Access steps for bench surveys
Sibelco UK	Improvement of existing fencing decision flowchart – UK Wide
Smith and Sons (Bletchington)	Safe movement of pedestrians to lorry park from office/welfare building
Tarmac Holdings Ltd	VMS/Radar management on FELs
Tarmac Holdings Ltd	Light vehicle control and segregation

CERTIFICATE OF MERIT	
Blue Phoenix Group	Safe entry for maintenance whilst mobile plant is operating in the same floor area
Blue Phoenix Group	Pedestrian walkway at site entrance
Breedon GB Materials	Light vehicle checkpoint and zone system for entry into heavy mobile plant operating areas
Cemex UK	Segregation of pedestrians and vehicles with Jersey blocks made from waste concrete
Cemex UK	Pedestrian walkway signage
Cemex UK	Catwalk automated access prevention – Unloader Pause
Cemex UK	Locating stock safely in the stock yard
Cemex UK	Removing manual sleeper gauging
Cemex UK	Traffic and pedestrian management
Cemex UK	Safe pedestrian & vehicle segregation
Lhoist	Automated PPE detection system through CCTV
Sibelco UK	People and traffic management
Tarmac Cement & Packed UK	Compressor house VPMP improvements
Tarmac Holdings Ltd	Improved pedestrian management and vehicle segregation
Tarmac Holdings Ltd	Improved VPMP by installing vehicle ‘Hold Points’ with a hard stop and positive communication protocols
Tarmac Holdings Ltd	Big Red

**WINNER
HEIDELBERG
MATERIALS UK***Near miss button located in cab*

Mobile plant CCTV incorporating immediate near hit alert system

Heidelberg Materials UK > Dagenham 2 6

DESCRIPTION

Heidelberg Material's Dagenham site has historically struggled with traffic and pedestrian management issues due to the layout of the site and high volume of traffic. These problems have been compounded by some individuals visiting the site who fail to follow site procedures. Examples of this behaviour are vehicles driving into operational areas without authorisation, speeding, individuals not wearing seat belts, mobile phone use whilst driving, incidents of staff abuse, and pedestrians entering restricted areas.

The team at Dagenham set up a project to reduce the number of incidents involving workplace transport and pedestrians, and incidents with road traffic vehicles. The project recognised that this would require a change in the behaviour of people, including on-site personnel and hauliers, customers and others visiting the site.

One of problems associated with trying to change the health and safety culture at the site, was the lack of evidence and time taken to investigate any incident. This could result in an unsatisfactory or inaccurate understanding of what actually happened and the contributing factors, and trying to clarify conflicting reports of the parties involved. A better understanding of an incident would enable improvements to be made and enhance the awareness of health and safety issues for everyone involved.

To improve understanding of an incident, what happened and to have the evidence to support this, a CCTV system was installed on all of the mobile plant at Dagenham.

The CCTV system provides a 360-degree view of the area surrounding the machine and records 24 hours a day. The images are saved for around five days before being overwritten. The recorded images can be accessed remotely via the internet or manually from the machine.

The plan to introduce cameras on the plant was discussed with the operators. Initially, there was some concerns about the system, it was perceived as the management's spy-in-the-cab that could be used against the drivers. However, following discussions and an explanation of why it was being introduced, the system was accepted. The response to its introduction has been very positive and its potential benefits recognised. The first recorded incident was a member of staff being abused by a haulage contractor who was immediately banned from site.

In addition to the standard system, following a suggestion from one of the operators, a near hit button has been installed in the cab of all the machines on-site. It has been positioned so that the operator can very easily push the button if he is involved in an incident or witnesses an unsafe act. This action not only puts a marker on the video timeline, but can also lock the video 30 seconds before and after the event. The video evidence



is tagged and forwarded electronically to the unit manager or supervisor including the machine identity, location, time and speed, enabling them to react instantly to any event.

The near miss button gives the operators the opportunity to make a real difference in the safe operation of the work areas and effect change. There are also eight programmable alarms that can be utilised in the same way as the near miss button along with another 32 standard alerts such as speeding that can be utilised.

BENEFITS

- The event or unsafe practice is recorded.
- The ability to review the evidence with all parties concerned and lessons to be learnt.
- The video and images can be shared with outside haulage contractors/customers.
- Assists in the education of staff about what is acceptable behaviour and practice on-site.
- Ability to review incidents with the staff and improve working practice, safety issues, etc. through training and education.
- Since being introduced, the evidence collected has facilitated changes to loading operations and pedestrian routes at Dagenham to alleviate certain issues that became apparent.
- Existence of the system encourages both individuals visiting site and site operators to adhere to the site rules.
- The time required to conduct detailed investigation following a serious incident is dramatically reduced and the establishment of facts is more accurate.
- Reduction in incidents following the changes to operations that were introduced, based on the evidence provided by system.
- A safer working environment for all.

DEVELOPMENT AND TRANSFERABILITY

Heidelberg Dagenham prides itself on continuous efforts to improve its health and safety conditions, the CCTV is one of several projects they have under development.

Mobile CCTV is not a new concept however, the way in which it is being utilised with the mobile plant at Dagenham to educate, inform and improve health and safety by giving people a better understanding of the risks and environment they work in is an innovative approach.

One of the main reasons the system works so well is the participation and engagement of the staff who now fully understand the benefits of the system.

The CCTV system has a number of additional alerts and functions that are being evaluated and may be incorporated in the future. The system already interacts with the solar powered traffic management system installed on-site and a pedestrian warning system on the mobile plant.

The system is easily installed as it is a self-contained unit which is located on the roof of the machine, it only requires a single cable to be run down into the machine.

Two other sites are evaluating the system as described.

If this system was to be utilised within the industry it would accelerate the way in which incidents are dealt with. It also provides valuable information that could be shared within the industry, so that improvements regarding the interaction of mobile plant with road vehicles and pedestrians could be made at a much quicker pace.



Near miss button very easy for cab driver to activate



'Lift truck – Stop & Think' – dynamic risk assessments to reduce fork lift truck incidents

Brett Group > Brett Landscaping > Barrow-upon-Soar **2**



DESCRIPTION

Across Brett Landscaping's four operating sites, over 50 fork lift (FLT) and grab trucks operate 24 hours/5 days a week. At times, they are operating in tight or restricted areas, working in close proximity to pedestrians, or undertaking a non-routine lift truck operation. The safe operation of the lift truck fleet is a priority, particularly in relation to their potential interface with pedestrians.

Analysis of FLT incidents in 2019 highlighted several common themes:

- Working in tight/restricted areas.
- Working in unfamiliar areas or where additional equipment had been placed in the normal operating area.
- Failure to check the operating area or journey route for new hazards.
- Undertaking infrequent tasks.

This analysis helped identify that the existing dynamic risk assessment process called 'BrettSafe' might not be suitable for assessing new or unusual lift truck movements or tasks. It was recognised that a specific lift truck dynamic risk assessment was required to address this issue, to help the operator 'Stop and Think' when about to undertake an unusual lift. The aim would be to assist the operator in identifying the hazards, risks, and necessary controls to complete the task safely.

Brett involved experienced and competent FLT operators in the development and the creation of the new risk assessment form and a supporting training package.

The assessments needed to reflect the key hazards present when using FLT's, these were grouped around four themes;

The load – (weight/dimensions/live load/containment/palletisation/contents).

The vehicle – (suitability/attachment/dimensions/cab type).

The environment – (considering the pick-up point, travel route, place-down point (clearance/other objects nearby/pedestrians/working area/ground conditions/lighting/visibility).

People – (non-standard PPE/non-essential personnel cleared/communication/banksman).

A draft dynamic risk assessment form was developed which was called a 'Lift Truck – Stop and Think' together with a briefing PowerPoint.

The new system was trialled at Brett's Barrow's Hydraulic Paving & Shotblast Department which historically had the highest level of incidents across the business.

For each potential hazard the operator would mark whether it presented a high, medium or low risk. For any risk above low, the operator would be required to list the control measures they would apply and agree them with all parties affected. The form was refined using feedback from the workforce and then rolled out across the whole of Barrow and other sites.

During 2021, over three of Brett's operating sites, 103 'Lift Truck – Stop & Think' forms were completed.

LIFT TRUCK – STOP AND THINK			
SITE	CLIFFE	DATE	18-3-22
TASK	Unloading a return load from a customer		
Do any of the following hazards cause anything other than low risk? Mark as either Low (L), Medium (M) or High (H) Risk			
LOAD			
Weight known / within machine capacity at all levels?	L	Width / Length / Height / Overhang outside FLT width or beyond attachment?	L
Can the contents move (live load) / Balance – where is the centre of gravity?	M	Where palletised - is the load fully secured to pallet?	L
Load strapping / hooding / integrity – could objects fall from the load?	M	Are the load contents hazardous? Could you be exposed to harmful substances?	L
VEHICLE			
Suitable for the load and its weight?	L	Suitable for the load dimensions?	L
Has the correct attachment for handling this load?	L	Where cab is open – do I need additional PPE?	L
ENVIRONMENT		PICK UP	TRAVEL ROUTE
Enough clearance both for load and vehicle? Check - Above / Left / Right / Behind / In Front		L	L
Could load or vehicle including attachment hit other objects? Check floor / walls / racking / fixed plant / electrical equipment / doorways / roller shutters		L	L
Can pedestrians enter the area? Are there doorways / walkways nearby? Do you need to cross pedestrian walkways?		L	M
Does the area need cordoning off?		L	L
Are ground conditions suitable? Check for significant potholes / cross gradients / ramps affecting stability? Is there excessive flooding / slippery surfaces?		L	M
Is lighting sufficient?		L	L
Visibility – can you see past the load? Do you need to travel in reverse? Do you need a banksman?		L	L
Is area where load to be placed suitable? Where placing on racking – is it within the SWL?		L	L
PEOPLE			
Do I need additional non-standard PPE?	L	Have all relevant parties been informed of this move?	M
Have all non-essential personnel been excluded from the working area?	L	Where a banksman is used – has the method of communication been agreed?	L
If you have answered Medium (M) or High (H) to any of the above list the control measures overleaf – if unsure. Contact your supervisor			
Signed by all undertaking the task			

IF IN DOUBT - ASK

Image of the new form

To encourage both the use of the forms and the sharing of good examples, a monthly 'Lift Truck Stop and Think' recognition scheme was introduced which has been running since Jan 2022. The competition involves each site nominating their best entry each month, the competition is judged by Brett's FLT suppliers, Glosrose Limited, and the winner is rewarded with a gift voucher.

Visit www.safequarry.com for more details or email: info@safequarry.com



Brett relaunched the 'Lift Truck – Stop and Thinks' in March 2022 with a fully narrated toolbox talk in PowerPoint which was rolled out across all sites. (This can be viewed and downloaded from Safequarry).



In 2022, there was a 26% increase over the number of forms submitted in 2021, and in 2023 there was a further 66% increase with 216 completed.

BENEFITS

- Clearly defined methodology for assessing and recording the hazards, risks, and controls for use whenever there is an unusual or infrequent lift truck tasks being undertaken.
- New system now embedded in the production site processes.
- FLT operators more competent and aware of potential hazards.
- General workforce more aware of FLT hazards and following safety procedures.
- Over the three years since its introduction FLT incidents have further reduced.

	LT-S&T completed	FLT Incidents
2021	103	17
2022	130	14
2023	216	11
Q1 2024	59	2

- Monthly competition reinforces and promotes system and awareness.
- Reduced likelihood of a FLT incident occurring.

DEVELOPMENT AND TRANSFERABILITY

The development of the 'Lift Truck – Stop and Think' dynamic risk assessment used the existing 'BrettSafe' system and input from the RTITB Assessors training manual as the sources of the necessary hazards to be identified and assessed. All new FLT operators are trained on the system, and the process is also briefed to personnel who do not operate FLT's but are affected by their operations as pedestrians in the workplace.

The 'Lift Truck – Stop and Think' forms are based on Microsoft Word documents, printed using standard site-based printers and can be utilised by any business that operates lift trucks, both within the mineral products or other industries.

The content can be adapted for site specific hazards that might not be covered by the Brett Landscaping documentation. The narrated and non-narrated PPT briefings content can be used by any company or adapted to suit their needs.



Employees completing the form for a new task



Keeping pedestrians safely segregated from plant with AI human form recognition

Cemex UK **2**



DESCRIPTION

Cemex's Readymix Midlands & Southwest Region operates 27 locations, primarily 24 concrete plants and three wharfs.

Workplace traffic and pedestrian interface remains one of the high-risk activities in the industry, particularly as it is not always possible to fully segregate pedestrians from moving mobile plant and vehicles.

Sometimes experienced people on-site can become desensitised to the risks represented by mobile plant, particularly the noise, so using other controls that rely on different senses can improve awareness.

Cemex Materials will normally have in excess of 10 asset damage incidents in a year involving mobile plant, fortunately none of these incidents recently have involved pedestrians. For this reason, Cemex is always looking to improve its risk control systems for the operation of mobile plant.

Cemex first became aware of FHOSS Halo System in 2020 and fitted the system to two loading shovels. It was first trialled at a concrete plant and quarry.

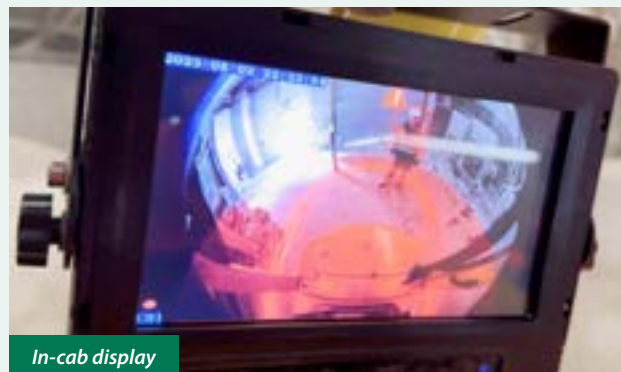
The FHOSS Halo System has been developed to clearly identify exclusion zones, this is achieved through a focused red LED light line system projecting an exclusion zone on the floor.



The loading shovels have a 7-lamp system installed which covers both the sides and the rear of the vehicle. The lights are mounted high off the ground. This creates a red exclusion zone on the floor that can be adjusted to allow an exclusion zone range of between one to five metres. The system takes two to three hours to fit, they are hard wired into the vehicle and are waterproof.

The FHOSS field pedestrian detection zone combines next generation exclusion zone technology with advanced AI detection algorithms that pick up human silhouettes, to create a full coverage 24-hour pedestrian safety system.

FHOSS have combined these technologies to provide a single comprehensive pedestrian detection zone system.



Cemex Material's loading shovels have the LED system and the AI detection system, on sites where the system is used.

BENEFITS

- The work/danger zone is clearly identified giving advanced warning to pedestrians and LGV drivers.
- If persons are wearing ear defenders or are staring at the ground, it provides an additional warning device.
- Two alarm sounds, one in the cab and one externally, whenever pedestrians enter the loading shovel's working area.
- There is no glare off the light system.
- At night or in dark conditions it is a highly visible device.
- The lights provide additional illumination when drivers are completing pre-start checks.
- A safer working environment for all.

DEVELOPMENT AND TRANSFERABILITY

This system is another risk control system, amongst a suite of others, to improve workplace interaction between mobile plant and pedestrians/other vehicles, following BATNEC principles.

This has been shared throughout Cemex and another eight loading shovels are currently trialling the system.

The system is easily fitted and can be adopted by other companies in the sector and all firms that operate mobile plant.



Visit www.safequarry.com for more details or email: info@safequarry.com

Topic 5

Safer transport and logistics



SPONSORED BY



This award relates to improving the safety of transport from the plant to the end user/customer site. This would include:

- Training of hauliers.
- Safety devices on vehicles.
- Measures to improve the safety of other road users, cars, vans, rail and waterborne transport.

JOINT WINNERS

Clubb Sand & Gravel	Safer discharging of concrete
Heidelberg Materials UK	Preventing falls from LGV cabs

FINALISTS

Cemex UK	Mixer rollover warning system
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HIGHLY COMMENDED

Cemex UK	Safe systems of work – Transfer to short films
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CERTIFICATE OF MERIT

Holcim UK	Cement tanker driver training package
Sibelco UK	Davit lifting equipment
Tarmac Holdings Ltd	Reverse Smart – automated braking radar system for tipper trucks





JOINT WINNER HEIDELBERG MATERIALS UK

Using both hands to exit cab

Preventing falls from LGV cabs

Heidelberg Materials UK **3**



DESCRIPTION

In the first quarter of 2023, six drivers in Heidelberg Materials Cement LGV fleet fell to the ground when entering or exiting their cabs.

It was apparent from the first aid reports, that once a driver is in 'free fall' from the steps of a cab the severity of the resulting injury is largely a matter of luck. At one extreme sustaining broken bones and at the other nothing more than wounded pride. However, what was not immediately apparent was the root cause of these incidents.

All the drivers reported holding on and maintaining three points of contact before they fell (as per the safety warning stickers on the cab doors) and the vehicle steps and grab rails were in good condition.

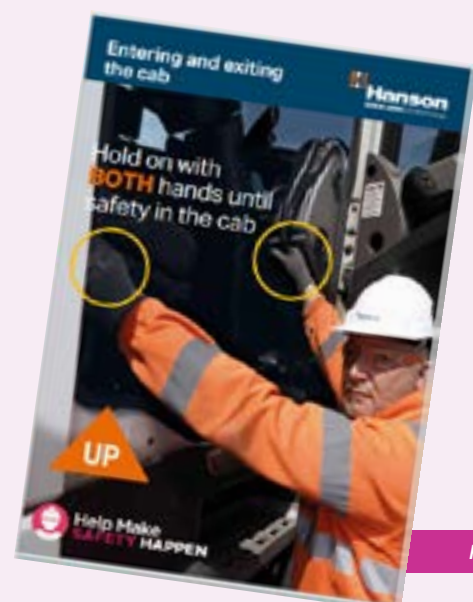
Had it not been for the specialist knowledge of one of the safety advisors, all these incidents could have been put down to the drivers 'needing to take more care', as had been the conclusion on previous occasions. However, the safety advisor in question is a qualified chiropractor and former manual handling and ergonomics consultant. He was able to analyse the incidents from a bio-mechanical perspective, and recognised that the root cause of all the incidents was a fundamental flaw in the 'maintain three points of contact' safety rule.

The three points of contact rule allows for either 'two handholds and one foothold' or 'one handhold and two footholds'. It is the latter of these that is flawed. With perhaps the exception of trained gymnasts, people do not generally possess the grip

strength in one hand to arrest the weight of their falling body if they unexpectedly lose a foothold or miss a step.

The combination of the downward force exerted by the weight of their suddenly descending body, coupled with a severe twisting force on their wrist and hand as their body rotates around the single handhold, will dislodge all but the very strongest of grips, leaving the person in freefall to the ground.

In all the incidents where the drivers fell from cab steps, they had initially lost a foothold or misjudged a step while holding on with



Poster



just one hand. As they fell, their single handhold had been torn away, and they fell to the ground.

The three points of contact rule had been in place for many years without anyone realising that it had this fundamental flaw. Sadly, during this time, numerous drivers have been injured falling from their cab steps, one of whom suffered a potentially fatal injury with a fractured skull. This rule is widely used and therefore, raising awareness of this issue would benefit any driver having to climb into or exiting a cab.

After detailed analysis it was recognised that the only safe way to enter or exit a cab is to maintain two handholds throughout. This provides the driver with sufficient grip strength to respond and arrest a fall if he/she loses a foothold or misjudges a step.

Using this analysis, Heidelberg Materials carefully constructed two new rules, one for safely entering a cab and one for safely exiting the cab (see below).

Having developed the new cab entry & exit safety rules, the next challenge was to ensure that drivers understood the risks inherent in the old three points of contact rule. They would then need to learn and implement the new rules. Attempting to change very deeply entrenched habits would be challenging. Therefore, a campaign was required that imparted the necessary information, which was reiterated and re-enforced over a period of months.

The training element of the campaign was delivered as a special video which alerted the drivers to the spate of incidents suffered by their colleagues; explained how the root cause of these incidents was a flaw in the three point of contact rule; and demonstrated how to enter and exit the cab safely using the new rules.

Please view the video by clicking on link:
https://youtu.be/_ytPAULdGFM

One month after the video had been shown to the drivers, posters were displayed in the drivers' messrooms and at all weighbridges, providing a daily reminder to drivers of the new rules and the key points from the video.

Thereafter, stickers were placed on the outside and inside of all LGV cab doors. These stickers were designed in compliance with the Safety Signs and Signals Regulations thus giving the new rules legal status.

Finally, a bespoke audit tool was developed in Microsoft Forms which was uploaded to the Distribution department management team's mobile phones enabling them to intensively audit and re-enforce compliance with the new rules during site visits.

BENEFITS

- No further falls from cabs in the LGV fleet.
- Drivers have internalised the new rule.
- Sticker and posters provide on-going reminders.
- Detailed analysis by expert enabled longstanding concept to be challenged.
- The revised rule has very wide application across industry.
- A safer environment for all.

DEVELOPMENT AND TRANSFERABILITY

This project shows the benefit of utilising specialists to analyse the root causes of injuries and injury trends.

Replacing the cab entry/exit 'three points of contact' rule with the 'hold on with both hands' rule, represents a new and innovative approach to resolve a repetitive and seemingly intractable cause of injury in our industry.

The findings from the accident analysis and the consequent safety campaign could be applied by other companies who currently rely on the three points of contact rule for cab entry and exit.

Heidelberg Materials are currently developing a similar campaign for safely entering and exiting yellow mobile plant used at its aggregate quarries, cement, ready-mix and asphalt plants.



Labels fitted to cab exterior



JOINT WINNER CLUBB SAND & GRAVEL LTD

Safer discharging of concrete

Clubb Sand & Gravel Ltd > Wilmington 2 3 5

DESCRIPTION

Truckmixers have a chute at the rear of the vehicle to allow concrete to be discharged. The chute swivels around 180 degrees to allow the chute to be positioned over the desired discharge location. The manipulation of the chute by hand often requires a driver to stand in a potentially hazardous place – the danger zone. The danger zone describes the area near the back of the chute where the driver is at risk of either being struck by moving plant, the chute itself, or falling/tripping into the hole that the concrete is due to fill.

To address this issue, Clubb have recently introduced a simple new tool, an extendable pole with a hook attachment. This enables the chute to be manoeuvred into the desired position by the driver while maintaining a safe distance and without having to enter the danger zone.

This application was the idea of the transport manager who researched the market and found Mounty Poles which are extendable poles with various attachments. He purchased one pole and the appropriate hook attachment to trial the new method out and to confirm that the chute was easy enough to manoeuvre with the tool. Following the success of the trial and a decision to introduce the poles, each truck was fitted with brackets on its side to attach the poles, this provided easy access to the pole when required.

The pole was rolled out to all drivers and their feedback was requested to identify any improvements or unforeseen issues.

Amendments were made to the relevant risk assessments and safe system of work to include this new process, and these were reissued to all site health and safety folders. Clubb's compliance

manager has added this new process to her internal audits to ensure all employees are utilising the new tool. The poles are bright yellow which helps to remind drivers to use them.

BENEFITS

- Driver no longer needs to stand in the 'danger zone'.
- Increased distance between the driver and the chute.
- Reduced likelihood of any crush injuries caused by moving plant equipment or the chute.
- Reduced risk of injuries from trips and falls.
- Reduced risk of any contact with the concrete.
- All drivers accept and are happy using the tools.
- The poles are easy for drivers to access and use.
- A safer working environment and safety culture.

DEVELOPMENT AND TRANSFERABILITY

The poles have also proved useful to flatbed drivers who are now using them for the safer unloading of bagged aggregates, by using the pole with the hook attachment to open the tunnels on the IBC bags aiding the forklift driver in unloading the bags.

There are various attachments available on the market for these poles, and many further possibilities that could potentially be fabricated. This pole could be easily introduced in other companies and utilised in a range of applications.



The 'Fatal 6' Award – Runner-UP



Mixer rollover warning system

Cemex UK **2** **6**



DESCRIPTION

According to concreteconnect.co.uk, there were 28 concrete mixer rollovers across our roads in 2023 and it is likely that there were others on-site that have not been recorded. Vehicles with a particularly high centre of gravity, like concrete mixers, are more susceptible in certain conditions to rollover because of their design configuration, shape and load position.

Rollovers typically occur during cornering, rapid lane or road position changes, and low or adverse road surface grip conditions. This is where the centrifugal force acting through a vehicle's centre of gravity causes it to lean. The magnitude of the centrifugal force will increase as speed and turning angle increase, resulting in a rollover.

'Rollover threshold' is the term for a truck's ability to resist rollover. The value is derived from the lowest point of centrifugal acceleration, which causes the truck to tip over when travelling consistently along a curved path. A vehicle's rollover threshold is directly affected by the way in which the vehicle is set-up (loads, tyre pressure, suspension etc.).

Driver behaviour and error are the main cause of rollovers, often due to speed, distraction, fatigue, load condition, interpretation of road layout, weather and mechanical condition.

Concrete mixer vehicles are inherently more susceptible to potential rollovers due to the nature of the type of load carried and the rotating drum. Small changes in road camber and surface can result in rollovers at very low speeds.

In partnership with Cemex, Ogden Safety Systems based in Bradford, have produced a system to significantly reduce the risk of mixer vehicle rollovers.



Establishing the points/degree of rollover

The system provides an early indicator to warn the driver if they continue driving in an unsafe manner, there is a risk of the vehicle rolling over.

Initially, tests had to be carried out to find out what the point/

degree of rollover was. This was carried out by using two recovery vehicles, one either side of a static mixer, which would pull the vehicle over. One would pull it over, whilst the other would counteract the process to stop it from rolling over completely. This provided a base statistic to start with which Ogden's could use to work out the mathematics required to develop a device.

Over three years of research, testing and development has been involved in the production of the Ogden Rollover Warning System (RWS). The system is simple to self-install or can be fitted by Ogden approved engineers. The system is fitted with bespoke algorithms to constantly monitor vehicle position, speed and braking inertia to provide clear, accurate driver alerts of potential vehicle rollover.

Two vehicles were fitted with the warning device for two years to help test and refine the system. It is now available to the industry, with Cemex fitting it to all new mixers.



In-cab warning system

The device acts as an early warning system, flashing Red, Amber or Green, depending on the driving habits of the driver. Red will activate to warn the driver that he is close to the point where the vehicle will roll over, giving the driver a visible and audible warning, indicating they should change their driving habit.

BENEFITS

- Reduced risk of rollover.
- Reduction in injuries to the driver and potential injuries to other road users.
- Encourages and warns drivers to change their driving habits.
- Improves driver awareness of rollover hazards as they learn from using system.
- Improves driver competence.
- Reduction in costly and lengthy repairs or vehicle write-offs.

DEVELOPMENT AND TRANSFERABILITY

Cemex will be fitting the device to all new vehicles introduced from 2024, with the offer of a retrofit to IHCs. With the current fleet replacement plan, all vehicles should be fitted within six years.

The device can be fitted to any mixers, with a simple retrofit which can be fitted by the supplier or supplied as parts only with a simple installation guide. The concept has been shared within Cemex globally.



'The Fatal 6'

- Mitigating the high consequence hazards in the Mineral Products Industry.
- 94% of fatalities in the industry fall within these six common themes.
- MPA and its members have committed to achieving a hard target of zero reportable incidents relating to 'The Fatal 6' by 2025.
- A working group has been set up for each theme. They are tasked to develop resources and recommendations to help the industry eliminate the causes of 'The Fatal 6'.

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



To find out more about 'The Fatal 6' go to [Safequarry.com](https://www.safequarry.com)

'The Fatal 6' Award

The winner of this award is chosen by an MPA panel. Entries are reviewed from across the eight Topic Awards that have been selected by the judges because they demonstrate the greatest potential to mitigate hazards associated with 'The Fatal 6'.



AG Paving + Building Products

Lock – Tag – Live – Improving safety in moving machinery.

This entry demonstrated the company's commitment to improve the lock and tag out systems and mitigate many other hazards associated with the 'The Fatal 6'. This was an impressive entry demonstrating how a company has embraced a strategy based on the elimination of 'The Fatal 6' from their work place. **ENTRY**



Below: Joint runners-up



Implementation of new safety measures and videos for safe operating procedures for the processing of natural stone.

Helping to eliminate hazards associated with 'The Fatal 6' such as operators being hit by falling stone. **ENTRY**



Mixer rollover warning system.

Developing an in-cab warning system to help mixer drivers prevent rollovers. **ENTRY**



Young Leader Award

This is the award that recognises the importance of the young people who work in this industry and celebrates their drive, their enthusiasm, their energy and their willingness to challenge the status quo. These are the Health and Safety Champions.



Adam Boddy
Breedon



Connor Garner-Jones
Breedon



Alex Nolan
Breedon



Rob Wells
Breedon



George Howell
Cemex



Laura Jackson
Holcim UK



Cara Budzynska
Macrete (Ireland) Ltd



Grant Garrick
Pat Munro (Alness) Ltd



Alex Prandi
Sibelco



Joe Colley
Tarmac



Callum McNulty
Tarmac



David Russell
Tarmac



Mitch Warren
Tarmac

"These individuals show that we have some really great talent who are committed to ensure we strive to make our industry a safer and healthier place."

James Thorne Joint CEO MPQC and IQ.

WINNER



Laura Jackson – Holcim UK



RUNNER UP



Grant Garrick – Pat Munro (Alness) Ltd



"Laura has demonstrated real leadership in developing and implementing her project with Holcim UK. The project she has undertaken establishing a clear evidence-based approach for improving the behavioural safety is impressive in itself. What marks Laura out is her passion, commitment and confidence to engage with the Holcim UK workforce from the senior executive team to the operators, making sure the solutions are embedded within the organisation."

"It is a great initiative and clearly Laura is demonstrating great leadership skills, which will only improve the company as Laura develops her career."

– James Thorne

"Grant is very passionate about ensuring the best H&S outcomes within the organisation. His commitment to learning and sharing knowledge and improving the performance of the company is clear."

"He has demonstrated an excellent collaborative approach to H&S and creating an environment where colleagues feel empowered to raise issues and 'stop the job'. For someone still relatively early in their career in the industry, Grant has already become a key member of the team and has shown leadership in this critical area."

– James Thorne



Eurobitume Award

The Eurobitume Award is for the best topic entry that is related to bitumen. This can be either in the production of products, storage, handling, delivery or contracting.

There were 11 entries referred for this award, these were reviewed by Malcolm Simms, Director of MPA Asphalt and Ian Lancaster of Eurobitume, the sponsor for this award.

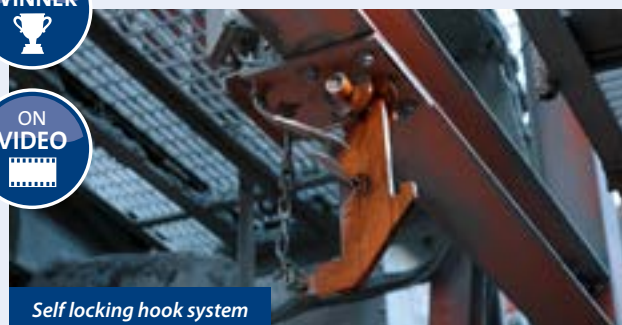


Self-locking skip track safety hook

A site technician at Hogan's asphalt plant in Bangor, Rhodri Williams, devised an innovative, self-locking hook system coupled with a fixed winch for safe skip track elevation. This simple design was developed to resolve a serious issue for our industry. It is a cost effective solution that can be easily adopted by other companies.

"A great example of an innovation developed by a small team on-site using a truly collaborative approach to achieve this great outcome."

Ian Lancaster – Eurobitume **Entry.**



Self locking hook system



Rhodri Williams

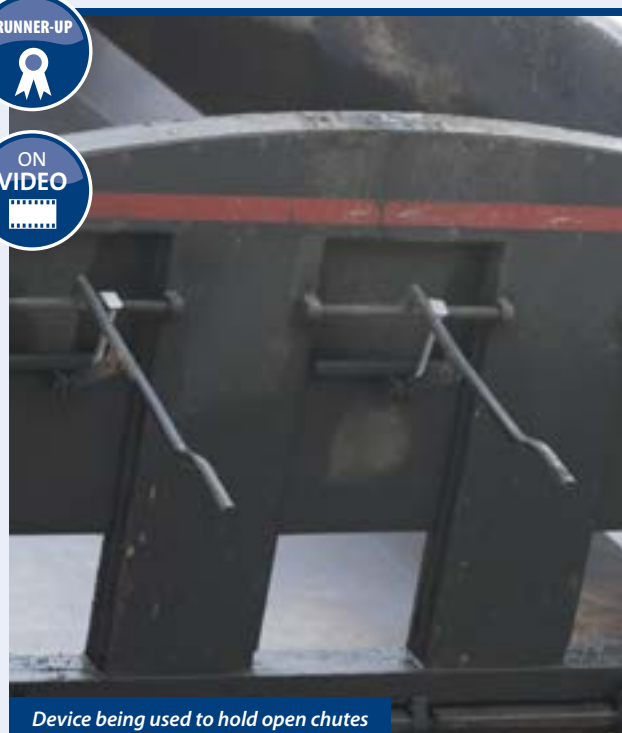
Runner-up



Device designed to hold open the chutes on the rear door of asphalt tipper lorries.

Christopher Leighton, an HGV driver at Northstone Materials Ltd, designed and created a simple device to hold open the chutes on the tailgate of asphalt tipper lorries. This device could easily be adopted by other organisations operating tippers with the same tailgate design.

Entry



Device being used to hold open chutes

Topic 6

Safer operations at a contracting, construction or customer site



This award relates to:

- The safer unloading, storage or handling of products at a customer/end user site.
- The delivery of services at a customer or construction site including on the highway. This would include entries relating to contracting, laying and installation of precast products.



WINNER	
Tarmac Holdings Ltd	Rapid response trauma and first aid backpack (The 900Hybrid Trauma Kit)
FINALISTS	
Northstone Materials Limited	Device designed to hold open the chutes on the rear door of asphalt tipper lorries
Tarmac Holdings Ltd	Sharing good practice through the Pave businesses
HIGHLY COMMENDED	
Tarmac Holdings Ltd	Pre start meeting presentation to improve understanding of our HSE and wellbeing standards
CERTIFICATE OF MERIT	
Cemex UK	Dry dock management monitoring and review





WINNER
TARMAC
HOLDINGS LTD

Rapid response trauma and first aid backpack (The 900Hybrid Trauma Kit)

Tarmac Holdings Ltd > Mountsorrel Quarry



DESCRIPTION

During some safety drills at Mountsorrel Quarry it was recognised that it was taking too long to respond to an emergency, particularly a cardiac arrest. On a large site such as Mountsorrel, it would not be unusual for an individual or small team of workers to be located at a remote site away from the main buildings.

In the event of an emergency, a staff member would need to travel from the location where the incident had occurred back to one of the depot buildings, find the defibrillator and then bring it back. This delay could have a life-threatening impact on the patient's chances of survival or quality of life.

Tarmac collaborated with a manufacturer to design a carry case that allowed staff members to carry defibrillators and other key first aid equipment around with them, ensuring that they would have the appropriate equipment wherever they were working.

The kit contains a semi-automatic defibrillator that offers guided CPR. This feature allows anyone to administer the product during an emergency, which reduces the time it takes to provide first aid to those in need.

The carry case also includes five different colour coded first aid modules, a tourniquet, a razor, and scissors to ensure that the contents are appropriate for any accident on site.

During the initial trial period the kit was packaged within a hard and relatively heavy carrying case. It was noticed that staff members were leaving the kit in their vehicles, as they couldn't transport the carry case as well as all their other working equipment. This led to creation of the '900Hybrid Trauma Backpack' which is lighter, more easily transportable and fits comfortably on the individuals back.

In addition to supplying the backpack, essential training videos and live demonstrations on how to use the defibrillator were provided. This training is included as a part of risk assessments, when staff arrive at new working sites, ensuring that they know how to access and use the emergency equipment.

The semi-automatic defibrillator delivers a potentially life-saving shock for someone suffering from sudden cardiac arrest.

The two recent statements by the British Heart Foundation reinforce why this innovation is a potential life saver.

- 'There are more than 30,000 deaths from out-of-hospital cardiac arrests in the UK each year, and fewer than one in ten people currently survive. Prompt CPR and defibrillation can more than double someone's chances of survival.'
- 'Every second is vital when someone has a cardiac arrest. Quick CPR and defibrillation can be the difference between life and death.'



BENEFITS

- The backpack has significantly reduced emergency response times.
- Rescuers have essential items required in a major incident.
- Everything contained in an easily transportable, comfortable, carry-on rucksack.
- Kit has five separate first aid modules to address cuts and grazes, burns, severe traumatic injuries, eye injuries, and dressing and bandages.
- Rescuer can easily identify and access appropriate module to treat an injury.
- Contents of pack are protected even when working in a challenging environment.
- The high visibility material ensures it is visible even in low-light conditions.
- Kit includes a RapidStop Tourniquet to help control haemorrhaging from arms and legs.
- General first aid kit on the outside pocket allows it to be grabbed easily and rapidly.
- Increases potential survival rate for individuals experiencing a cardiac related emergency.
- Increased confidence and competence of emergency responders.

DEVELOPMENT AND TRANSFERABILITY

This product has been deployed in the rail industry, where remote location requires swift medical assistance, especially where there may be a limited amount of staff working on a hazard.

This product is essential for any industry where employees work away from a main building, as defibrillators can save lives and make a significant difference in emergency cases.

Many tasks undertaken within the mineral products industry are on very large sites in remote areas, which can be relatively difficult to access. These tasks may only involve one or two people who are engaging in a potentially hazardous activity. Should an emergency arise, the ability to rapidly respond at the site of the incident with the right equipment is critical. This kit could be ideal for all sites which have similar characteristics.

There is an increase the number of public places equipped with defibrillators, and more people are being trained to use them. It is hoped that this trend is extended into workplaces, where employee safety and wellbeing should be a top priority.



The defibrillator



Front



Back



Sharing good practice through the Pavé businesses

Tarmac Holdings Ltd > North and Scotland Region



Sharing Good Practice North & Scotland

January 2024



Tarmac. Building our World.

26/02/2024

1

Typical example of PowerPoint – see images below

DESCRIPTION

The contracting or pave side of Tarmac's North and Scotland Region operates across four geographic areas, Scotland, North East, Yorkshire and the North West.

Whilst visiting different sites, the regional manager regularly noticed examples of good practice however, there was limited sharing of these good practices across each individual gang within the different areas. It was recognised that a quicker, more effective method of sharing this type of information was required.

The solution he introduced is based on a monthly slide deck of images, each slide has a simple one-line title explaining what is being shown with one or two images. The use of this format has enabled individual gangs to share their ideas, quick wins, and improvements they have implemented.

The supervisor or manager can run through the slide pack with the gang either on or off-site, the team can quickly identify ideas that could be applied or adapted by them. In addition, the slides can be printed off and copies placed on a noticeboard or another appropriate location.

This concept has also been introduced across the region with the aggregates, asphalt and ready-mix sides of the business. The slide pack includes ideas submitted from across all the business sectors. It enables the teams to celebrate the good works that colleagues have implemented on their sites, and to discuss and review whether it would be feasible to adopt these practices.

Hillwood Asphalt - Good example of lifting equipment management by site fitter (Ross Stevenson)



26/02/2024

3

Sellafield RMX – Radio charging cabinets (fire protection during charging operation)



26/02/2024

4



Yorkshire Pave – 14-foot chipper trailer parked with wheels chocked to prevent inadvertent movement



26/02/2024 6

This system is not a competition or being used as a bragging type of exercise. It enables the talent, ideas and experience that exists across the sectors to be shared and improves Tarmac's wider national business.

Part of the beauty of the process is simplicity, based on the adage that a picture tells a thousand words. An example of a typical slide pack is available on Safequarry.

BENEFITS

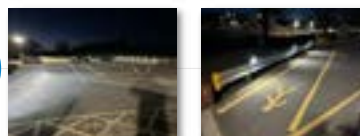
- Simple system based on images.
- All levels within the business view the slides.
- Provides self-challenge to others.
 - Why this can't be achieved in their own operation?
- Examples can be shared with clients to demonstrate Tarmac's proactive approach to health and safety.
- Provides visual indicators of Tarmac site's standards.
- Improves safety culture and reinforces the benefits of sharing.
- A safer working environment for all.

DEVELOPMENT AND TRANSFERABILITY

This format is currently being used in Tarmac's North & Scotland Region but could easily be rolled out across the wider Tarmac business to capture good practice in all areas.

This simple but effective means of sharing health and safety improvements could easily be applied by other organisations.

Killerby Quarry – Effective car park lighting with additional lights highlighting pedestrian walkways



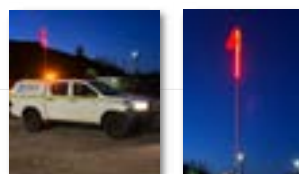
26/02/2024 8

Douglasmuir Quarry – CAT 980 ballast painted by site staff



12

Douglasmuir Quarry – LED buggy whip for improved visibility



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Inverness RMX – Sensor used to detect truck in position to tip material into ground hopper, which then turns traffic light to Red to stop vehicle movements whilst tipping



Sensor



26/02/2024

7



Eurobitume Award Runner-Up

Device designed to hold open the chutes on the rear door of asphalt tippers

Northstone Materials Limited



Christopher Leighton receives CRH Safety Award

DESCRIPTION

During a Northstone transport safety meeting, the company tipper drivers discussed how difficult it is to close the tail door of an asphalt tipper truck when the body is still partially loaded with hot bituminous material. The tail door on this style of tipper lorry is inset to the body rather than sitting external to it, so to close the tail door, the contact surfaces need to be cleared. The driver has to either manually hold it open or insert a prop into the heavy tail door in order clear the door sill of hot material.

Tippers with external tail doors eliminate the hazards associated with cleaning and closing the tail door. However, Northstone still have a number of older lorries with inset style tail doors.

The issues associated with working around and clearing the tail door include:

- Manual handling of the heavy tail door.
- Contact with hot material (burns).
- Nip/trap injuries when removing props or closing the tail door.
- The additional time spent by the driver in a live site environment where he/she is exposed or close to road or site traffic.

In 2023, a contract HGV driver received a hand injury which required stitches when the prop that he was using to hold the tail door open slipped and the tail door closed suddenly, catching and injuring his hand. Drivers were using improvised props to hold open the tailgates that could potentially slip or fail.

Following the meeting, one of the HGV drivers, Christopher Leighton, designed and created a simple device to hold open the chutes on the tail door of asphalt tipper lorries. He welded the prototype device in his home workshop in his own time.

Christopher's innovative solution, which is shown in the image (see opposite), is a device which is applied to each chute on the tail door to hold the chute doors open during tipping. The devices enable material to flow freely from the open chutes into a spreader while the main tail door remains closed and secured with safety pins. After moving away from the spreader, the driver lowers the asphalt tipper body and removes the chute holding devices, the chute doors then slide closed and are secured by the driver.

The devices enable both smaller amounts of material to be delivered from a single chute or a larger volume if additional (or all) chute doors are open. Each open chute is secured by this simple device. The beauty of this deceptively simple design is that the heavy main tail door can remain closed throughout this process – eliminating the hazards shown earlier.

Visit www.safequarry.com for more details or email: info@safequarry.com



The prototype device was trialled on three trucks initially, and the design was then fine-tuned with the input of other drivers and road contracting squads. Once the final design was agreed, the Transport Manager and the driver met with a fabricator who then manufactured a batch of chute safety devices to this design. Chute safety devices were issued to all relevant asphalt tipper trucks including those owned by regular contract hauliers.

A video of this safety device in use was shared with all company drivers using the Transport WhatsApp group.

BENEFITS

- Significant reduction in manual handling risk.
- Significant reduction in risk of burns.
- Significant reduction in nip/trap and crush injuries from tailgate.
- Reduced exposure to traffic as no longer spending time cleaning tailgate.
- This successful project and the management support further empowered workforce.
- Low cost of implementation with each chute holding device only costing £10.
- Enhanced the safety culture at Northstone.
- More efficient operation.



Device in action



DEVELOPMENT AND TRANSFERABILITY

The beauty of this deceptively simple design is that the heavy main tail door can remain closed throughout this process. The device has been shared as best practice with all operating companies within Northstone's parent company CRH Plc.

Whilst tail doors that sit external to the truck body eliminate the hazards associated with cleaning and closing the tail door, there are many lorries still in use world-wide with inset doors. This simple and cost effective device could be used by operators across the industry.

Christopher Leighton was recognised for his innovative design and solution to this industry wide problem by being awarded a 2023 CRH H&S Award – see image opposite.



Close up of device

Safer by Design

Safer by Design is the campaign to ensure that health and safety is built into the core design of the mobile plant used in the mineral products industry.

The health and safety features recommended in the Safer by Design module on Safequarry.com for mobile plant will eliminate or mitigate the high consequence hazards associated with 'The Fatal 6'.

The recommendations have been prepared by a cross industry working group of health and safety specialists. Please go to **www.safequarry.com** to:

- **Review** – key safety features listed for all mobile plant commonly used within the industry
- **Specify** – the Safer by Design health and safety features when ordering new plant
- **Audit** – existing plant to check how well it meets Safer by Design recommendations

safer by design

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Safer by Design

This website has been developed to provide anyone responsible for the operation or maintenance of mobile plant with information on the essential health and safety features that should be incorporated on different types of plant. To find out more about Safer by Design please watch the video: [PLAY VIDEO](#)

The Safer by Design health and safety features will eliminate or mitigate the high-consequence hazards associated with 'The Fatal 6'.

Hazard	Review	Specify	Audit
1. Collision with static structures and vehicles			
2. Unstable, uneven and obstructed surfaces			
3. Manual lifting			
4. Unstable or changing load conditions			
5. Poorly designed working platform			
6. Poorly made structures			

Please select what you would like to do:

REVIEW
500 recommendations for plant type

SPECIFY
500 specifications for new plant

AUDIT
500 audit for existing plant

Sharing health and safety resources helps us all work towards Zero Harm



Topic 7

Safer through improvements in health and wellbeing



This award relates to initiatives that improve the health and wellbeing of people. This could be at a specific site, within a division, or a company-wide initiative. This could include:

- Management of mental health, diet, fitness, medicals.
- Management of hazards such as dust, chemicals, HAVs or noise, if not more appropriately covered in an earlier topic.



WINNER	
AG Paving + Building Products	AG Activ8 health and wellbeing programme
FINALISTS	
Cemex UK	'Hey Girls' free sanitary products
Tarmac Holdings Ltd	Sustaining a high level of control for Respirable Crystalline Silica
Tillicoultry Quarries Ltd	Employee engagement, support and wellbeing App
HIGHLY COMMENDED	
Day Group	Safer through improvements in health and wellbeing
Heidelberg Materials UK	Mental health & wellbeing
Tarmac Holdings Ltd	Enhancing health and wellbeing at sea: A comprehensive approach aboard our fleet of ships
CERTIFICATE OF MERIT	
Blue Phoenix Group	Respiratory protective equipment cabinets
Cemex UK	Menopause support & awareness for both men and women
Cemex UK	Mental health training
Cemex UK	Engaged workforce is a safe workforce
Cemex UK	Wellbeing and Safety Days
Cemex UK	Wellbeing strategy group
Cemex UK	Journey for wellbeing improvement
Cemex UK	Health and wellbeing wall
CleanSpace Technology	CleanSpace live workplace protection factor study – Protecting the respiratory health of workers with facial hair
EPC United Kingdom Limited	Improving employee health and wellbeing through development of an interdependent culture of trust
Forterra Building Products	Forterra Distribution safety sessions
Forterra Building Products	Welfare and safety checking-in device
Holcim UK	End of the line for airborne dust – Concrete Products.
Ibstock PLC	Employee wellbeing garden



WINNER AG PAVING + BUILDING PRODUCTS

AG Activ8 health and wellbeing programme

AG Paving + Building Products



DESCRIPTION

AG are a third-generation family-owned business, the Acheson family are current members of the executive team and, along with the Directors and senior management team, drive the family ethos through daily business practice, creating a positive workplace culture for all employees to thrive.

AG Activ8 is the company's health and wellbeing programme which aims to promote and improve employee's physical and mental wellbeing and ultimately, their overall psychological safety. A key element of the programme is promoting an environment of openness and inclusion.

The key objectives of AG's Activ8 wellbeing programme are to:

- Improve the overall health & wellbeing in AG.
- Empower and educate staff to make positive lifestyle changes.
- Promote the family values #GoHomeSafe, ensuring that wellbeing is a priority both in and out of working hours.
- Deliver and coordinate a range of cost-effective health promotion activities based on employee needs.
- Raise awareness of several health & wellbeing topics in the workplace.
- Provide a full and varied range of employee benefits which helps promote the wellbeing of employees and leads the way for improving overall business results.

- Enabling its employees to flourish and achieve their full potential through training allowing for continual development, resulting in a more established and sustainable workforce.

Activ8 originated in 2018 in collaboration with the Public Health Agency. As part of this collaboration, an employee survey was completed and AG employees identified eight key areas which they wished to focus on. The AG management team believe that the inclusion and engagement of employees in the programme from the offset has contributed to its ongoing success within the business.

Activ8 includes a wide range of initiatives including support for medical check-ups, discounts on services, sporting activities, volunteering, advice on healthy living and diet, access to expert advice and charitable work. AG has also worked to improve the physical environment through introduction of picnic tables, ensuring high standards in washrooms and canteens, provision of vending machines and drinking stations. All these activities are aimed at improving both the physical and psychological safety of the workforce.

AG has a Corporate Social Responsibility Action Team made up of members from its senior management with a Director sponsor. The team reports regularly on progress on a range of sustainability issues, but the Activ8 wellbeing programme is very much to the forefront in its focus on social responsibility.

AG firmly believe that the support, direction, and involvement from its senior management team, together with a regularly updated action plan, has been critical to maintaining the momentum of the Activ8 wellbeing programme.

Visit www.safequarry.com for more details or email: info@safequarry.com



In 2023, AG joined the 'Business in the Community (BITC)' – Take 5 accreditation programme which has further helped with external collaboration, sharing ideas and keeping AG accountable for continually improving.

Activ8 has been rolled out throughout the business to promote mental health. It is promoted through internal communication channels; teams, viva engage, WhatsApp and signage for office and production staff and lorry drivers. Similarly, AG promotes its Activ8 programme externally via its social channels, with its Activ8 logo on any company wellbeing events.

BENEFITS

- AG have recently gained level three in the 'Take 5' workplace wellbeing accreditation.
- Employees experiencing health problems are supported.
- Health surveillance clinics help to identify work related health problems.
- Facilitates earlier recognition of workplace issues and implementation of corrective adjustments.
- Improved employee health.
- Enhanced work-life balance for employees.
- Increased employee engagement and morale.
- Lower rate of absence – 1.63% in 2023.
- Increasing % of females in workforce.
- Reinforcement of AG's 'Go Home Safe' message.
- Decrease in workplace accidents with incident frequency rates 75% below the industry average.
- £20K Insurance rebate at the recent 2024 renewal.

DEVELOPMENTS AND TRANSFERABILITY

As part of its Activ8 programme, AG has enhanced its social impact and have recently received BES6001 accreditation for responsible sourcing. AG believe in sourcing locally with 100% of AG's suppliers, contractors, recommended installers and hauliers from the local community.

AG also partnered with Women in Business in March 2024, providing women with the support, skills and connections to achieve success in their careers by helping to address the structural barriers facing females in the workplace.

AG are continuously adding to their Activ8 initiative with new training, partnerships and benefits to improve employee's wellbeing.

As part of the BITC Take 5 awards ceremony AG presented its initiative on men's health which was implemented as part of AG Activ8.

Having a wellbeing initiative is a step all companies should take to improve employee performance and morale.



Engagement with local schools



Mental Health First Aiders



Mark Wilson
Winner of Good Catch of the Year 2024



Working with local charities



Sustaining a high level of control for Respirable Crystalline Silica

Tarmac Holdings Ltd > Dry Rigg and Arcow Hardstone Quarries

4



Spray system on stockpile

DESCRIPTION

Dry Rigg and Arcow Quarries are two gritstone quarrying operations in the Yorkshire Dales. The sites produce a combined output of 600,000 tonnes of High PSV (Polish Stone Value) for use in asphalt surface courses. This material contains approximately 67% silica, and any dust created from the crushing process must be well controlled to prevent it becoming airborne. The very finest dust fraction (<PM2.5) has the potential to contain Respirable Crystalline Silica or RCS which can be damaging to the health of employees based on-site as inhalation can cause damage to the lungs and long-term health issues.

In 2017, the sites hosted a series of safety days, with over 140 guests from a variety of industry organisations. The safety days highlighted the steps that were being made to control and reduce the potential for RCS on these sites. The passion to maintain outstanding site cleanliness and industry leading standards has continued since then, even though the site has experienced three changes in management over this period.

Detailed below are the measures currently in place to ensure that the highest possible standards are maintained. It reflects the integration of training, management processes, measurement systems, cleaning systems, and the investment in PPE and other devices to keep everyone safe.

- Each site has detailed 'Dust Action Plans', living documents that help manage the control of dust, including RCS.
- All employees have annual health checks provided by a 3rd party.
- All areas of the sites are monitored annually to understand what processes and areas are most responsible for dust emission.
- There are six permanent dust monitors to understand if any fugitive dust is leaving the site boundary
- Both sites now use AAA – a maintenance and servicing App for management of fixed assets including all dust control equipment.
- All machines are required to have clean cabs and be fitted with high efficiency particulate air filters (HEPA), this rule also applies to contractors.
- All machines must be operated with all windows closed.
- Many employees also choose to drive in shoes rather than safety boots whilst in their cab to ensure dust is not introduced to the working environment.
- The cab environment includes no foam seating due to its potential to trap dust.
- Both sites have improved and redesigned welfare/ changing facilities to ensure that they can remain clean and dust free.
- Boot cleaners and covers are located near all the facilities entrances and changing rooms are used to ensure all 'clean' areas of the buildings remain dust free.
- The crushing equipment is fitted with foaming systems that help contain any dust before it can become airborne.
- Transfer points are equipped with water sprays and misters to reduce fugitive dust emissions.
- At Arcow, where material is transported by rail, each wagon passes under a rail fogging system that prevents dust being wind whipped from the material during transport.
- All plant buildings have multiple pressure washers used for cleaning instead of brushes that can result in airborne dust.
- Entry to plant buildings is restricted until the plant has been stopped for 20 minutes.
- Concrete walkways have been installed around the sites where possible, this enables them to be cleaned and washed down.
- A new wheel wash and wedge pit system has been installed to help clean vehicles' undercharge before they leave site.
- A road sweeper is on-site daily to keep local roads clean.
- On-going toolbox talks and training to ensure that a 100% buy-in from the site operatives is maintained.
- Ensuring that the correct PPE is supplied for the persons on-site that may be exposed to dust.
- All fitting staff are issued air fed masks instead of disposable masks as they provide better protection against RCS.
- All respiratory PPE is face fit tested annually to ensure a tight seal between the face and the masks.

**Spray suppression system for rail wagons**

BENEFITS

- Operatives, contractors and visitors to site are protected from exposure to dust.
- A dust free and clean work environment reduces risks from other hazards.
- Workforce has high level of awareness of potential risk from RCS.
- Workforce committed to maintenance of high standards.
- Inspection and preventive maintenance regime limits stoppages and improves productivity.
- Well documented evidence of plant's performance and can quickly identify and address any increase in dust levels.
- Cleanliness of site promotes a good safety culture.
- Measures to control dust improves relationship with local community.
- Helped Dry Rigg secure a further 13 years of planning permission securing the near 60 jobs that the site creates.
- Systems to manage dust levels and other activities protect the environment.
- Tarmac is recognised as a good neighbour and responsible operator by local residents.
- A safer environment for all.

DEVELOPMENTS AND TRANSFERABILITY

The addition of two remote pecking systems at the quarries will reduce the requirement for persons to enter the crushing buildings when it is running, it will also reduce lost time caused by blockages.

A permanent road spray system will allow more control over wetting the roads, as well as allowing the mobile water bowsers more time for keeping dust down in other areas by wetting stock heaps and the working face areas.

Tarmac is also looking into creating a purging system that will be fitted to the crushing buildings. This system would purge any airborne dust, using misters and water sprays, that may be lingering in the air if a person needs to enter in an emergency.

The creation of more dust sheds on-site is being considered. These are areas where dust products can be stored under cover out of the wind, this reduces wind whip from any stocks preventing the creation of airborne particles. Arcow Quarry currently has a dust shed but more spaces are required on both sites.

The holistic approach to dust management reflects what can be achieved and, whilst many of these initiatives are applied on other sites across the industry, these two sites reflect what can be achieved with a determined and comprehensive approach to dust control.

**Boot cleaning station****Dust free cab**



Employee engagement, support and wellbeing App

Tillicoultry Quarries Ltd



ALL WRAPPED INTO ONE

EVERYTHING YOU NEED TO KNOW ABOUT YOUR NEW BENEFITS & EMPLOYEE ASSISTANCE PROGRAMME APP.

Pay Documents

View your latest and historical payslips directly on your phone.
Quickly access your P60 and other pay documents.

Health & Wellbeing

Gym discounts at many top UK gyms.
Online health check - receive information tailored to you.
Keeping fit and healthy is great for your mental and physical well-being!

24/7 GP service

Speak to a GP, anytime, anywhere - appointments can be face-to-face via webcam/phone camera allowing you to virtually interact with the doctor to show relevant symptoms, or by telephone.
Book appointments that suit you - you don't have to worry about getting to your doctor if you are unwell, or having to take time off.
Prescriptions authorised on the phone and delivered to your local pharmacy.

Employee Support

A free confidential 24/7 telephone line direct from your staff portal.
Access to fully qualified, professional counsellors.
Confidential financial, legal and emotional support.
100% confidential - no information will be shared with us (who, why, where).

Discount Outlet

The best discounts at over 5,000 retailers.
Eat and drink well with hundreds of restaurant offers.
Enjoy fun times with the family at top UK attractions.
Savings on holidays.
Average savings of up to £1,000 per year.

Launch date 27 November 2023

Download at web link
tq.benefix.co.uk
or scan the QR code



WE ARE TQ

Poster to promote App

DESCRIPTION

In 2022, Tillicoultry Quarries commissioned an employee survey to understand employee sentiments, thoughts and feedback on several themes across the business including health and wellbeing. The survey results concluded employees would like to see more health and wellbeing initiatives, including ones focused on mental health awareness.

To understand the survey results in more detail, the Director and HR manager held feedback sessions across all the business sites to clarify what types of support employees were looking for.

Based on the feedback, it was decided to create a bespoke employee App. The App would focus on employees' health and wellbeing, and ensure that it could be accessible for all employees and provide 24/7 access to support.

The team engaged with App developers to find a provider that understood the importance of the App, its role in employee health and wellbeing and ensured it could provide core services such as GP, counselling and support tools. The finalised App offers GP and mental health support, free counselling sessions, retail discounts and hosts payslips.

Throughout the development process the team consulted with individuals across the business to help identify what employees liked and disliked about other Apps, this helped to inform the development brief.

The App brief and proposed development partner was presented to the Tillicoultry Quarries senior management team at an early stage in the development, gaining their full support.

Accessibility and inclusion were two key mandatory criteria for the rollout of the App.

The HR team created a rollout plan that included visiting every site in the business to discuss the App, what it was, the benefits it offered and why the business was introducing it. They also helped employees to download and set up the App on their mobiles and tablets, ensuring everyone felt comfortable with it. This was also backed up with easy-to-follow user guides. They continued to provide on-going support with follow up visits and refresher training when required.

Following the successful rollout, Tillicoultry Quarries announced this initiative to customers and the industry via its company website, LinkedIn and Newsletter.

Monthly statistics have shown that engagement with the App has continued to grow. Employees are using the GP and counselling services, and some have signed up to longer term support programmes. 95% of employees signed up to the App in the first month of the launch.

BENEFITS

- 135 people used an App benefit within the first four weeks.
- Extremely well received by employees.
- Employees have a range of confidential support tools at their fingertips.
 - Including GP services, mental health support, counselling services and legal advice.
- Services are free to all employees and their families.
- If employees are unwell and cannot attend work or see their GP, there is a free 24/7 GP service available to them (phone and video) that can issue prescriptions and appointments can be arranged within 24 hours.
- Encourages healthier lifestyles through gym discounts and health assessments.
- Employees can access an extensive range of retail discounts including, travel, restaurants, supermarkets and other retailers
- Employees have acknowledged that discounts are extremely beneficial to them.

Visit www.safequarry.com for more details or email: info@safequarry.com



- Employees have access to online payslips, pay documents and pension information is readily available.
- Reinforces company ethos as a family business with core value of 'looking out for each other'.
- Demonstrates management is committed to improve our health and safety culture.
- Demonstrates management's desire to breakdown any stigma around mental health issues in the industry.

DEVELOPMENTS AND TRANSFERABILITY

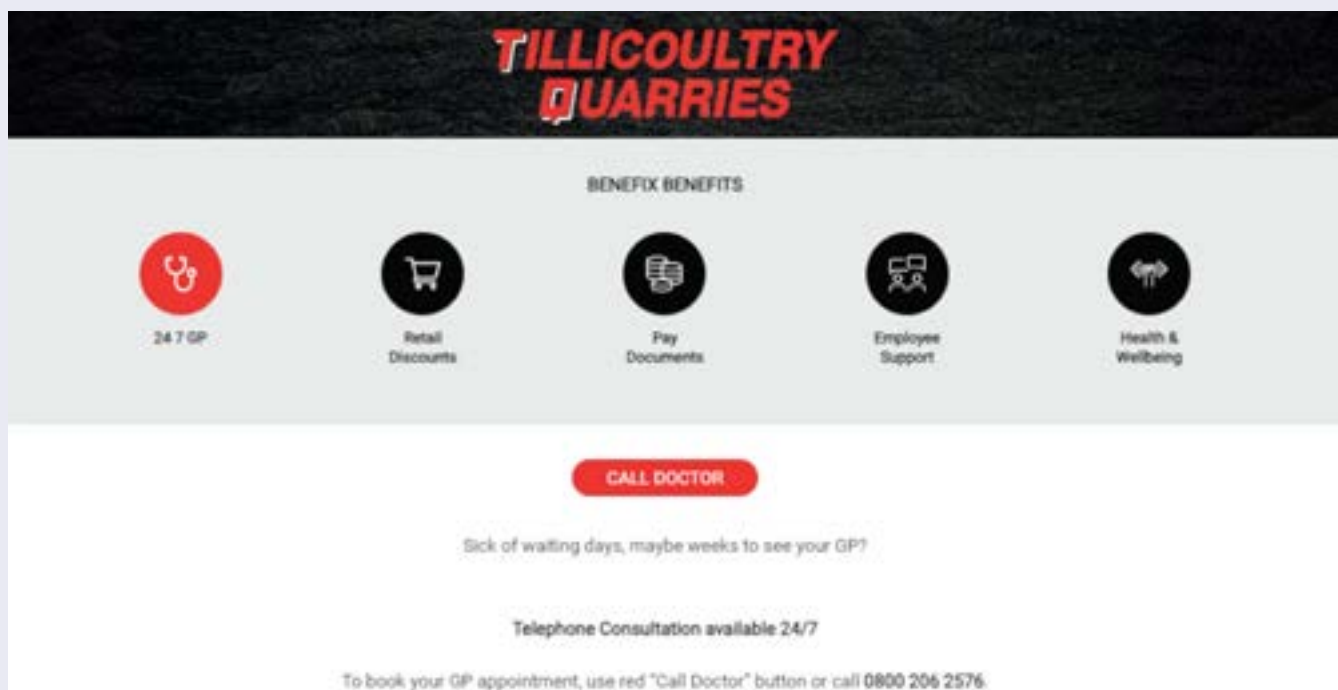
This initiative has helped to remove the stigma around mental health, it has helped to get men talking about health issues

and provided support to women in a male dominated industry. The App is a core channel within Tillicoultry's wider health and wellbeing strategy and will be continually improved based on staff feedback.

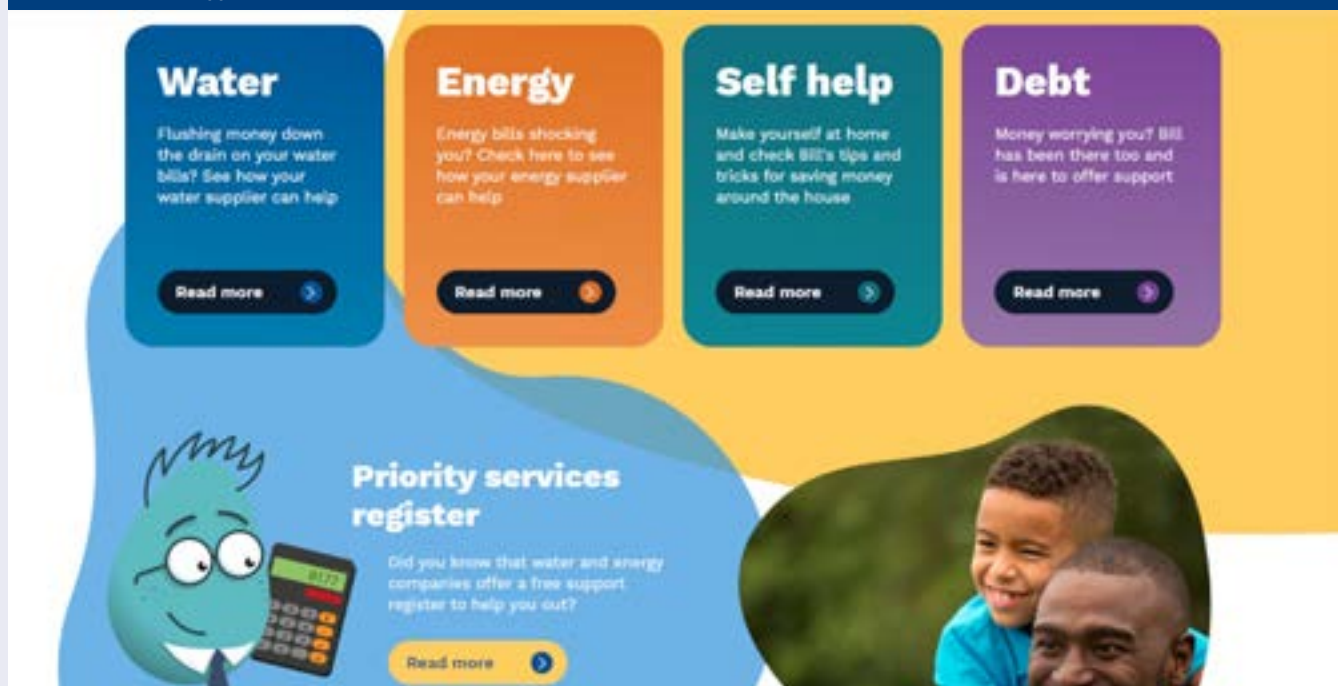
It is anticipated that the number of days lost through sickness absence will be reduced through the GP service and staff morale will improve.

The HR team is passionate about wellbeing and will continue to dedicate time to research industry best practice. Any insights from this will be fed back into the App and the wider wellbeing strategy.

Tillicoultry will continue to share the benefits the App has given its employees and the business, ensuring that it is championing wellbeing on the agenda across the industry.



Screenshots of the App





'Hey Girls' free sanitary products

Cemex UK



Lucy Forster – Cemex Human Resources UK

DESCRIPTION

Women make up a minute percentage of the UK's construction/quarrying workforce. The construction sector, unfortunately, holds its reputation for being a man's career, despite this being a very outdated construct.

Enticement of women into our industry is put off by:

- Poor fitting PPE – the PPE provided often designed to fit the male build, commonly resulting in women working in uncomfortable or ill-fitting PPE.
- Poor maternity schemes in comparison to job roles outside of the construction sector.
- Discriminatory behaviour.
- Lack of job flexibility.
- Poor welfare facilities.

Whilst Cemex, and the industry, have made progress with all the above bullet points and particularly diversity, welfare facilities are a challenge; especially where shared facilities are in place.

Cemex's Wellbeing Strategy Group meet every quarter with members of the group being drawn from every part of the business. The group agrees topics/themes and initiatives, one of which was lack of sanitary products, particularly on operational sites where it is difficult to set up contracts with dedicated hygiene services providers.

Cemex therefore teamed up with 'Hey Girls'
– <https://www.heygirls.co.uk/about/>

'Hey Girls' mission is to eradicate period poverty in the UK, improve access to quality products and increase education around period health, and eliminate shame and stigma. A core part of Hey Girl's programme is its buy one, donate one policy, donating products to period poverty areas and lobbying for period dignity across the UK.

Providing sanitary products in the workplace can make the difference between a good day at work or the worst day of a female's career. Cemex recognised that this could be easily addressed by supporting its female staff and providing a variety of simple affordable solutions that could be put in place straight away.

Cemex shared information about this initiative with their employees via local comms and weekly newsletters, explaining the process for ordering the products at a site level.

Cemex provided a discreet basket in site toilets so that women can take a product whenever they need it.

BENEFITS

- Can make a significant difference to female staff.
- Easily achieved by providing a variety of simple affordable solutions.
- Easy to implement with minimal delay.
- Working with 'Hey Girls' improves corporate social responsibility (CSR).
- Helps to reach environmental and sustainability goals.
- Champions equality and diversity – an inclusive initiative to ensure dignity for all.
- Easy to order from 'Hey Girl' website.
- Hey Girl matches on a buy one, donate one basis for each product purchased.
- Demonstrates that Cemex is invested in the wellbeing of its female personnel.

DEVELOPMENT AND TRANSFERABILITY

This was a new concept to Cemex, and they do not think it is that common within the industry. The industry is trying to become more diverse and make the construction/quarrying industry attractive to everyone – this is one easy step to make life a little easier when females are 'caught short'.

Easily transferrable to any workplace.



Items provided in pack

Topic 8

Safer together



This award relates to initiatives where the main emphasis is on working together, leadership or behavioural change. This could be site-specific, divisional or company-wide initiative. It could include:

- Training programmes.
- Safety days.
- Communication programmes.
- Cross site safety audits or similar initiatives.

VISION ZERO
SAFE & WELL EVERY DAY

WINNER	
Brett Group	Vision Zero harm strategy and programme drives significant reduction in serious harm
FINALISTS	
EPC UK Limited	Coaching for empowerment – training supervisors and managers
Tarmac Holdings Ltd	Implementation of a safety leadership development programme
HIGHLY COMMENDED	
Cemex UK	Fire and emergency arrangements
Cemex UK	Journey for behavioural change – apply the basics, every day, with everyone
Forterra Building Products	Significant improvement in standards of the storage, use and management of lifting equipment.
Ibstock PLC	Hand safety
Lhoist	Improved methods of communication gives improved safety performance
Tarmac Holdings Ltd	Creation of the employee led 'Safety Focus Group' to improve HSE and wellbeing standards
CERTIFICATE OF MERIT	
AG Paving + Building Products	SafeDay Campaign
Banner Contracts	Sharing best practice in the digital age
Cemex UK	Safety essential monthly focus
Forterra Building Products	Undertaking of a two year behavioural H&S training program
Holcim UK	Information station – Concrete Products
Tarmac Holdings Ltd	Monthly readymix haulier engagement sessions
Van Elle Limited	Hazard notification system

MPA
HEALTH & SAFETY
AWARDS ✓
SAFER BY SHARING



WINNER BRETT LANDSCAPING

Safety day

Vision Zero harm strategy and programme drives significant reduction in serious harm



Brett Group > Brett Landscaping

DESCRIPTION

Brett Landscaping manufactures concrete paving, blocks and kerbs. It operates on four sites, with 180 manufacturing personnel working 24 hours over four to five days per week. Site teams range in size from circa 20 to over 70 people.

At the end of 2021, the LTIFR and TRFR were 6.02 and 12.04 respectively, significantly higher than the MPA LTIFR target of 1.5 by 2025.

In response to these statistics, the Managing Director, Richard Baldry, and the Production Director, Neil Frost, set a key aim for the five year SHE strategy, to be operating Brett Landscaping with Zero Harm.

The SHE Strategy

Key areas to target were identified which would help to achieve this, they were;

- Aligning the SHE improvement plan with 'The Fatal 6' and the related six core health and safety values.
- To increase pro-active measures which would help to reduce incidents.
- Engage in a cultural change programme by embracing MPA's Vision Zero.
- Focusing on 'The Fatal 6' hazards in the workplace.
- Improving competency and knowledge.
- Developing open and honest communication to identify and resolve issues.

The objectives were fully supported by the senior management team. They agreed to the development of a programme of fully interactive, Vision Zero (VZ) Roadshows. The roadshows would be a core element in the delivery of this cultural change programme and Brett's drive to improve health and safety related behaviour. An external facilitator, Future Thinking, was engaged to assist with this.

A video was created that explained what the core values meant for management, supervisors and employees; this was used at the first roadshow. To help launch the programme a new strapline was developed – **'START SAFE. WORK SAFE. HOME SAFE.'**

ERIC, a cartoon character, was created, he was used to reinforce Brett's Vision Zero messages.

The management team Increased the frequency of their Behavioural Safety Alive and Well (A&W) Walks to help reinforce their engagement with the programme and obtain feedback.

THE ROADSHOWS

The roadshows were scheduled to be held every six months at all four operating sites.

The first was held in Q1 2022, which launched Vision Zero and the associated six core health and safety values.

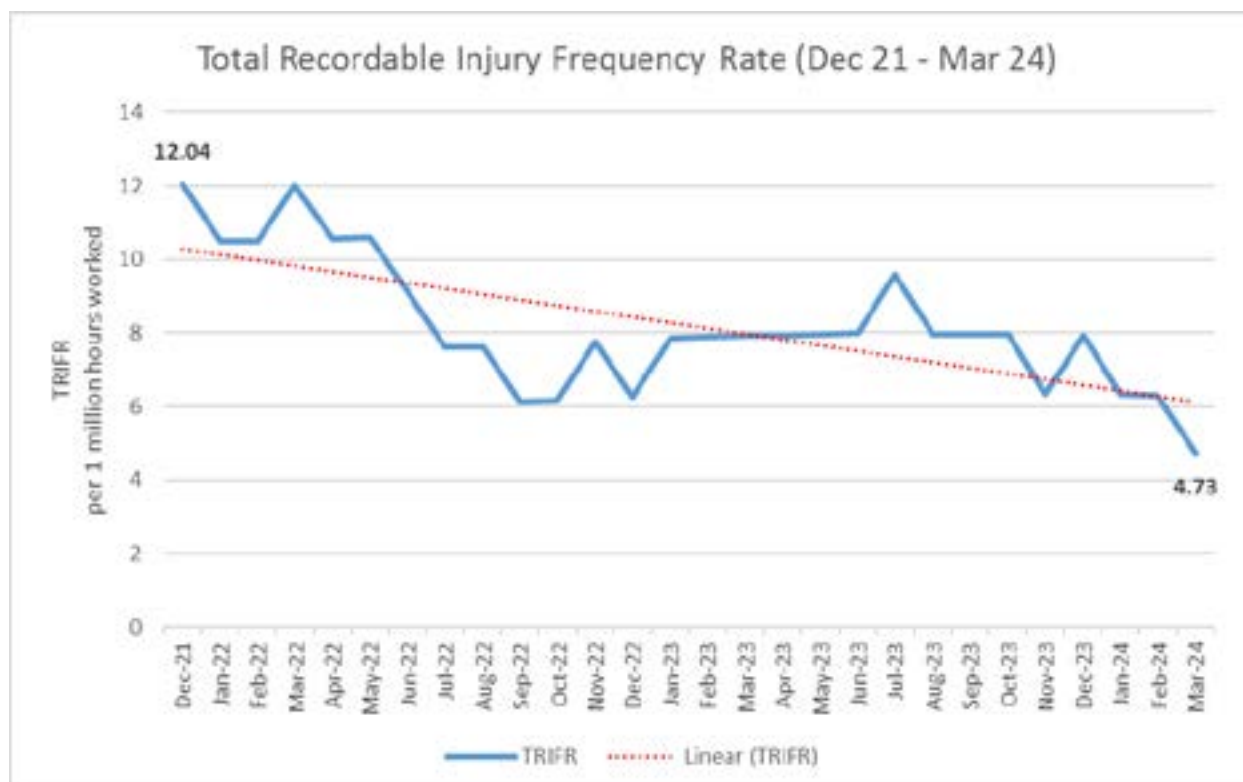
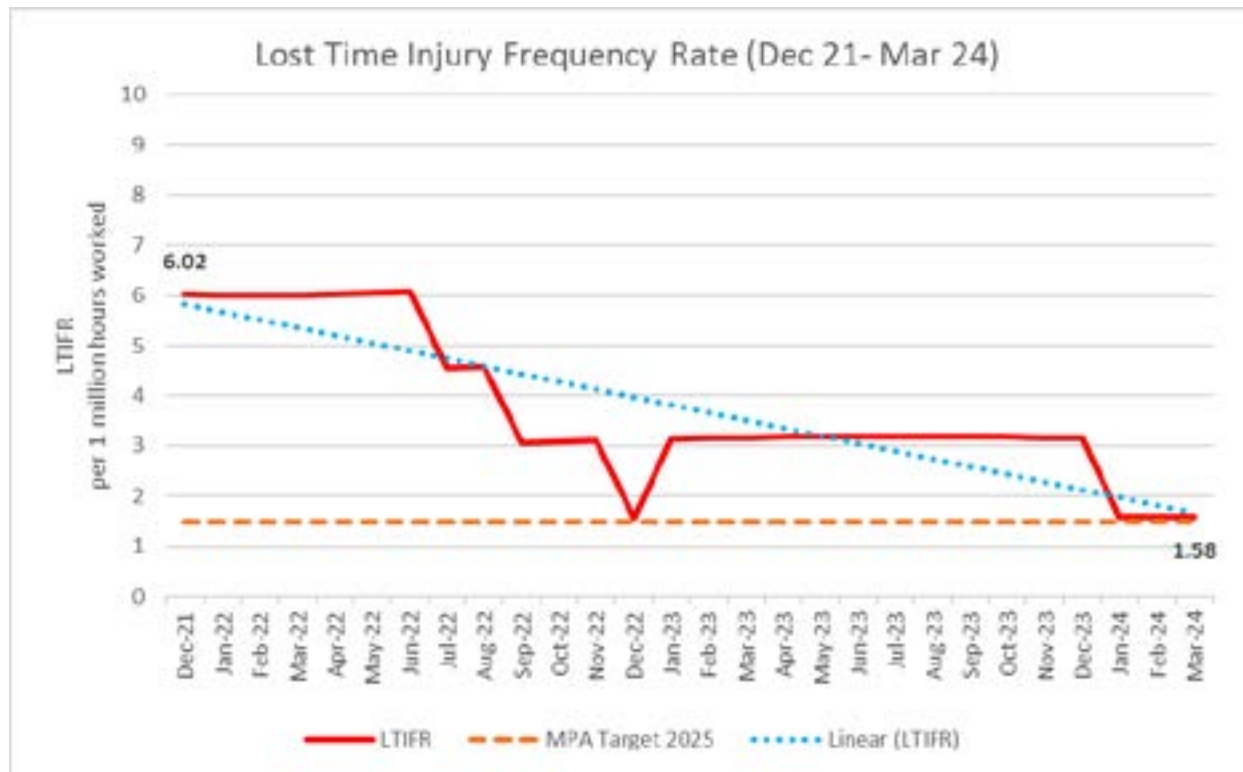
To establish a benchmark and track progress, employees were asked to score electronically on a scale of one to ten where they believed their site would score on each of the six core values.

The concept of linking 'The Fatal 6' to the SHE plan was explained, encouraging them all to focus on identifying 'The Fatal 6' risks on their site. An action plan would then be developed to mitigate the risks that had been highlighted in this process.



BRETT LANDSCAPING

REDUCTION IN LOST TIME INJURY FREQUENCY RATE SINCE LAUNCH OF OUR VISION ZERO PROGRAMME IN Q1 2022





The 'MPA Employees Guide to Vision Zero' and VZ cards were given to every employee. Individuals were asked to feedback what they would personally commit to do to reflect their adherence to each of the six core values. These commitments were used to create site-specific posters.

The subsequent roadshows were used to review and feedback on actions that had been agreed, seek feedback on employee's commitment to the values and work on specific themes.

The following key elements were incorporated into all the Vision Zero roadshows:

- The whole management team was involved in development of the roadshow's content.
- Each roadshow was presented by the Lead SHE Manager, the Site Manager and the Production Director.
- Based on an open and honest two-way exchange between workforce and management teams.
- The use of small group interactive sessions within the roadshow.
- Use of Brett Landscaping scenarios to demonstrate the core values of 'The Fatal 6'.
- Feeding back on H&S action plans developed from the issues raised at roadshows.
- Re-scoring the six core values on electronic MS Forms with results displayed immediately.
- The use of a variety of safety media such as European NAPO Films (www.napofilm.net).
- Roadshows attended by all site staff – production and non-production personnel.
- Feedback questionnaires completed to help plan and improve the next roadshow.
- Supporting documentation and equipment used to reinforce messages – posters/ERIC.
- Follow up programme at site level – such as employee's commitment to a value.

Each roadshow would include a focus on specific themes:

- **Roadshow 2** – Workplace RCS, developing site specific RCS action plans.
- **Roadshow 3** – The value of Empowerment and what this means in the workplace.
- **Roadshow 4** – Working at Height awareness and developing action plans for site specific issues.
- **Roadshow 5** – Effective (High Quality) Implementation and the launch of a colleague-nominated Empowerment Award.

Progress against the SHE plan and the individual site action plans generated from the roadshows are tracked every month through the Operations and SHE meetings.

Every employee was issued with a bespoke My Vision Zero Journey A4 folder with pockets. This enabled them to keep everything associated with this programme together.


AWARDS

To further encourage all employees to be pro-active in relation to the programme, a number of awards were introduced with winners receiving both recognition and gift vouchers.

- A monthly Vision Zero Recognition Award for the best general dynamic risk assessment, BrettSafes.
- An award for 'Lift Truck – Stop and Think' – this is highlighted in a separate [entry](#)
- An award for near miss reports.

COSTS

The cost of implementing this programme has been low, primarily the investment of time by Brett's management teams. The production of printed media and 'takeaways' such as ERIC mugs, keyrings, pens, highlighters, etc, supported by MPA media such as the 'Employee Guide to Vision Zero' and VZ 6 Core Values/ 'The Fatal 6' cards. Since 2023, all media generation has been brought in house with the support of Brett Landscaping's



VISION ZERO
SAFE & WELL EVERY DAY


mpa
essential materials
sustainable solutions

BRETT
built on relationships

LOOKING AT SAFETY THE RIGHT WAY

I don't deserve to work safely
So don't try to convince me that
I should look after myself
Because at the end of the day
What's the worst that can happen
And I'm not going to lie to myself by saying
My health and well-being matters
So rest assured I will remind myself
That I should ignore situations that can cause me harm
And nothing you will say will make me believe
I deserve a safe working environment
Because no matter what
I am not important enough to be a happy and healthy
employee
And I am in no position to believe that
Every day I come to work, my safety matters

(Now read it from the bottom up)



START SAFE. WORK SAFE. HOME SAFE.



marketing team and the use of in-house printing, the total external expenditure for just over two years has been circa £6k.

BENEFITS

- There has been an improvement in all the proactive measures of safety including:
 - 1,704 Alive & Well behavioural safety walks.
 - 1,527 near misses have been reported.
 - 1,340 dynamic risk assessments completed.
 - SHE Responsible Persons competency matrix at 54.0% completed.
 - SHE competency has increased to 88%.
 - A significant reduction in serious harm.
 - 36% overall reduction in all types of incidents:
 - A 74% reduction in Employee LTIFR which is now 1.58.
 - Three out of the four sites are now LTI free for over two years – one of these LTI free for over five years.
 - Remaining site achieving 345 days LTI free between 29/03/2023 and 21/03/2024.
 - 60% reduction in Employee TRFR which is now 4.73.

- The feedback from the roadshows is overwhelmingly positive.
- Health and safety culture improving at sites as reflected in the site core values scores.
- A safer environment for all.

DEVELOPMENT AND TRANSFERABILITY

Brett Landscaping's Vision Zero Strategy embraces MPA's Vision Zero, by aligning its SHE plans to 'The Fatal 6', and adopting the MPA six core H&S values. This has been combined with an unrelenting focus on improving its proactive measures as reflected above.

Brett set their 2024 targets to maintain their proactive measures at the 2023 level. However, they recognise that they have yet to achieve their objective of sustaining Zero Harm but know it can and must be done.

The sixth Roadshow for Q4 2024 will focus on either 'Struck by Moving and Falling Objects' or 'Contact with Moving Machinery and Isolation'. Brett is planning to increase the role of the site manager in the roadshows to enhance the level of site focus.

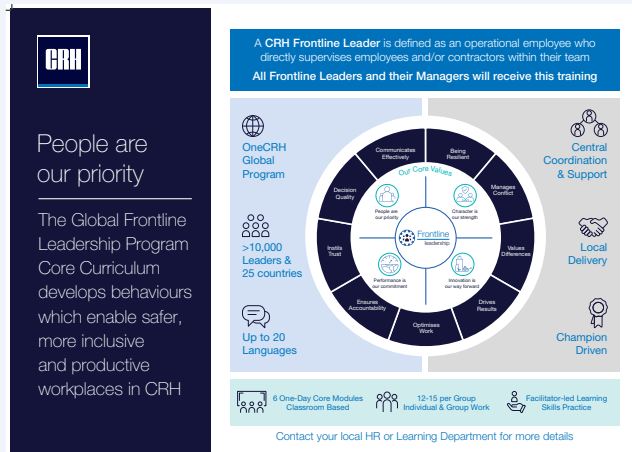
The Brett Landscaping Vision Zero strategy and journey can be adapted by any company to develop their own program. One of Brett's suppliers, Proctor Johnson Limited, have used the Brett Vision Zero programme to help them implement a similar version on their own sites.





Implementation of a safety leadership development programme

Tarmac Holdings Ltd > National Skills & Safety Park **1 2 3 4 5 6**



DESCRIPTION

Tarmac has circa 600 frontline leaders, defined as an operational employee who directly supervise employees and/or contractors within their team. He/she is typically one level above general operational employees and is responsible for day-to-day operations. The company has recognised that this level of leader is critical to influencing how work gets done, and that people stay safe and deliver on results.

Tarmac decided to invest in frontline leadership development to enhance the human performance element of a strong safety management framework.

Working in partnership with an external training content provider, a global company project team designed and developed a six-module program. In developing the programme, line managers were consulted, and a core set of behaviours were identified. Modules were then developed to support the demonstration of each behaviour. There were several critical factors and principles adopted by the team to ensure that the programme was a success, these are summarised below.

Critical Factors in programme development

- Senior leadership sponsorship – including their presence in some of the modules.
- Experiential and interactive delivery of module content, enabling the participants to practice using the tools and techniques and learn from each other.
- Content that contained tools and techniques that were relevant, relatable and easy to apply for participants.
- Modules to be delivered by trained and certified facilitators who were also managers within the company.
- Line manager support – focused on conversations with participants before and after each module.

- A period, typically three to four weeks, between modules to give the participants the time to practice the tools and techniques.
- Relating the tools and techniques to their role as safety leaders.

To enable consistency of delivery, the certified facilitator is provided with a step-by-step guide to deliver the module. Each participant is provided with a workbook and 'job-aid' for each module.

The job-aid is a two-sided document that summarises the tools and techniques that they will learn in the module. The delivery of the module uses a range of techniques.

Typically, the circa six-hour modules introduce participants to the content, a variety of exercises are then deployed to help them better understand the tools and techniques. Participants work together in small groups, feedback and share what they have learned. They also practice using the tools with each other.

Each module builds on the previous one, and, with more practice, confidence and competence in using the tools and techniques is developed.

Two additional one day modules have been designed for line managers. These ensure that the line managers are both aware of the content, and importantly, are clear of what is expected of them in supporting their direct reports on the programme.

BENEFITS

- The programme has been a contributor to the improving safety performance in Tarmac.
- To date over 65% of Tarmac's frontline leaders and 80% of their line managers have completed the programme.
- LTIs and High Potential learning events have reduced.
- Feedback from participants and their line managers has been extremely positive with NPS (Net Promoter Score) at over 90%.





- Improvement achieved in a broad range of behaviours and activities including:
 - Adoption of tools and techniques to plan safety conversations with frontline leaders' teams and the individuals they lead.
 - Increased confidence in providing timely and specific feedback.
 - Reinforcing positive safety behaviours.
 - Motivating and engaging teams in safety.
 - Recognising the importance of building trust and awareness of trust breakers.
 - Increased ownership/accountability by their teams, reducing dependence on frontline leaders to solve their problems/issues.
- Direct feedback by frontline leaders to senior leaders of the successes and challenges as a result of completing the programme.
- A consistent language across the business around safety leadership.
- Networking of frontline leaders across Tarmac and CRH UK businesses promoting sharing of learning and relationship building.

- Increased talent identification and opportunity for team leaders to progress in the organisation.
- Line managers adopt the tools and techniques, encouraging role modelling and their involvement supports the credibility of the tools and techniques being deployed.

DEVELOPMENT AND TRANSFERABILITY

Historically, team leaders are individuals who have been promoted into a team leader role because of their operational skills and knowledge. However, they have generally not been given the skills and knowledge to lead others.

By providing these skills to lead their teams, frontline leaders become role models for safe behaviours, providing effective and timely feedback, setting clear safety expectations of their teams and positively reinforcing safe actions.

The success of the programme has resulted in additional modules being created to refresh the training, to reinforce the tools and techniques and through e-learning to continue the development of its frontline leaders.

The principles applied in the development of this programme, which have been highlighted earlier, can be utilised by other organisations wanting to improve frontline leadership across their organisation.





Coaching for empowerment – training supervisors and managers to coach, mentor and develop the EPC-UK culture of trust

EPC-UK 1 2 3 4 5 6



DESCRIPTION

EPC-UK is developing a culture of psychological safety and trust. It recognises the value that high quality training, mentoring and coaching brings to the company and its team capabilities.

EPC-UK's Managing Director, the Head of Safety, Health, Environment and Quality and the Head of Human Resources worked with a specialist in sustainable safety culture development, Rob Shore, to design a 'Coaching for Empowerment' course specific to EPC-UK.

The course content took six months to create and fine tune. It focuses on providing enhanced interpersonal skills in coaching and mentoring for supervisors and managers within the EPC-UK business. The programme is based on working together to further embed **EPC's 'SPIRIT' values – Safety, Passion, Integrity, Respect, Innovation and Teamwork** – whilst delivering aligned results.

The aim was to help to make employees feel empowered, and to provide managers and supervisors with skills to better coach and mentor.

EPC wanted people to develop the confidence to collaborate and take a zero-tolerance approach to unsafe working conditions, helping the business to sustainably improve.

Ideas were collated and checked, and training materials were developed through a process of content filtering to get the balance right. Once the course went live, it was continuously reviewed using the delegates' feedback.

As a result of this feedback, the course became more focused with the addition of personal objective setting. It was made applicable to both operational employees and key stakeholders from other departments to encourage broader positive effects and value for the company.

The course content covers...

- Coaching, mentoring and training.
- Values, beliefs, behaviours and attitudes.
- Psychological safety.
- Coaching techniques.
- Feedback and reflective practice.

"People don't always appreciate what coaching is and what its principles are. Through effective coaching, people seek other people's opinions, making everyone involved, so it's not just the Leadership Team giving direction and making the decisions. This generates vital traction and builds company confidence, so closed questions can become open questions and people find new, better ways to work." – Rob Shore, external expert course design and facilitator.

As part of the fully interactive training sessions, delegates broke out into groups for discussions and to give feedback.

EPC's MD joined the sessions and talked candidly about his personal experiences and his thoughts on being a leader. He also shared examples of how he's had to adapt within his own role. The training has created opportunities for collaboration and networking between employees from different divisions.

The workbook used throughout the course was designed as a continuous development tool to be referred to during the training and beyond. These materials continue to be regularly reviewed to ensure ongoing improvement.

Throughout the training, self-reflection was constantly encouraged to find ways to improve, and espoused versus enacted values were referenced so delegates could learn what the organisation aspires to be and how it is perceived.

News of the training achievement was published in EPC-UK's on-site newsletter and shared on social media channels.

BENEFITS

- Helped delegates to apply the stages of psychological safety within their area of influence.
- Through interactive delivery, participants have practised a variety of coaching techniques.
- Participants have the opportunity to discuss performance influencing factors.
- Established pattern for continuous improvement.



- Participants have recognised the course has helped them in their personal lives.
- Participants reported improved confidence, sense of empowerment and self-awareness.
- Culture of mutual support, personal reflection and improvement.
- Participants positive about the course even though initially reluctant to participate.
- Reduced risk of experiencing events associated with 'The Fatal 6'.
- A safer environment for all.

DEVELOPMENT AND TRANSFERABILITY

The course was developed by applying and adapting concepts from psychological safety culture, this has been influenced by the work of Amy Edmondson in her 2019 book, *The Fearless Organisation*. When people have psychological safety at work, they feel comfortable sharing concerns or mistakes without feeling fear of embarrassment or retribution. This encourages employees to speak up without the risk of them feeling humiliated, ignored or blamed.

The DuPont Bradley curve has been used to measure the maturity of EPC-UK's company culture in achieving lasting reductions in accident rates. By having a broad course attendance from different EPC-UK departments and operations, the training has succeeded in encouraging open conversation and sharing collective and crossover knowledge to improve safety related to different individual roles and operations.

The tools within EPC-UK's Coaching for Empowerment course are completely transferable. With just a few course content adjustments, other companies could realise the answers for themselves and feel empowered and confident. As a result, their employees are more likely to speak up, rather than remain silent; do a job the right way, as opposed to cutting corners; admit mistakes, not hide them; engage in safety initiatives, rather than undermine them; and share, not withhold ideas. Each element will contribute to the evolution of a more trustful working culture and wider operating industry.

Plans are being discussed to develop a specific mentoring scheme. This 'next step' training is intended to be an innovation with the industry and will further encourage the culture of psychological safety at EPC-UK.



Safequarry incident alerts and HiPo Reports

‘Everyone has the right to go home safe every day’

However, every year people are killed or seriously injured whilst working on our sites. Many more incidents or ‘near misses’ occur but fortunately, without any adverse consequences.

It is essential that we learn from both incidents involving injuries and, as importantly, the ‘near misses’.

All of these incidents are avoidable. To ensure they do not occur again, we must all share information about them and learn how they can be avoided. We are all ‘Safer by Sharing’.

Safequarry incident alerts and HiPo Reports will help you to avoid similar incidents on your sites.

FROM INCIDENTS FIND OUT:

- What happened?
- Who was involved?
- Why did it happen?
- Whether those involved were trained and qualified to undertake the task?
- What were the processes and systems in place, and whether they were followed?
- What supervision was in place?
- What equipment and PPE was used, and whether they were appropriate?
- The condition of the plant guarding and safety systems at the time of the incident?
- What were the other contributing circumstances to the incidents?
- What were the weather and light conditions at the time of the incident?

AND HOW TO AVOID THEM ON YOUR SITE:

- What can I learn from this incident?
- Does the same hazard exist on my site?
- How can I make sure it will not happen on my site or within my organisation?
 - Can we engineer out the need for the task or mitigate the risk?
 - Can the process be changed or improved?
 - Do my people have the right skills/training?
 - Do they have the right equipment/PPE?
- What action must I take to mitigate these risks in my work place?
- Who else must I share this information with or directly involve?
- When will I do this?

Register for free incident alerts from [Safequarry.com](https://www.safequarry.com)

Review the new HiPo reports on [Safequarry](https://www.safequarry.com)

We are all ‘Safer by Sharing’

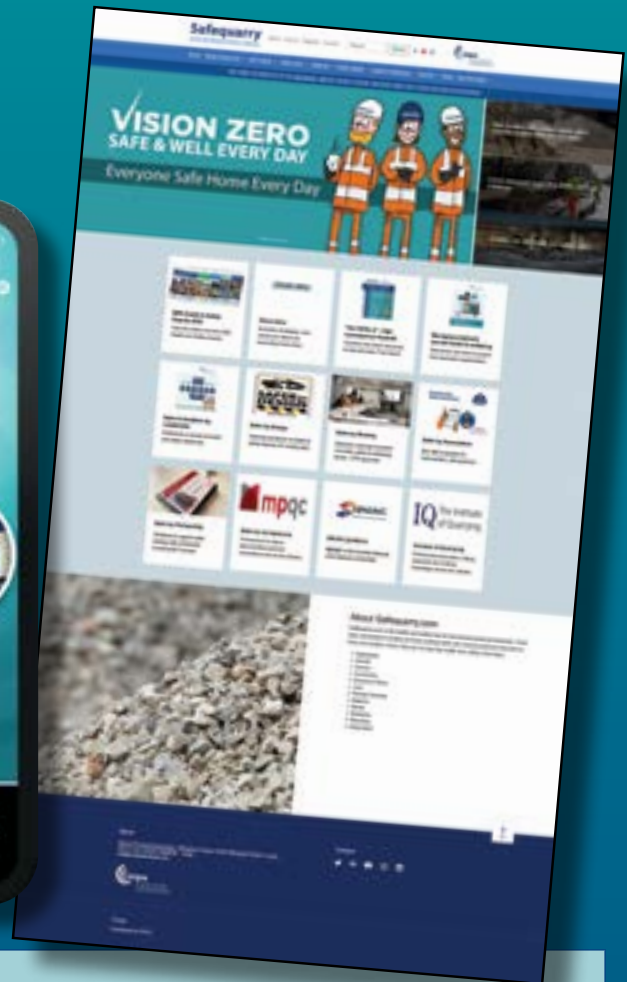
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The Health and Safety Hub for
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Safequarry.com & Safequarry App

Safequarry is the free health and safety hub for the mineral products industry.

All product sectors are covered

- Aggregates
- Asphalt
- Cement
- Contracting
- Dimension Stone
- Industrial Sand
- Lime
- Masonry
- Mortar
- Precast Concrete
- Ready-mix
- Recycling



Extensive library of content and information on:

Safety resources	Focus on	MPA Initiatives
Good practice	IQ, MPQC and QNJAC	Safer and healthier by leadership
Industry guidance	'The Fatal 6'	Safer by Association
Toolbox Talks	Vision Zero	Safer by Partnership
Incident Alerts & HiPos	Quarries Partnership	Safer by Competence
Hot Topics	Public Safety	Safer by Design
Over 400 videos	Mental Health and Wellbeing	Safer by Sharing

Registered users receive alerts when new content is added.

VISION ZERO

SAFE & WELL EVERY DAY



SAFER BY SHARING

Please review the content of this guide and implement or adapt the ideas presented to make your workplace healthier and safer.



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The Mineral Products Association is the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and industrial sand industries.

Written by Chesil Communications, Winchester
Designed by Theme Group
Managing editor: Colin Mew MPA

Printed on paper and board which is totally chlorine-free and produced from pulp from sustainable forests.