

safety

solutions

health
safety &
at work

PP 100007391

TOP TIPS: FINDING
THE BEST WOMEN'S
SAFETY BOOT

**HIGH-TECH FLEET
INNOVATIONS** FOR
DRIVER SAFETY

**REDUCING HAND
INJURIES** IN THE
WORKPLACE

**WHY ACTION
MUST BE
TAKEN ON
TRUCK
DRIVER
HEALTH**

WHEN YOU'RE IMPAIRED IT FEELS A LOT HIGHER

Drug **ALERT**

YOU ONLY HAVE ONE LIFE.

Even if you think you're ok,
you may not be.

A one second mistake on
site, could lead to **more
than a loss of job.**

Our testing kits are
designed for ease of use
with 99.9% accuracy.

There's a fine line
between ok and not ok,
**test yourself, not your
life or the lives of others.**



AVAILABLE FROM



**CHEMIST
WAREHOUSE**



**Blooms
THE CHEMIST**



AND SELECT INDEPENDANT PHARMACIES

Drug alert kits use the same technology as that found in professional
screening laboratories, without the need to send them away to obtain results.

DRUGALERT.COM.AU

CONTENTS

- 8 Using high-tech fleet innovations to improve driver safety
- 14 Why action must be taken on truck driver health
- 16 Hand injuries at work — what do the statistics say?
- 23 Top tips for finding the right women's safety boot
- 27 Smart AI dash cams improving driver safety
- 30 The dos and don'ts of hydraulics servicing
- 33 Register now for Australian Manufacturing Week



Cover image iStock.com/STEFANOLUNARDI



READ ONLINE!

Your copy of *Safety Solutions* is available as an online eMag.

www.safetysolutions.net.au/magazine

FROM THE EDITOR



I hope that all of our **Safety Solutions** readers had a restful Christmas break and that 2023 has been off to a good start! The first magazine issue of the year shines a light on the transport industry, as well as focusing on PPE — including footwear and hand protection.

The health of many male truck drivers is in peril, according to a Monash University-led study — with thousands of lives predicted to be lost within the next 10 years. Given that 30% of truckies report dealing with a chronic health condition, research suggests that a national effort is needed to improve outcomes for these workers.

Technology has a key role to play in achieving safety compliance within the transport industry — Greg Newham takes a look at how fleet technologies can be used to monitor driver fatigue and other health and safety issues, as well as helping drivers to quickly adapt in unfamiliar situations. With shoe manufacturers increasingly aware of the fundamental differences between men's and women's feet, there are now more safety boots than ever on the market that are specifically designed for the female foot. The February issue of **Safety Solutions** offers some top tips for finding the best fit. Hand injuries are among the most common workplace incidents. According to Safe Work Australia, using a sharp-edged tool is the single task resulting in the highest number of work-related hand and wrist injuries. Finding the right PPE is therefore critical to preventing these injuries.



Amy Steed
Editor, **Safety Solutions**
ss@wfmedia.com.au

RAISE AWARENESS OF LIFTING SAFETY AT GLOBAL LIFTING AWARENESS DAY 2023

The fourth Global Lifting Awareness Day — #GLAD2023 — will take place on Thursday, 13 July. Powered by the Lifting Equipment Engineers Association (LEEAA) and supporting organisations, it is a day where manufacturers, suppliers and end users are among those sharing material that promotes safe and high-quality load lifting.

Social media posts, videos, articles and in-person activities will all be featured under the hashtag #GLAD2023. Industry stakeholders are invited to share their content so LEEAA can add it to the website, where information about apprenticeships, military recruitment, diversity, sustainability and technology has been posted during previous years.



While the key message remains the same, LEEAA has updated the logo, which will be used as a point of identity before, during and after the event. Anyone with an interest in lifting and working at height can contribute by using the graphic and hashtag to celebrate their involvement with the industry and promote it as an interesting place to work.

Ross Moloney, CEO of LEEAA, forecasts that this year's Global Lifting Awareness Day will be the most widely supported and impactful ever. "The concept has successfully spanned the COVID era, reiterating the fact that lifting remains both ubiquitous and essential in keeping all kinds of operations going, irrespective of pandemics and economic conditions," Moloney said.

Moloney said that fighting gravity is inherently dangerous, and getting it wrong can lead to accident, injury and even fatality. "That makes it an extremely important, challenging and rewarding sector to work in, which is just one of the messages we're encouraging people to promote," Moloney said.

To celebrate Global Lifting Awareness Day on 13 July, use the #GLAD2023 hashtag.



ICARE, MOTOR TRADERS' ASSOCIATION OF NSW RENEW PARTNERSHIP

The Motor Traders' Association of NSW (MTA NSW) and Insurance and Care NSW (icare) have renewed their industry partnership to deliver tailored support via specialist work, health and safety provider and MTA NSW subsidiary Motor Trades Care (MTC). The finalisation of the two-year agreement will see the MTC team work to improve safety outcomes across the motor industry, supported by expert guidance from icare.

Stavros Yallouridis, CEO of MTA NSW, said icare's expertise will help enhance programs that reduce risks, boost workplace safety and improve the recovery journey for injured workers. "Our growing partnership with icare in the work health and safety (WHS) and return to work (RTW) space will be coupled with the specialised safety advice and training that we deliver to businesses across NSW, positioning our industry well for the exciting technological shifts underway in the world of motoring," Yallouridis said.

MTA NSW previously expressed concerns about the future of automotive workplace safety following the announcement of federal and state targets encouraging a shift towards electric vehicles (EVs) by 2030. With 49,000 technicians throughout NSW requiring training to safely work with high-voltage EV batteries, a shortage in upskilling programs suggests the industry may be unprepared for such rapid growth. In line with its goal to reduce workplace injuries, MTC will help businesses prepare to safely work with EVs.

Trevor Ballantyne, General Manager of Motor Trades Care, said this partnership is designed to ensure the organisations can support and educate automotive businesses to minimise WHS risks, and in the event of a workplace injury, identify the best treatment plan and get staff back to work in a reasonable time frame. "MTC is excited to deliver tailored programs, education, advice and support, alongside access to icare's great research on workplace wellbeing and injury prevention," Ballantyne said.

Since MTA NSW and icare established their partnership in 2019, MTC has helped reduce the number and severity of workplace injuries within the automotive industry. To date, MTC has successfully helped 200 businesses with over 3700 activities and more than 100 workers with compensation claim reviews. icare CEO Richard Harding said the partnership is a response to the needs of the automotive sector in NSW in relation to workers compensation.

"Workers and employers in the rapidly changing automotive industry are tackling challenges that can be confusing for small organisations to handle alone. Our continuing partnership with MTA NSW and their MTC team will help industry participants to receive impactful safety training and post-injury support. In particular, this will help local technicians, auto-electricians or panel beaters who are actively managing their small businesses as they repair cars and serve customers," Harding said.

The updated agreement promises programs and outcomes for automotive workers, their employers and icare, as their insurer. Harding said the agreement reflects the vision of building safer and more productive workplaces. Motor dealers and industry members can access a range of free business resources via MTC's Care Central.

AUTOMATED TRAFFIC CONE-LAYING TRUCK LAUNCHED TO SAVE ROAD WORKER LIVES

A technologically advanced automated traffic cone truck has been unveiled in Melbourne after two years of real-world testing to prove its safety credentials. The truck's inventor, Arrowes, joined with key stakeholders, including the Victorian Government and infrastructure construction companies, to launch the truck at Holmesglen Institute's Victorian Tunnelling Centre which is training road construction workers to operate the new truck.

Arrowes CEO Lea Ea said the Automated Cone Truck (ACT) features a lot of 'smarts' and mechatronics that automatically place and retrieve traffic cones to ensure workers are not exposed to the risk of traffic. "The ACT will revolutionise the industry and is set to become the new norm for safe and efficient cone deployment and retrieval both in Australia and internationally. It will rewrite health and safety and operation standards around roading worksites and mean that workers return home safely every day to their family and friends," Ea said.

Road construction and maintenance workers are reportedly among the most likely to be involved in a workplace accident in Australia. Research by Safe Work Australia revealed that 63% of fatalities on worksites were caused by being hit by moving vehicles. The ACT, which is designed and manufactured in Australia, has been recognised for its innovation, named as a finalist in a Major Transport Infrastructure Authority infrastructure safety technology award, after being nominated by Major Road Projects Victoria.

The prototype truck was unveiled to the industry in October 2020, followed by two years of trials on various projects, including the M80 Ring Road upgrade in Melbourne. The feedback from the trials has been incorporated into the commercial design which has now been released. "The innovation meets a global need and application and confirms Arrowes as Australia's premier innovator in roading safety," Ea said.

Several years ago, Arrowes employed a group of young engineering graduates from the Queensland University of Technology and University of Queensland to work alongside Arrowes senior engineers on automating the placement of traffic cones to reduce risks associated with placement and retrieval of cones, to make the process safe and efficient. The ACT can deploy one cone per five seconds and can be placed at 3–24 metres spacing. For example, when deployed with 12 m cone spacing, the ACT can deploy cones at 8 km/h or at 24 m spacing at 16 km/h.

The ACT can also retrieve cones from both sides of the vehicle while driving forward or reversing. With a capacity of 400 cones, the ACT is equipped to close over nine kilometres without stopping. "The goal of the ACT is to improve safety and in doing so, naturally it will also improve productivity. One kilometre of lane closure takes the ACT around seven minutes — and it does this without exposing traffic workers to hazards," Ea said.

Infrastructure construction roadworks supplier Fulton Hogan endorsed the ACT and said Arrowes is a technology leader and innovator. Thomas Holdaway of Fulton Hogan said that Fulton Hogan has embedded safety and risk management deeply in its company culture, adding that overall sustainability supported by a zero-harm safety culture is the only way to do business.

"Arrowes knows and understands the importance of safety in the roading industry; the risks associated with working in live traffic and in high-speed environments," said Doug Talbott, Project Director of international engineering and construction company Laing O'Rourke.



IN THE NEWS



CALL FOR ENHANCED SAFETY FOR CONCRETE POURS

Acting Head of SafeWork NSW John Tansey has called for concreters to implement regular inspections, maintenance and testing of equipment into their routines, after a spate of recent concrete placing equipment incidents. Between 2017 and 2020, inspectors from SafeWork NSW attended approximately 60 incidents, including one fatality, and a further 17 involving serious injuries, many of which were caused by malfunctioning concrete placement equipment. Tansey said that concrete pours are hazardous operations and concrete placing equipment such as concrete pumps must always be serviced and functioning properly before any work starts.

"Recently there have been multiple occurrences of workers being injured by concrete line hose which has either blocked or burst and expelled concrete at significant force, as well as equipment impacting with powerlines, scaffolding and other infrastructure," Tansey said.

A concrete pump connection point burst during a recent pour at a site in Wagga due to a blockage, spraying a member of the public's car with concrete as they drove past the site. In a separate incident at Greystanes, a boom pump extension arm struck overhead powerlines and caused an arc explosion and current which travelled along a boundary fence and blew a neighbouring property's water main.

Workers are urged to verify if the terrain is suitable for concrete placing equipment operations and note hazards such as overhead powerlines and recent instances of trenching. "Always ensure you have safe work systems in place and that anyone performing high-risk work is adequately licensed, trained and supervised when doing so," Tansey said.

UNION STEPS IN TO BAN ENGINEERED STONE

In an extremely rare form of industrial action, the CFMEU has said it will ban the use of engineered stone if the federal government fails to do so. CFMEU ACT Secretary Zach Smith, who is set to take over as national secretary in 2023, will launch the Stop This Killer Stone campaign at the union's national conference. The campaign urges the federal government to ban engineered stone products by July 2024. Smith will move a resolution at conference for CFMEU members to:

- Ban the use of engineered stone from 1 July 2024.
- Ban the importation and manufacture of engineered stone products from 1 July 2024.

This form of industrial action has not been seen since building and construction unions banned asbestos decades ago. Modelling



\$2 MILLION FINE AFTER DEATH OF TEEN APPRENTICE

A company has been fined \$2 million after an 18-year-old formworker was killed by collapsed scaffolding at a Sydney construction site in 2019.

Synergy Scaffolding Services Pty Ltd pleaded guilty in the NSW District Court to an offence contrary to section 31 of the *Work Health and Safety Act 2011* for breaching its health and safety duty, and exposing workers to the risk of injury or death.

Christopher Cassaniti became trapped under the scaffolding — which had become overloaded with building materials — when it collapsed, and he was crushed to death. His colleague Khaled Wehbe also suffered serious crush injuries.

The court heard that the collapse of the scaffold was "caused by a culmination of events", including unauthorised removal of building ties. It also heard that the risk the scaffold could collapse if it was improperly constructed, inadequately maintained or overloaded was known to Synergy Scaffolding Services. It was found that the company had constructed the scaffold without vertical bracing, in contravention of its own design and that of the Australian Standard.

The maximum penalty for the offence was \$3 million.



by Curtin University estimates that 10,000 workers in Australia across all sectors will develop lung cancer, and up to 103,000 will be diagnosed with silicosis as a result of their current exposure to silica dust at work.

"Australian workers will keep dying unless we ban engineered stone," Smith said.

"Engineered stone is the asbestos of the 2020s. That's exactly why we're taking this extremely rare step of flagging a ban on CFMEU members working with this killer stone. Australia has one of the world's most voracious cheap benchtop habits and it could claim thousands of lives unless we quit. In NSW alone, almost one in four engineered stone workers who've been in the industry since 2018 were suffering from silicosis or another dust-related disease. If the federal government doesn't ban killer stone, the CFMEU will."

BLACKWOODS

UNIFORM SOLUTIONS

Blackwoods have you covered - From undergarments to compression wear, to hardhats and safety boots, to high visibility disposable coveralls, we've got it all.

To fit any body shape, to suit any fit preference, to serve any gender.

**SCAN QR CODE TO
CHECK IT OUT TODAY**



Blackwoods

Blackwoods



USING HIGH-TECH FLEET INNOVATIONS TO IMPROVE DRIVER SAFETY

Greg Newham, Director, Verizon Connect



New fleet technologies have made it easier to assess the safety of drivers and improve the day-to-day operations of a company, ensuring they have adopted safe practices and are encouraging good driving from fleet operators.

Using connected fleet technologies to access real-time data

What isn't measured, cannot be managed. Telematics is the combination of telecommunications and informatics, using small hardware devices on vehicles to collect operations data in real time.

Businesses with fleets have been using telematics for a number of years to keep track of their vehicles and reduce the theft and misuse of company cars. But huge improvements in technology have facilitated telematics that deliver much more than just GPS coordinates — instead creating a fully connected vehicle, assisting with everything from route optimisation to helping a driver quickly adapt to an unpredictable situation.

According to Boston Consulting Group, connected vehicles will make up 53% of all road traffic by 2025, and 77% of all traffic by 2030. Fleets using connected technologies will have up-to-date data from traffic light sensors, GPS route mapping and other connected technologies to make informed decisions.

Encouraging good driving

Fleet management technologies are being used to actively monitor driver fatigue and other health issues, raise awareness of potentially dangerous driving and promote safe behaviour by fleet drivers.

According to the International Transport Forum, it's estimated that excessive speed is a factor in about one-third of all fatal crashes in Australia, and this figure is likely underestimated.

Connected technologies can include features that send fleet managers near-instant alerts about the speed at which a driver is going, helping to ensure they are not speeding or driving dangerously.

A broad awareness of the real-time data collection and monitoring can cultivate a culture of safety and reassurance for drivers, rewarding good behaviour and raising safety across the board.

A JBM Logistics truck was driving down an empty country road in regional Australia, when a kangaroo suddenly jumped into its path and collided with the vehicle.

Thanks to advancements in fleet technology, the company's managing director received a notification of the incident via an integrated video solution within minutes, and was able to immediately check on the driver's wellbeing.

This type of occurrence — common for companies with a fleet — demonstrates the effectiveness and importance of using fleet

technologies to improve safety and driving conditions. Drivers often face unpredictable conditions and potentially hazardous situations while working on tight deadlines.

The latest figures by Safe Work Australia show that the economic value of reducing the number of work-related injuries and illnesses between 2008 and 2018 would have saved employers a staggering AU\$49.5 billion in overheads, with associated health expenditure totalling AU\$37.6 billion. Over that period, the loss to Australia's overall economic output equated to losing 2.2 million full-time employees.



iStock.com/LeManna



A FLEET MANAGEMENT PLATFORM THAT FEATURES INTEGRATED VIDEO THROUGH TELEMATICS CAN MITIGATE THE RISK OF ACCIDENTS AND ASSIST WITH A QUICK RESPONSE IN THE EVENT OF AN INCIDENT.

Real-time incident response

A fleet management platform that features integrated video through telematics can mitigate the risk of accidents and assist with a quick response in the event of an incident.

As seen with the kangaroo incident, this allows fleet managers to view specified video snippets of accidents just moments after they happen, and to be alerted of an accident as soon as possible to assess the safety of a driver.

Artificial intelligence is also being incorporated to analyse footage and classify

it based on its level of dangerousness and its underlying cause, saving businesses time and money.

Another example of this was when a customer's brand new truck was scraped by another truck at a roundabout. Thanks to the AI system and telematics on the truck, the fleet manager was sent a video of the incident within minutes of being notified. This allowed the company to check on the health and safety of its driver as soon as possible. And having this video on hand so quickly helped the company to avoid a lengthy insurance claim for the new truck.

Coaching good behaviour

New technologies can play an important role in assisting managers in coaching drivers in safe practices.

The huge amounts of data collected through connected vehicles and the use of artificial intelligence to parse through footage allows for far more effective monitoring and training of drivers.

This also facilitates the analysis of longer-term behaviours of drivers and for comparisons to be made with other fleet drivers. This helps to incentivise good behaviour and safe driving.

There is also an emerging use of driver-facing cameras, which capture the in-cab perspective to assist with training.

Ensuring vehicles are running smoothly

Connected technologies can provide deep insights into the health of a vehicle and ensure any potentially dangerous defects are detected as early as possible.

This data can assist in identifying when a vehicle needs a service, saving potentially huge amounts of money, and dangerous incidents for drivers.

In the longer term, once connected technologies become commonplace on roads around the country, overall safety conditions will be greatly improved for all drivers on the road, for the benefit of all road users.

Using telematics can set a fleet-based business apart from the pack. A recent Isuzu Future of Trucking report found that less than a third of Australian businesses are using data to manage their fleets more effectively.

Technology should be embraced as a tool to improve driver safety, and telematics and other innovations present a safe and effective step forward.

These should be key safety instruments for any company with a fleet, and seen as ways to mitigate the significant risks of dangerous driving, unpredictable road conditions, congestion, fatigue and faulty vehicles.

Safety should be a top priority for all businesses, and this is especially important for those with a fleet, no matter what size.

Verizon Connect Australia Pty Ltd
www.verizonconnect.com.au



Safety footwear

KAMU safety footwear harnesses the performance capabilities of BASF Infinergy, often used in high-performance running shoes.

The safety footwear is engineered with a four-layer, triple-density sole construction and features technologies such as washable OrthoLite comfort footbeds; breathable waterproof Sympatex or COOLMAX lining with antimicrobial properties; abrasion-resistant Cordura collars; as well as a lace-less closure system on several models.

There are 18 models designed for the differing foot anatomies of women and men to provide improved safety and performance in a broad variety of jobs.

According to the company, incorporating Infinergy into the midsoles offers up to 57% energy return with every step. This means that workers won't feel fatigued as quickly and can stay focused for longer.

Kamu

www.kamusafety.com.au

Custom-printed tags

Cirlock has released a range of custom-printed tags that are printed on durable poly material with a long outdoor lifespan or available as economic cardboard tags.

Cirlock supplies the tags in any quantity, with a fast turnaround of five days or less on smaller runs. Quantities of 200 custom tags or less can be accommodated, there is no minimum order, although a minimum charge may be applied.

The tags can be customised and are available with or without eyelet/string. The custom-printed tags are manufactured in Australia, by Cirlock.

Cirlock

www.cirlock.com.au



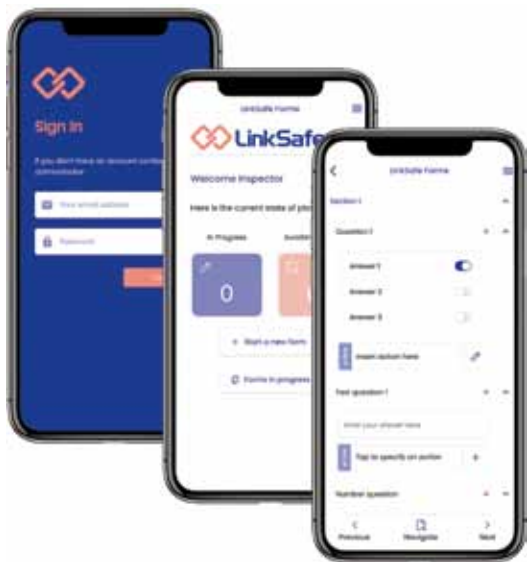
Breathalyser range

The Alcolizer Breathalyser range is suitable for small companies through to large mining sites, to carry out on-site alcohol breath testing. With their easy-to-use menu screens, this Australian-made range of breathalysers includes the HH3 Breathalyser (an entry-level industrial alcohol breathalyser), the HH4 Breathalyser (an advanced industry handheld alcohol tester) and the LE5 Breathalyser (a law enforcement-grade handheld alcohol tester).

Along with handheld breathalysers, a wall-mounted range is also available that is suitable for large organisations that require high-speed bulk testing on a job site.

Pathtech Pty Ltd

www.pathtech.com.au



Integrated cloud-based forms solution

Digital contractor management platform LinkSafe has expanded its product offering with the launch of LinkSafe Forms, eliminating the need to use external systems. LinkSafe Forms is an integrated, cloud-based forms solution that is designed to be a flexible and easy-to-use document that captures audits and inspections as well as photo and video content.

LinkSafe aims to empower businesses to build and customise any required form, audit or checklist inside its existing contractor management system; Forms can also be used as a standalone piece of software. The new software aims to streamline and simplify the onsite data and media capturing process, giving businesses the ability to collect information with ease.

The system is fully customisable and dependency-based, so questions can be dictated by a user's answers, without the need to scroll through a list of unrelated questions to reach the end of the form. The software also offers offline capability, priority corrective actions, version control and full functionality for phones and tablets. LinkSafe Forms pricing is scalable and dependent on specific requirements.

LinkSafe Pty Ltd

www.linksafe.com.au

Wearable and mobile headset

Teledyne FLIR has launched the RealWear fully hands-free, voice-controlled thermal camera module. In addition, Thermal by FLIR cohort Ulefone has introduced its mobile handset featuring the Lepton 3.5 thermal camera module, the Power Armor 18T 5G Android phone.

The thermal camera module for the RealWear Navigator 500 headset enables frontline workers to capture high-resolution visible and thermal images to locate temperature anomalies in mission-critical industrial equipment. Being hands-free in hazardous environments gives workers greater capacity to complete tasks safely and productively. The camera features the Lepton 3.5 thermal camera module, deployed as a wearable for assisted reality diagnostics. With the module mounted to the device, the user only needs to say voice commands — even in high noise settings up to 100 dBa — to change settings and modes and to capture thermal imagery.

The rugged Ulefone Power Armor 18T Android phone incorporates the Lepton family of small, lightweight, low-power micro thermal cameras. RealWear and Ulefone products leverage the Teledyne FLIR ecosystem, including using the patented MSX imaging capability, enhancing thermal imagery with embossed visible-light outlines, and compatibility with FLIR Thermal Studio software.

Teledyne FLIR

www.flir.com.au



Safety portal

Guardian Angel Safety, an Australasian provider of lone and remote work solutions, has launched the Guardian Angel Portal to enable organisations to be more responsive to the changing safety needs of mobile workers working alone or remotely. The portal allows customers to view and manage all safety devices, data and planning for workers in real time, via an easy-to-use interface. In addition, all device monitoring, vehicle impact and rollover alerts are delivered to the portal — with an immediate response from Guardian Angel Safety if required.

The portal is designed to improve connectivity and productivity for people and assets by enabling customers to view and manage all safety devices in real time in one place, including satellite devices, smartphone apps, cell pendants, vehicle impact and rollover alerts, location-based services, and APIs. The portal also enables customers to add new devices and solutions anytime, regardless of manufacturer, as their safety needs change. In addition, within an organisation, people can be assigned to any monitored devices as required, allowing device-sharing among different teams, with an incident response tailored by device and person.

The cloud-based portal encrypts data while being sent and at rest. The portal also features policy-based permissions management, so data can only be accessed by people who are authorised to do so and within their role. The portal is designed to circumvent the emergency number process and link customers to its response software at the company's graded monitoring stations, with trained operators to speed up the emergency response for mobile workers working alone or remotely, including sudden-onset injury or illness, road accidents, vehicle failure or other emergencies. To enable further integration, the company also provides access to an API key and sandbox testing environment to allow customers to connect their HR software to maintain their users and escalations automatically.

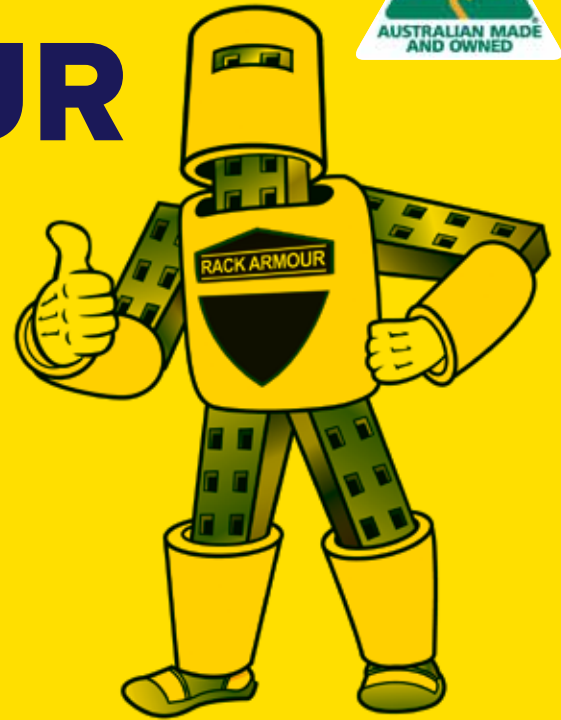
Guardian Angel Safety

guardianangelsafety.co/



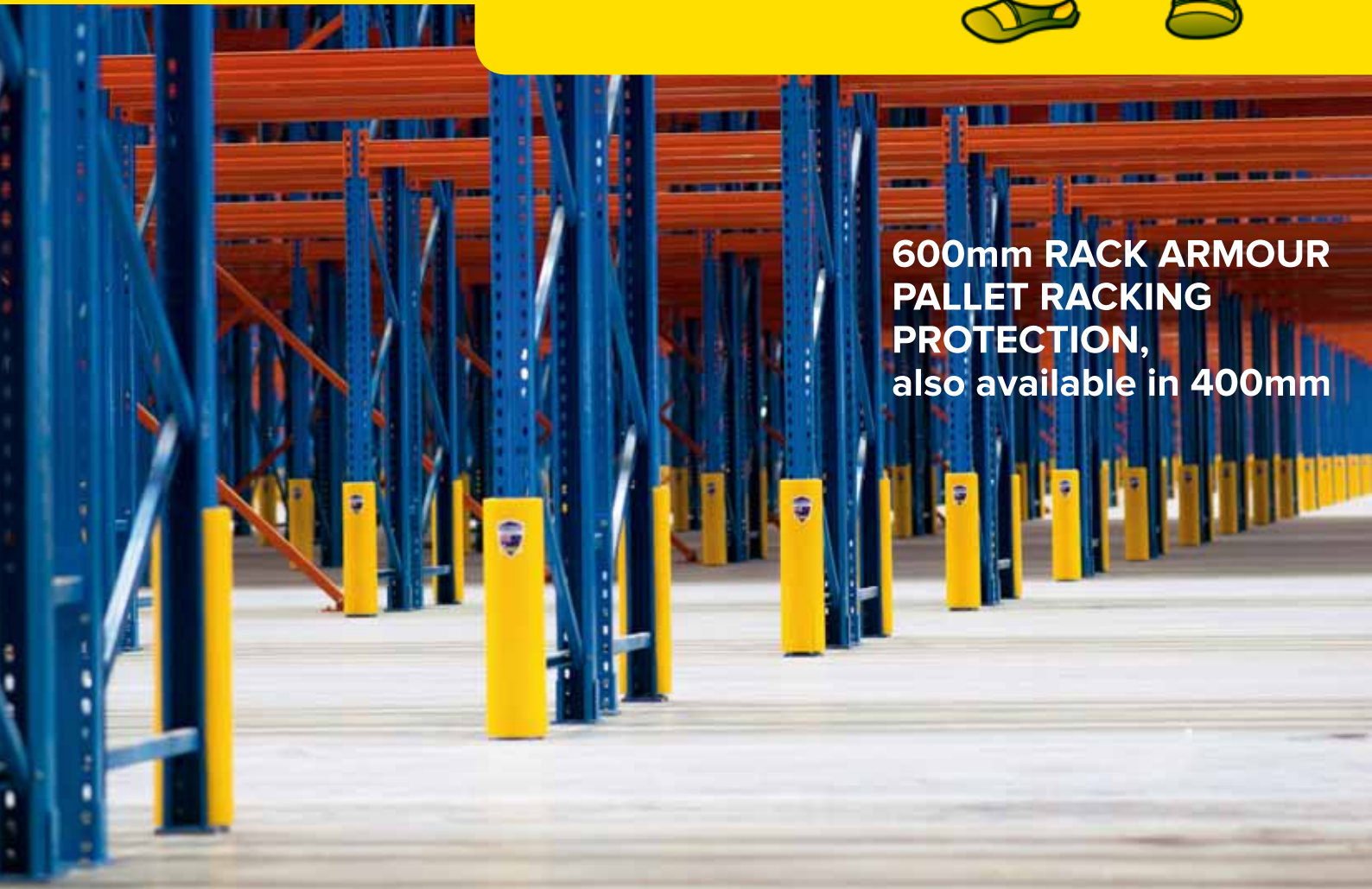
RACK ARMOUR

PALLET RACKING PROTECTION



Rack Armour is the simple superior solution to pallet racking damage caused by forklifts.

Rack Armour is a patented product, locally manufactured and internationally recognised.



**600mm RACK ARMOUR
PALLET RACKING
PROTECTION,
also available in 400mm**

- www.rackarmour.com.au
- t: (02) 9722 0500
- e: info@rackarmour.com.au



ACP

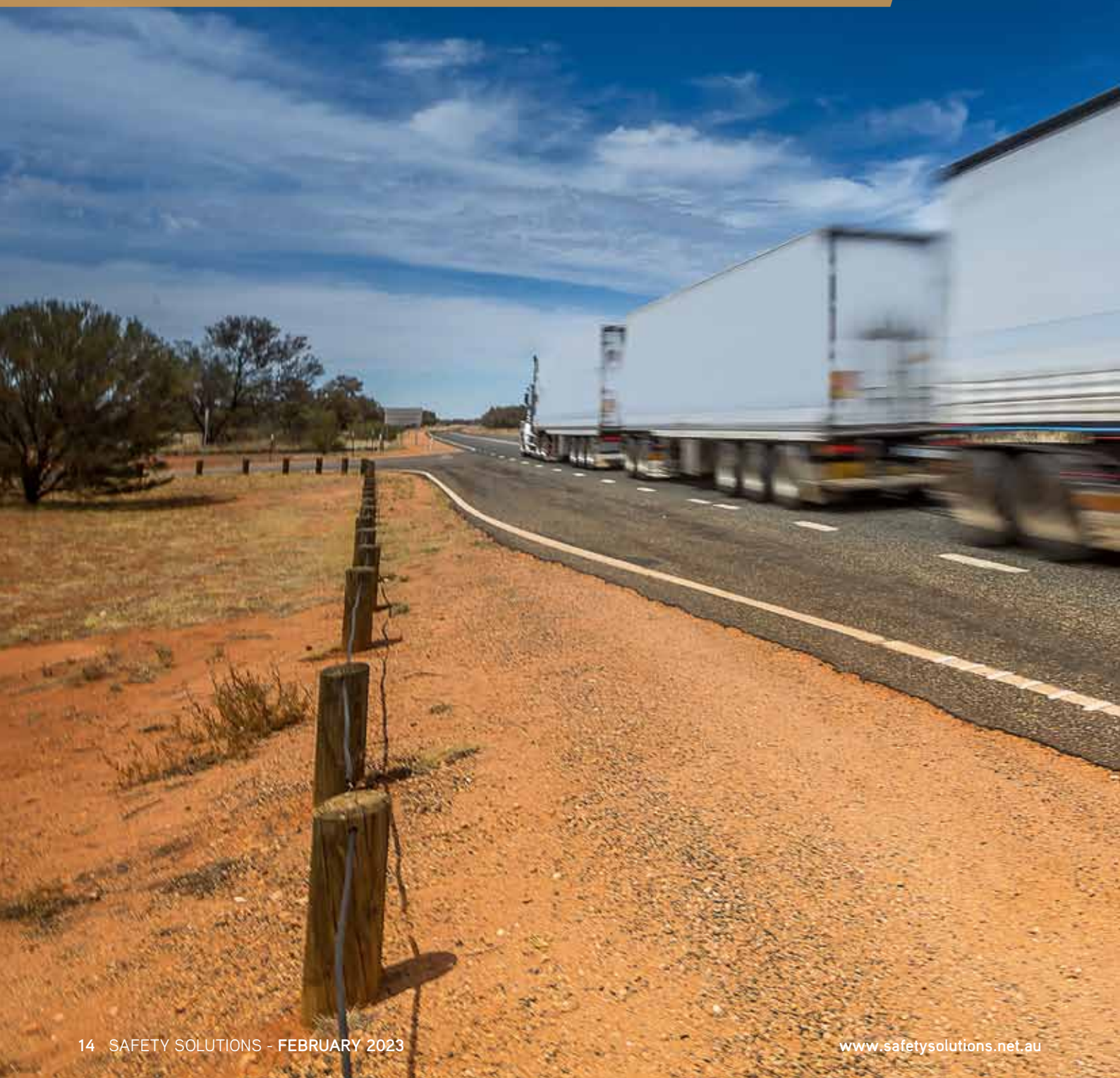
AUSTRALIAN CUSTOM PIPES

PLASTIC PIPE • FABRICATION • MOULDING SPECIALIS

Proudly manufactured and distributed by ACP Australian Custom Pipes

WHY ACTION MUST BE TAKEN ON TRUCK DRIVER HEALTH

Amy Steed



Research shows that the health of many male truck drivers is in peril, with 6067 lives predicted to be lost within a decade if nothing is done to improve the situation.

Truck drivers have a high prevalence of cardiovascular disease, obesity and hypertension, which has been attributed to long working hours, poor access to health care, exposure to physical and mental stress and other behaviours and occupational characteristics which contribute to poor health.

Published in *The Journal of Occupational Rehabilitation*, a Monash-led study has estimated the work-related mortality burden among truck drivers, using modelling to simulate the Australian male working-age population (aged 15–65) from 2021–2030.

The researchers also used data from the Driving Health study and other published sources to estimate work-related mortality and associated productivity loss, hospital and medication costs.

What does the research say?

The research found that a collective national effort was required to improve the health and wellbeing of Australian truck drivers, because inaction could cost an estimated \$485 million in healthcare fees — as well as 21,173 lost years of life — due to work-related diseases or injury in the truck driving industry.

Previous research published in *BMC Public Health* has also demonstrated that transport and logistics workers have worse health outcomes than those in other industries, especially musculoskeletal and trauma-related injuries. In that study, three in 10 truck drivers reported three or more chronic health conditions. The most common of these was back problems (34.5%), while chronic pain was reported by 44% of drivers. In addition, the majority of drivers were classified as either overweight or obese.

“If the current state continues, there will be an enormous cost, not only for the individuals concerned, but also for the Australian economy,” said Program Lead, Associate Professor Ross Iles.

“The Driving Health project found there is no easy fix, but this analysis shows that even a small improvement in driver

health will lead to savings of tens of millions of dollars.”

Study co-author Dr Caryn Van Vreden said there were some efforts underway but they were hampered by lack of funding and policy change from the government.

“Despite efforts to improve driver health by the industry, greater input from government and regulators is needed. This includes increases in funding and changes in policy to effect lasting change,” she said.

Nutritional program to improve health outcomes

Research from Monash University in 2021 showed that 70% of truck drivers in Australia do not meet health and balanced diet guidelines.

As a consequence, Healthy Heads in Trucks & Sheds Foundation (HHTS) has launched a Nutrition Pilot Program — developed in partnership with Nutrition Australia — that aims to educate, raise awareness and encourage longer-term healthy eating among truck drivers.

Over a four-month period, HHTS will deliver educational content across social media platforms, the HHTS website and via existing partners operating in road transport, warehousing and logistics. In conjunction with this, 29 bp service centres across Australia are offering freshly cooked, healthier meals, 24 hours a day — catering to the needs of those working in the logistics industries. HHTS worked closely with bp and Nutrition Australia to develop a custom menu comprising healthy meal choices.

“Limited access to healthy food options is an ongoing challenge for many people working across the industry, particularly those who spend extended periods of time away from home or work in remote areas,” said Naomi Frauenfelder, HHTS CEO.

“The long-term goal is to roll out a national program that spans across the broader logistics industry, including warehousing and distribution centres where we can continue to share educational information, but also, influence on-site canteen suppliers and increase access to healthier foods,” said Melissa Weller, HHTS Director Industry Relations and Program Management.



HAND INJURIES AT WORK — WHAT DO THE STATISTICS SAY?

istock.com/VioletaStolmenova

Workers in any industry or workplace can experience injuries to the hand, wrist, fingers and thumb — ranging from sprains and strains, to fractures, cuts, open wounds and amputations.

According to the Safe Work Australia 'Work-related hand and wrist injuries in Australia' report, two of the main industries in which hand and wrist injuries appear to be a problem are the manufacturing industry and the construction industry. The report stated that using a sharp-edged tool, particularly a knife, is the single task resulting in the highest number of work-related hand and wrist injuries.¹

Other common causes of injury to the hand include:

- Hands caught, crushed, jammed or pinched between objects
- Contact with powered hand tools and machinery
- A foreign body or object entering through the skin
- Contact with woodworking and forming machinery
- Struck by thrown, projected or falling object
- Contact with non-powered hand tool
- Contact with metalworking machinery

- Hands caught, crushed or jammed in doors
- Contact with powered lawnmower

Workplace hand injuries are among the most common in NSW. From the period 1 January 2019 to 29 July 2019, icare received 13,317 claims relating to arm, shoulder and hand injuries.²

Similarly, during 2018/19, there were 4786 hand injury claims lodged in the WA workers compensation scheme, which accounted for 18% of all claims lodged.³

In 2022, WorkSafe Victoria accepted 137 claims for workplace amputation injuries, with more than 150 body parts amputated, including at least 127 fingers or thumbs. Digits caught or crushed in machinery or severed while using a saw accounted for about one-third of all amputation claims.

WorkSafe Executive Director of Health and Safety Narelle Beer said employers needed to do more to ensure workers were kept safe from the risk of traumatic injuries due to unsafe work practices.

"The staggering number of workers who have lost limbs and digits from preventable incidents is simply unacceptable," she said.

"No one should suffer such horrific, life-changing injuries at work."

1. https://www.safeworkaustralia.gov.au/system/files/documents/1702/work-relatedhandandwristinjuriesinaustralia_2008_.pdf
2. <https://www.icare.nsw.gov.au/injured-or-ill-people/workplace-injuries/what-are-the-most-common-work-injuries-in-nsw#gref>
3. <https://www.workcover.wa.gov.au/wp-content/uploads/2020/03/Statistical-Note-Hand-injuries-Feb-2020-BISstatrep.pdf>

450 SERIES



*Infinitely
Thinner*

21 Gauge
Cut Level D



GFPR450 Graphex® Infinity

EN 388:2016



3X41D

CERTIFIED PRODUCT



Australian Standard
AS/NZS 2161:2:2020
AS/NZS 2161:3:2020
Lic. BMP 760806



2797
CE 719275

Subatomic engineering creates a balanced hexagonal carbon structure, ensuring stability and strength throughout the yarn. Paper thin to perform like a second skin. Unrivalled dexterity, knitted for a relaxed fit. Thinner. Lighter. Stronger.

This is infinitely thinner. This is cut protection at its finest. This is Graphex® Infinity.



**Scan to
request
a sample**

Graphex Superior Cut Protection

GraphexGloves.com



Raised grip safety gloves

The Mack Traction nitrile glove has a raised grip pattern, making it suitable for low grip environments. Whether the wearer is working with oil, grease, lubricants or chemicals, Mack Traction provides good grip and protection.

The glove also has touch screen capabilities, with advanced dexterity — acting like a second skin to give the wearer extra control. The glove's durability helps to keep the wearer focused and protected. Tools, screws, nuts and bolts and low viscosity environments are part of the job, but with Mack Traction's chemical protection, risks don't have to be.

While the design promotes increased airflow over the hands so that the gloves can be worn for longer, the fact that they are powder- and latex-free means there is a reduced risk of allergies and contamination.

Mack Traction is suitable for industries including automotive, industrial, maintenance, chemical, repair and operations.

Bunzl Safety

www.bunzlsafety.com.au



Sweat-resistant disposable gloves

SW Megaman with EcoTek is a sweat-resistant disposable glove that now offers virus protection according to EN ISO 374-5. It provides comfort and strength in a fully textured, extended cuff glove.

Featuring multi-layer construction and a proprietary moisture-wicking lining, this glove also offers level 3 abrasion resistance for long-wearing durability, combined with DriTek sweat management technology to keep hands drier and more comfortable. It is available in a box of 50 gloves or a convenient, mini, vend-ready pack of eight gloves.

EcoTek biodegradability technology is a nitrile treatment that accelerates the breakdown in landfills without any performance loss. EcoTek gloves biodegrade in landfill — 92.6% in 2½ years, tested according to ASTM D5526-12. The gloves have been certified by independent laboratories and institutes for biodegradability, ecotoxicity, safety, quality and performance.

Safety Mate Pty Ltd

www.safetymate.com.au



High-visibility work gloves

PROSAFE Kashi high-visibility work gloves are designed to help improve hand placement and awareness.

Hi-vis gloves ensure that the wearer knows exactly where their hands are, as do the colleagues who are working with them. This is relevant in many workplace situations, including when using machinery or high-impact tools such as hammers. The gloves also allow health, safety and environment (HSE) team members to easily see that workers are wearing hand protection.

PROSAFE Kashi general-purpose

work gloves have a 15-gauge, seamless, hi-vis yellow knit liner. The hi-vis yellow foam nitrile palm coating enables grip durability and abrasion resistance while also allowing touchscreen compatibility, reducing the need to take gloves off to use devices.

The gloves are suitable for light-duty material handling, assembly, maintenance applications or any tasks that require extra grip and agility, whilst helping keep hands clean and visible.

Blackwoods

www.blackwoods.com.au





Thin safety gloves

ATG's MaxiFlex Elite gloves are thin and breathable, designed for precision handling in dry environments.

According to the company, the glove is 30% thinner than traditional foam nitrile gloves, offering dexterity and tactility. Additionally, the gloves feature AIRtech technology that delivers 360° breathability, keeping hands cool, dry and comfortable. This is achieved with ATG's patented micro-foam coating, which channels moisture and heat away from the skin, maintaining an ideal hand temperature. Not only does this ensure optimal work productivity by helping hands stay cool and dry while working, but it reduces the chance of workers removing the gloves — thus reducing their chance of injuries.

As well as being thin, MaxiFlex Elite incorporates ERGOtech technology, which concentrates on maximising the form, fit and feel of the glove — resulting in reduced hand fatigue. These gloves are tested and certified to retain their mechanical performance levels when machine washed up to three times (no higher than 60°C) resulting in a glove that lasts longer.

The gloves are suitable for multiple applications in a number of industries where dexterity and tactility are required, and can be purposed for a variety of functions including assembling small parts, final assembly and maintenance.

Mayo Hardware Australia

www.mayohardware.com.au

CIRLOCK

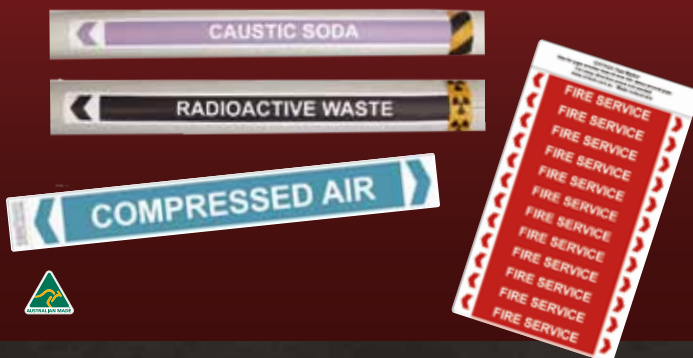
LOCKOUT / TAGOUT EQUIPMENT

LOCKOUT EQUIPMENT

PIPE MARKERS

Pipe Markers help to quickly and easily identify pipe contents. This is especially helpful in an emergency situation. It also saves time during maintenance. A Pipe ID marker consists of printed text on a coloured background with a contrasting border and a chevron to show flow direction.

Cirlock Pipe ID Markers are Made in Australia and guaranteed fast delivery.



LOCKOUT PADLOCKS

Cirlock's Lockout Tagout Padlocks come in 8 different colours, with various shackle sizes and shackle types (Non-Conductive and Stainless Steel) and can be keyed differently, keyed alike or master keyed, to suit your requirements.

Cirlock Padlocks are available for immediate dispatch.



See our full range on our website: www.cirlock.com.au
lockout@cirlock.com.au | 1300 889 738





Biodegradable nitrile gloves

The SHOWA Group provides an extensive range of biodegradable hand protection. Using its innovative Eco Best Technology (EBT), SHOWA has designed gloves that decompose in biologically active landfills, as opposed to the 100-year decomposition of regular nitrile gloves.

EBT is incorporated into the construction of the glove; when the gloves are disposed, they are transferred and discarded into biologically active landfills, where microorganisms break them down. Organic soil, water and bio-gas are produced during the decomposition process. This leads to zero waste; the bio-gas can also potentially be used as a renewable energy source.

EBT gloves are designed to create less of a footprint after-use, without losing their critical safety features. The gloves can be used in the mining, food preparation and chemical manufacturing industries, and are designed to provide the same level of protection as standard nitrile gloves.

Blackwoods

www.blackwoods.com.au



Black leather safety boot

The RotoFlex #8561 by Blundstone is a 6", black leather safety boot that has been designed following years of research and development, using biomechanical technology to provide stability and flexibility.

The safety boot features GripTek HD, Fortalite, AirCell and SoftCell, along with a host of componentry and materials, for lightweight safety footwear. Providing comfort and safety for wearers, this uniform-style boot is suitable for a variety of trades.

The RotoFlex range by Blundstone is available online and in stores via select retailers throughout Australia and is backed by a 30-day comfort and six-month manufacturing guarantee.

Blundstone Australia Pty Ltd

www.blundstone.com.au

Safety barcode positioning system

Leuze electronic has launched the FBPS 600i, a safety barcode positioning system featuring one sensor that facilitates safe position detection. Previously for safety reasons, system manufacturers had to use input from two sensors and two different technologies for position detection. The safety barcode positioning system from Leuze enables position detection with a single sensor. The safety barcode positioning system is connected to a safe evaluation unit via two SSI interfaces and is suitable for applications up to performance level e.

In intralogistics it is important that the stacker cranes and transverse transfer cars pose no danger to the staff. The position and speed must be monitored during maintenance work or when operating with a manned car. Until now, system manufacturers had to use a setup with two sensors

in order to meet performance level d. The new single-sensor safety bar code positioning system already meets the requirements of performance level e. This enables safety functions to be implemented safely. The unit is connected to a safe connection unit, for example a frequency inverter, via two SSI interfaces. The safety bar code positioning system requires less space in the system, and the installation effort is also reduced.

Leuze electronic Pty Ltd

www.leuze.com.au



GREENTEK™

NXG
Next Generation Gloves

SAME PROTECTION, NOW SUSTAINABLE

FREE TRIAL OFFER

Safety Mate's latest innovation is the new NXG GreenTek™ environmentally conscious range of gloves which are manufactured using up to 50% recycled yarn. Every pair of GreenTek™ gloves repurposes one to two landfill-bound plastic bottles.



Manufacturing the yarn alternative generates **79% LESS** carbon emissions, and re-uses plastic destined for landfill. The NXG GreenTek™ Recycled range of gloves contain up to **50% RECYCLED** content with no compromise to safety, comfort or value.



GREENTEK™ AIR

A-5139



FEATURES

- + Using more than 50% recycled plastic content per pair = 2 plastic bottles
- + 15g CO₂ emission reduction per pair
- + Touchscreen compatible
- + Super lightweight

GREENTEK™ CUT D HD

C-5135



FEATURES

- + Using recycled plastic content = 1 plastic bottle per pair
- + 8g CO₂ emission reduction per pair
- + Touchscreen compatible
- + Lightweight cut level D glove



Gloves that help the environment without compromising performance.

Working together to reduce plastic waste and carbon emissions.



Scan for more info and free trial samples



Cylinder lift

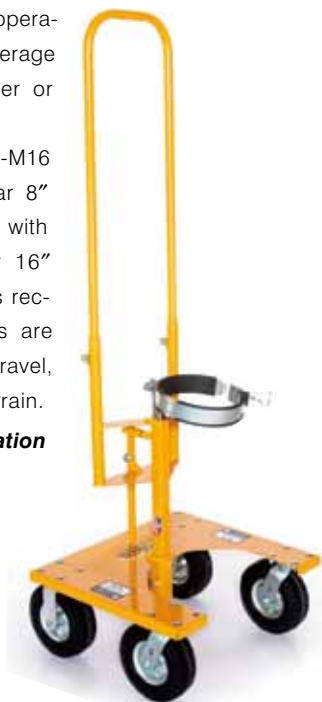
The Ergonomic Cylinder Lift is a handcart that can move cylinders without lifting or rolling the cylinder. Just clamp, tilt and cart away. Once the cylinder is in the desired place, tilt the cylinder back using one hand and roll the cart forward to place the cylinder on the surface. Lift the cylinder by the cap to the desired height and unload.

ECL-8: Equipped with 8" no-flat tyres, front swivel castors with brake on right front, fixed rear castors. A bracket range for cylinders 9 to 9.75", up to 270 lb maximum working weight. Solid steel body design, single galvanised rising bracket shaft. Components are steel, rubber, galvanised and no-lead powder coat.

Brackets for cylinders and tanks to 12" can be ordered for the ECL-8; however, it is recommended that an operator use an accessory leverage handle with any cylinder or tank above 10.25" OD.

ECL-8-M16: The ECL-8-M16 option replaces the rear 8" castors on model ECL-8 with a steel axel and rear 16" no-flat tyres. The M16 is recommended if operators are moving cylinders over gravel, snow or other rough terrain.

CAC Gas & Instrumentation
www.cacgas.com.au



Safety air guns

EXAIR safety air guns have been designed to eliminate the safety issues associated with some low-cost air guns. They are built to be durable and comfortable, with each model using an engineered air nozzle that entrains large volumes of surrounding air. Low air consumption and noise level help to ensure safe operation, and all models are OSHA compliant for noise and dead-end pressures.

VariBlast Precision Safety Air Guns are lightweight with a focused blast of air. Designed with a variable flow trigger, the airflow is adjustable and can produce a range of different force values from the same nozzle by pulling the trigger.

Soft Grip Safety Air Guns are cast from aluminium with a four-finger trigger to reduce fatigue over long periods. A large variety of air nozzle options provides a solution for light- to heavy-duty blow-off applications.

Heavy Duty Safety Air Guns are designed for rough surroundings and robust blow-off applications. Built from a cast aluminium body and full rubber grip, they are available with powerful nozzles to solve blow-off problems.

TurboBlast Safety Air Guns produce high airflow with force values up to 10.43 kg. The light touch activation trigger creates a powerful blast of air and includes a 'dead man's' grip that turns the air off if the air gun is dropped.

Compressed Air Australia Pty Ltd
www.caasafety.com.au



Hearing protection and communication series

The Elacin RC Communication series includes the RC BoomMic, RC Solocom and the RC Tube. The product range is designed to connect hearing protection to two-way radios, mobile phones and landlines, to support workers in the audio and PPE sectors. The kit can be connected to Elacin custom earplugs with one click; the connection piece fits the various Elacin RC filters with an attenuation of 15 to 29 dB. This protects users from too much noise, while allowing them to communicate via phone or radio. The RC BoomMic comes with a special headset microphone that is lightweight and designed to filter out ambient noise.

The RC Communication range is designed to protect vulnerable hearing. It also offers a high degree of connectivity, with a range of ways to connect it to different devices.

The Elacin communication kit enables users to link every personal mobile radio (PMR) to the Elacin hearing protection range, with plug-and-play functionality. Development of the Elacin RC communication series is continuing apace, with the housing 3D-printed in Australia, along with the assembly, thereby facilitating small improvements to the series in a flash.

HearSafe Australia
hearsafeaustralia.com.au/

TOP TIPS FOR FINDING THE RIGHT WOMEN'S SAFETY BOOT



The rise and rise of women in the construction and industrial workforce lends itself to an ever-increasing demand for safety gear designed specifically for women. Gone are the days of “one size fits all” when it comes to personal protective equipment, and boots are no different.

Manufacturers are aware of the fundamental differences between men's and women's feet, and an increasing range of women's safety boots is hitting the market. And it's not just the size that counts, but more profound anatomical variations that make designing women's safety footwear all the more important.

The industry is slowly evolving beyond simply shrinking men's boots for the female workforce, but what makes a comfortable, functional and well-fitting safety boot for women at work?

The best fit

An ill-fitting work shoe can be a painful nuisance and a big distraction on the job. What's worse is that distraction can become a potential safety risk.

For a long day on the worksite, ergonomic safety footwear makes all the difference. Boots made from a specific female last should provide a better fit for women's feet.

Not all feet are created equal; on average, women's feet are shorter and narrower

with a lower instep than men's feet. Look for a boot with a naturally narrow design to eliminate that loose fit that frequently results in blistering, slippage and accelerated wear.

Naturally, women's work boots with a smaller instep and shorter length will keep female workers on their feet for longer.

Arch support

Women generally have a higher arch, which means a safety boot or shoe designed with built-in arch support tends to provide greater all-round comfort and fit. Short of built-in support, a soft arch-supportive insole will help relieve foot stress.

For better arch support, orthopaedics recommend lace-up safety boots rather than pull-on or slip-in safety shoes. Work boots with a convenient and lace-less quick closure, like a Boa or Freelock wire systems, also ensure a safe and snug fit. This will reduce foot fatigue and limit abnormal movements, which goes a long way towards preventing over-pronation and painful injuries like joint pains in the knee and hip.

Ankle support

Women's feet are shorter in the heel and ankle, which means an ill-designed safety boot won't align correctly. Safety footwear specifically designed for women should provide ankle support at a height marginally lower than a work boot that's designed for men.

Handy hints

- Boots made from a specific female last provide a better fit.
- Look for a boot with a naturally narrow design to avoid blistering, slippage and accelerated wear.
- For better arch support, orthopaedic surgeons recommend lace-up safety boots rather than pull-on or slip-in safety shoes.

Women's safety boots should feature shorter ankle lengths to encourage mobility without conceding on safety. Is an ankle or high-top boot preferred? Either way, it is important to consider the work environment and choose a boot design that best suits.

Feet first

Finding the right fit is the best thing workers can do for their feet. With a differing foot anatomy, don't just settle for a smaller men's work boot. Not only will a female-specific safety boot feel better, it will provide greater protection and functionality to make any workday far more productive.

While considering the nature of the work and the safety standards required of the protective footwear, consider these handy tips for the next pair of safety boots.

Kamu
www.kamusafety.com.au



Emergency lighting system

Hazardous area and emergency lighting specialist MineGlow has launched an interoperable emergency lighting system, em-Control, to improve miner safety and preparedness in the event of emergency evacuations. em-Control is an intelligent, network-based solution that warns and directs an underground workforce to safety with multi-directional light pulses and colours. The system comprises em-Lighting, the LED light strip; em-View, a web interface; and em-Controller, a network-based controller that integrates with third-party systems via an open API.

Installed throughout a mine's underground tunnel network, em-Control alerts workers of an emergency and directs the best way to designated exits, rescue chambers or other safe areas. The emergency LED strip lighting system is also fully configurable, giving mine sites greater flexibility for different applications and the type of safety warning needed. The system uses high illumination to communicate information to underground teams, thereby bolstering safety in high-stress, dangerous environments.

Designed and engineered by MineGlow for tough industrial conditions, the IP65-rated, shock-proof em-Controller integrates with third-party systems used in hazardous and industrial applications such as traffic management, zone identification, vehicle awareness and seismic activity. Featuring built-in network capability and open architecture, multiple safety systems can communicate with em-Control to provide an additional layer of safety.

When a safety event or incident occurs, the em-Controller receives the information and triggers the em-Lighting LED strip to emit a pre-programmed colour, direction and pulse sequence. One control unit can control up to 500 m of LED strip lighting. The em-Control system can be configured to work with a mine's existing network infrastructure or activated manually where network connectivity is not available, through activation points throughout the mine. The flexibility of the em-Lighting LED strip lights enables miners to install them onto any fixed or mobile surface, at any height.

Mineglow

www.mineglow.com.au

Pre-start checklist books

The UniPrint Pre-start checklist book helps users track the condition and service of machinery, exposing defects or service issues prior to becoming hazardous.

A working environment that prioritises employee's safety is one that cultivates a productive and thriving business operation. Using safety books such as a pre-start checklist helps demonstrate commitment to safety procedures which can help earn the trust, confidence and loyalty of employees and clients. Industrial and manufacturing companies that use machinery, vehicles and equipment must perform regular inspections and maintenance check-ups before and after operations.

The checklist books are versatile, allowing users to use them for a variety of machinery. An added feature of the Pre-start checklist books are having both daily and weekly inspection forms that enable users to use them daily, weekly or even monthly.

The checklists are quick and simple to use and guide users through a series of checks to ensure machinery is safe before they start using it.

UniPrint also offers customised pre-start books, featuring company branding and personalised front covers. Customisable Pre-start checklist books can also be designed to meet an organisation's unique safety requirements, as well as being an integral marketing tool or brand building product. Prototypes can also be created in the product development stage. Customised pre-start books options are endless with UniPrint.

UniPrint Pty Ltd

www.uniprint.com.au



Driver fatigue incidents on the rise



Data from cameras installed in heavy and light vehicles is being used in a series of workshops to highlight the dangers of driver fatigue and distraction on the road.

Vehicle safety and training provider AutoSense has analysed the data from 4600 cameras installed in vehicles on New Zealand roads, and confirmed 125 verified fatigue sleep events occur while driving every day.

Charles Dawson, AutoSense CEO, said the data is worrying, particularly because sleep events have significantly increased this year.

“Dangerously, New Zealand has more tired people in charge of light and heavy vehicles on our roads this year. Our Guardian by Seeing Machines cameras detect 125 events daily where car and truck drivers are falling asleep at the wheel, meaning the driver’s eyes are closed for 1.5 seconds or more. These fatigue events were recorded from September to November this year. Alarming, they are up 32% on last year,” he said.

A national roadshow hosted by motorsport champion Greg Murphy and neuroscientist Nathan Wallis is aiming to improve commercial vehicle driver safety, and will visit eight New Zealand cities in 2023. Delivered by AutoSense and facilitated by road safety expert Kelly McLuckie from Success Formula, the Eyes Up NZ workshops will commence on 13 March in Auckland, and travel to Hamilton, Palmerston North, New Plymouth, Tauranga, Invercargill, Dunedin and Christchurch.

“Customers tell us that fatigue and distraction are a cultural problem in the transport and logistics sector; we need to help transport managers coach their professional drivers to better identify risks like fatigue and distraction and then work to minimise or eliminate it. We’re going to help managers to get that message across to their teams and make a change,” McLuckie said.

“Solving this challenge will need a change from everyone: leaders, dispatch, customers and drivers. We need to disrupt the current system, which is still telling drivers to be safe — but hurry up. For example, why do drivers repeatedly tell us that most of the phone calls they get are from their own companies?”

McLuckie said the 3.5-hour Eyes Up NZ workshop will include a discussion with Nathan Wallis and Greg Murphy about the impacts of fatigue, sleep and distraction, how the brain works, and tips to help with driving safety problems in workplaces.



According to Charles Dawson, the Guardian cameras are recording two peak daily fatigue times: 5 am and 11 am.

“Fatigue is one part of the safety issues we see on the cameras — the other is driver distraction. We know of the 4600 light and heavy vehicles being monitored, there have been at least 134 verified mobile phone events per day. These drivers have been viewing or talking on their mobile phones for some time while driving, and not on hands-free. These mobile distraction events increased by almost 20% from September to November this year,” Dawson said.

“We are committed to working with the transport sector to help reduce these fatigue and distraction events before they eventuate in crashes and fatalities. Our 2023 driver safety workshops will provide expert advice and tips to enable drivers and anyone involved in transport to prioritise road safety and life over death.”

AutoSense

www.autosense.co.nz



Public safety mobile application platform

Motorola Solutions has launched PSCore, a smart public safety mobile application platform that is designed to improve productivity, incident awareness and safety for frontline officers. The platform integrates with multiple safety systems, providing operational information within a single, intuitive interface to streamline and simplify how public safety officials work.

The platform is designed to deliver digital tools and real-time intelligence for ongoing operational agility for the field-based workforce. With PSCore, first responders utilise a

purpose-built application that integrates with existing back-end systems to facilitate a quick response and keep the community safer.

The platform helps users improve situational awareness and connect with critical information for an informed, coordinated and rapid response. It features in-field command and control, voiceless dispatch, proactive patrol objectives, and a shift activity log. It aims to streamline information and evidence capture by reducing manual or redundant tasks and enable digital report submission from the field.

The platform facilitates the reuse of data, minimises user keystrokes and enables users to query necessary databases and work autonomously. It also features voice transcription and dictation, along with consistent UI.

Motorola Solutions Australia Pty Ltd
www.motorolasolutions.com.au



Modular safety shower decontamination booth

The Modular Laboratory Applications emergency shower booth is shipped in modular sections, allowing for them to be moved through doors and assembled onsite to connect to water supply and waste systems. The modular nature of the design also allows the shower to be moved from one site to another as the need arises.

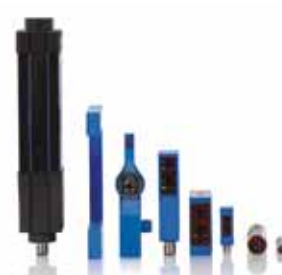
The shower is made of chemical-resistant fibreglass and is equipped with a pull rod activated shower and push handle eye/face wash for immediate drenching of personnel who have been exposed to hazardous chemicals. The shower also features frosted front strip curtains, interior grab bars, raised deck grating, and bottom or rear drain outlet. It is also compliant with A.N.S.I and O.S.H.A requirements.

HEMCO Corporation
www.hemcocorp.com



The leading supplier of high quality safety products and components.

The
BIGGEST
names
IN THE ONE PLACE



Treotham Automation • 1300 65 75 64 • info@treotham.com.au



iStock.com/Kwangmozaa

SMART AI DASH CAMS IMPROVING DRIVER SAFETY

Matt Cooper, Managing Director, Fleetware

Safety on the road continues to be a talking point, particularly when discussing heavy vehicles. The reality is, Australia has technology available that can greatly reduce the number of crashes and road incidents — and it's important to understand the major causes of truck collisions and how this technology can help.

The transport sector has done a great job in recent times to reduce the number of major accidents caused by fatigue. In fact, the latest NTI report states that only 8.2% of major crashes are caused by fatigue, down from 12% in 2015. This in part has been helped by the introduction of fatigue cameras to the market as well as a greater focus on fatigue management by employers. Unfortunately though, 63.5% of truck crashes are still caused by human-related factors.

The biggest contributor to truck collisions is now inattention and distraction. There are many distractions for drivers and the use of mobile phones continues to

be a major factor. This, along with drivers not paying attention to the road, is what needs to be addressed.

The use of a smart AI dash cam can help alleviate the major causes for collision. Having an AI camera facing the road will detect lane departure, following too closely, speeding and potential collisions — all of which are results of being inattentive. Having the ability to give immediate alerts to the driver assists with adjusting driver behaviour and in turn makes our roads safer. This technology can also further assist with driver coaching by picking up harsh braking and acceleration, as well as sharp turning which could be unsafe.

To complement this technology, having an AI camera facing the driver will address the remaining issues faced with driver safety. It can detect whether a seatbelt is being worn, whether a phone is being used, distracted driving (eyes not on the road) as well as recording fatigue events experienced by the driver — yawning and

falling asleep. This all-in-one technology really does address all the main causes of incidents on our roads involving heavy vehicles.

To further emphasise the importance of smart AI dash cam technology, Frost & Sullivan's 2020 video telematics white paper cites that video telematics can lower driver distraction by 80%, reduce speeding by 65%, increase seatbelt use by 70%, reduce collisions by 60% and reduce insurance claims by 25%.

The transport industry has the opportunity to reduce the number of collisions on Australian roads by embracing this technology. It also requires education of drivers as to why these AI dash cams can help save their lives, rather than seeing them as 'big brother' keeping an eye on them while working. Every employer has an obligation to ensure their employees return home to their families every night.

*Fleetware
gpstrackingsystems.com.au*

App protects lone workers when operating in areas of danger

Suez Advanced Solutions UK is one of the entities forming the SUEZ Group that specialises in smart and environmental solutions. SUEZ is a specialist in water network services, developing wastewater treatment solutions that are adapted to local conditions, meet health standards, and protect water resources and biodiversity. They also provide water utility clients with digital solutions such as those for monitoring the condition of their network systems and smart metering. Wastewater sampling technicians at SUEZ often travel to wastewater treatment sites across the UK to obtain water samples. These sites are often unmanned, remote and carry a range of risks to the lone workers. The risks associated with this type of work can include working at heights, exposure to large bodies of open water or sludge pits, as well as slips, trips, and falls.

Previously, SUEZ used a peer-to-peer messaging system to communicate with their lone workers. This came with issues such as delays, limited contact and periods of low signal when vital contact or emergency services may have been needed. Another issue that SUEZ faced was the lack of visibility awareness of a lone worker's location and status, should they ever become unresponsive. These issues led to SUEZ needing a system that was more robust and reliable.

SUEZ found that switching to the StaySafe app and cloud-based monitoring service helped to safeguard workers who were situated

at remote locations or unmanned sites. The StaySafe solution was also easier for lone workers to use and manage. StaySafe is a smartphone app and cloud-based monitoring service that monitors employee location via GPS or satellite while they are at work and alerts their employer if they do not check in within a specified time. The app offers a range of functions including panic button, check-in, man-down and duress alerts. SUEZ now manages its hub and escalation procedures in-house, giving them complete control and visibility.

With the way that most people now go about their day-to-day lives, using an app on a mobile device has proven to be a more effective and simpler way for SUEZ to help protect its lone workers. Habitual and protective behaviour towards mobile phones means that the chance of people losing or breaking them is low, and this results in the app being more accessible and reliable.

"We have found people's day-to-day behaviour is very strongly linked to their mobile phones so moving the provision of lone working monitoring from a dongle device to a mobile phone has been very effective," said Lidia Aleksinska, QHSE Leader at SUEZ Smart & Environmental.

StaySafe

staysafeapp.com/en-aus



Chemical adhesives

DeWalt has introduced two chemical adhesives to market, to deliver a complete anchoring and installation system for the construction industry. The DeWalt Engineered By POWERS PURE500+ and EA70-Pro build on previous solutions, offering improved performance and productivity for major infrastructure projects and commercial construction sites.

Both new products provide compliant anchoring solutions for concrete and masonry respectively while dispensing systems improve application effectiveness and efficiency. With comprehensive European Technical Assessment (ETA) pre-qualifications, both products have been endorsed by the Australian Engineered Fasteners and Anchors Council (AEFAC) thereby meeting the requirements of AS5216-2021 and in turn satisfying the relevant provisions of the National Construction Code (NCC 2019). The PURE500+ chemical adhesive is EAD 330499 approved (ETA Option 1) for use in cracked and uncracked concrete, and EAD 330087 approved (PIR — post-installation rebar) as an alternative to cast-in-place rebars. The chemical adhesive is approved for overhead applications, water-filled holes, and for diamond-drilled holes (uncracked concrete). It also has an A+ VIC installation rating for installations down to 0°C.

For use in large commercial projects and major civil infrastructure projects for safety-critical anchoring solutions, PURE500+ is a slow cure pure epoxy adhesive that is designed to be used in demanding applications. PURE500+ builds on the previous PURE150-PRO and comes with new ETA approvals including a 100-year design life, extensive seismic C1 & C2 approvals for threaded rod and rebar applications, and fire resistance approvals. Its two-component epoxy adhesive anchoring system includes injection adhesive in plastic cartridges, mixing nozzles, dispensing tools and hole cleaning equipment and can be stored for 24 months without leakage and dispensing problems.

The EA70-Pro is an Epoxyacrylate adhesive injection system which supersedes PV45-PRO. It is a medium-duty, fast-curing adhesive for threaded rod applications in concrete and masonry substrate. The chemical adhesive comes with new ETA approvals for use in hollow and solid brick and substrates such as aerated concrete. It is also ETAG 029 approved for use in solid and hollow masonry, and approved for water-filled drill holes and overhead applications. The EA70-Pro also features A+ VOC installation rating and installation down to -5°C.

Stanley Black & Decker Inc

www.stanleyblackanddecker.com



**WORKPLACE
HEALTH & SAFETY
SHOW**

Exhibit with the industry leaders Workplace Health & Safety Show 2023

31 May – 1 June 2023 - Brisbane Convention and Exhibition Centre

20 – 21 September 2023 - Sydney Showground, Sydney Olympic Park

- Australasia's only dedicated Workplace Health & Safety exhibition
- Engage with over 2000 OHS professionals, across industry sectors over two days
- Build networks and gather new leads at this well attended leading industry event

Limited exhibitor stands & speaking opportunities available.

Book your spot now

03 9596 9205

• WHSSALES@IECGROUP.COM.AU

• WHSSHOW.COM.AU



THE DOS AND DON'TS OF HYDRAULICS SERVICING

With so much pressure on earthmovers, miners, construction and infrastructure, and transport operators in the current climate, many are working shifts well on into the day and night to meet their clients' demands.

Such 24/7 service puts immense pressure on the hydraulic systems of static and mobile machinery essential to their tasks — including graders, diggers, trucks, forklifts, forest and agricultural harvesters, road and rail maintenance equipment, and fixed and mobile cranes.

"Virtually everything depends on hydraulics in the world of lifting, moving and heavy machinery. Properly functioning hydraulic actuation provides the muscle to do the job safely and quickly," said Denis Matulin, Managing Director, Hydraulink Australia.

The importance of servicing

Done well, hydraulic servicing can save money and enhance safety on diesel-powered vehicles and machinery of all sizes. A poor job — such as just patching up machinery malfunctions, or ignoring warning signs — can lead to accidents and higher costs.

"If hydraulic service has been done poorly, often the first you may know about it is when hydraulic actuation stops dead. Or the machine may let you know something is wrong through abnormal noise, which experienced operators will immediately recognise as a sign of things to come," Matulin said.

Such faults can often be caused by aeration or cavitation in the hydraulic oil system, which can be a sign of big problems to come. Aeration occurs when air contaminates the

hydraulic fluid. Air in the hydraulic fluid makes an alarming banging or knocking noise when it compresses and decompresses, as it circulates through the system.

Apart from costly and extended downtime, a single fault can be deadly where earthmoving equipment is shifting tonnes of rubble in a single bite, harvesting tons of valuable produce in a narrow time frame, grading slopes on infrastructure, or lifting loads into heavy trucks and specialist vehicles.

This is a myriad danger because there can sometimes be hundreds of hydraulic hoses and connections upon which machinery depends. That's hundreds of opportunities for things to go wrong in a single vehicle, and thousands when multiple vehicles are involved. It is the owner's duty of care to ensure servicing is done correctly, and that the job meets compliance, traceability and safety requirements.



iStock.com/Mariusz Pietrnek

Building a service partnership

"One of the most important things to have is service staff or service partners who know your machinery, your sites, your work priorities and are available 24/7," Matulin said.

These partners ideally need to know, before they arrive onsite, what's likely to be expected and how to fix it. They should also know both the machinery and the site conditions — otherwise, every new issue is a big lesson at the machinery owner's expense.

"If you have to spend half a day educating different people turning up each time, you are wasting your money and your time — then getting a bill for it," Matulin said.

"And if the new service person doesn't know the safety protocols for your industry, or is not continuously educated in this

changing field, then you may be taking a culpable risk. That's no exaggeration. It is the employer's responsibility, the site owner's responsibility, to ensure people coming onsite have the right qualifications for the job in hand."

While experienced staff or partners are essential to predict and prevent failures — with associated time and safety costs and hazards — Matulin said there are some basic checks owners can undertake themselves.

These include checking for wear on the outer cover of hoses; leaks at the end of the hose; exposed wires; and removal of kinks or twists in the hose that will prevent flow and cause early failure. They are essential routine observations that a competent technician will check, so as to prevent breakdown or safety issues arising from failure.

Ask the right questions

Given that hydraulic service is a major safety, compliance and traceability issue, it is critical to ask the right questions of anyone coming onto the site.

- **What are their safety compliances relevant to the site?** These are absolutely top of the list, because all decent operators want to protect their workers — and it is the first thing a statutory body will ask for if there is an accident.
- **What is their experience relevant to the machinery and industry?** Familiarity with customer sites and very diverse machinery being worked upon is important. Typically, a skilled technician familiar with multiple machinery types within an industry can do a better job in less than half the time taken by a less skilled or DIY operator.
- **What programs of continuing education are they involved in?** Hydraulic machinery is a fast-moving field, and what was good enough 10 years ago might not be right today. An investment in education and training is the basis of competence, confidence and trust.
- **What backing does the individual have — are they continuously involved as part of a big team or are they more of a lone ranger?** Can they come out 24/7 if needed? Do they have 4WDs to do the remote jobs when these come up, and do they have the workshop facilities to handle the bigger jobs needed for all big machinery from time to time?

"Outstanding hydraulic service is demanding. You have to have deep knowledge and great experience in this area to be able to see issues coming before they arrive. There are huge issues of safety, compliance, machinery knowledge, site knowledge, traceability and accountability involved in big machines," Matulin said.

"When servicing hydraulic hoses, fittings and adaptors, mechanics need to be spot-on, every time. A faulty hose or incorrect fitting can have dire consequences when operating at high pressure (typically 3000–7000 PSI in mobile applications)."

Hydraulink
www.hydraulink.com.au

High-tech biometric sensor vest keeps workers safe

Security guards in Switzerland have been equipped with a high-tech vest that uses artificial intelligence to improve safety.

All agents at the security company SOS Cash & Value are now making use of the intelligent vest, created by startup Wearin'.

The vest is equipped with environmental and biometric sensors connected to the monitoring centre based at the security company's headquarters in Vernayaz (Valais). The dashboard integrated into the centre's warning system provides real-time information on the situation on the ground. It continuously displays the data from the sensors, whose algorithms correlate biometry, movement, acceleration and positioning in the vicinity and in the armoured vehicle, which is also equipped with a specific sensor.

An alarm is automatically triggered when the system detects an abnormal situation such as a security guard falling over (man down detection), or the stress caused by an incident such as an attack on a vehicle. The alert and communication system between the agents and the monitoring centre enables leaders to decide on the actions and measures needed to secure and intervene with the emergency services and police forces at the scene of the incident.

The technology developed by Wearin's R&D engineers in Morges (Vaud) was successfully tested on a European scale in May 2022, during first-aid drills in the event of a major disaster.



Image courtesy of Wearin'

It is intended for organisations where staff are called upon to coordinate risky activities and interventions on the ground — such as police forces, firefighters and first responders, or lone workers in the logistics or construction sectors.

"This personal equipment is revolutionising the world of private security," said Pierre-Yves Glassey, CEO of SOS Cash & Value.

"It's cutting-edge and provides an ingenious and reliable solution, tailored by Wearin' to our company's specific needs, and based on our experience and standards in security. This high-tech bulletproof vest provides a security guard with exceptional safety."



Anti-rotation device

Gates Australia has a number of Power Transmission tools available for industry that have enhanced the way belts and drives are installed and maintained. The Gates DraftGuard anti-rotation device is designed to improve the safety of workers who are performing maintenance on fan drives. The DraftGuard anti-rotation device secures the fan drive, to prevent it from spinning backwards when maintenance is being performed. It is designed to protect the entire system from extreme shock loads during start-up that can cause unnecessary wear of the motor components.

The DraftGuard is designed with mounting holes for bushings including QD (E, F and J) and Taper-Lock (3020, 3535, 4030 or more) commonly found on ACHE belt drive systems, and features maintenance-free bearings with greased-for-life assembly. The DraftGuard's applications include air-cooled heat exchangers (ACHE), cooling tower fans and air-cooled condensers.

Gates Australia Pty Ltd

www.gatesaustralia.com.au

Island canopy hoods

HEMCO Island Canopy Hoods are designed to be located over peninsulas to collect and exhaust corrosive vapours, heat, steam and odours when mounted over areas with water baths, hotplates or portable equipment.

Manufactured of moulded one-piece composite resin, canopy hoods are lightweight and can be wall-mounted or suspended from the ceiling. The canopy fume hood's glass smooth surfaces provide chemical, corrosion and heat resistance. Optional side panels are designed to prevent cross drafts and improve airflow while providing a way to contain chemical spills.

HEMCO Corporation

www.hemcocorp.com



Guard locking system

The Treotham MGB2 guard locking device is now available with EtherCAT P/FSOE. The MGB2 system protects safety doors and fences in machines and installations against dangerous machine movements and combines a safety switch, bolt and door-locking mechanism into a single unit. The modular design and the optional MSM submodules offer additional functions, different networking options and intelligent communication features for industry 4.0 applications.

The guard locking system features a PROFINET/PROFIsafe connection; the safety door systems for EtherCAT/FSOE connection have an established reputation in many sectors, including the automotive industry and other fields where automation is used. The guard locking system features a functional door locking system that meets safety levels up to PL e but also has the flexibility to adapt to future requirements.

The Euchner MGB2 Modular from Treotham is designed to meet individual requirements due to its modular system design. The guard locking system is designed to be versatile, by spreading the individual functions across different modules. The three main functions — bus communication, door monitoring and control and indication — are implemented in separate modules and submodules. The MBM bus module acts as the system's 'head'; all information from the connected modules comes together here and moves along to the control system over the designated bus system. The control system, in turn, sends its signals via the bus module to the connected system modules.

The MGB2 interlocking and locking modules monitor the door position and lock the guards; the modules feature two special slots to accommodate submodules, which feature a range of controls and indicators such as pushbuttons, selector switches, key-operated rotary switches and emergency stop buttons. If more functions are needed, adding an MCM expansion module to the system can provide capacity for up to four extra submodules.

By separating the locking module from the bus module, users can connect up to six MGB2 Modular units to a single bus module. While collecting the signals from two or three safety doors requires two or three bus nodes, only one is needed with the guard locking system. All modules can also be mounted remotely, which allows users to place the system in the most suitable location.

Treotham Automation Pty Ltd

www.treotham.com.au



REGISTER NOW FOR AUSTRALIAN MANUFACTURING WEEK



Registrations are now open for Australian Manufacturing Week (AMW2023), held at the Melbourne Convention and Exhibition Centre (MCEC) from 9–12 May 2023.

AMW showcases the latest innovations, technologies, and equipment in the advanced manufacturing sector. Visitors and exhibitors can explore new opportunities, meet, and network with industry leaders and technology experts, all under one roof at one show.

After the successful AMW2022 show in Sydney in June 2022 — with 6100 trade visitors and 170+ exhibitors in 4500 square metres of exhibition space spread over four days — the 2023 Melbourne show will be back on home ground and is slated to be a much bigger event.

Once again organised by the Australian Manufacturing Technology Institute Limited (AMTIL), AMW2023 will occupy more than 10,000 square metres of exhibition space at the MCEC in Melbourne, with 300 leading industry exhibitors taking stands to showcase the latest manufacturing technologies, processes and support services to expected crowds of over 10,000. AMW2023 will be the 'must attend' event in the manufacturing landscape.

There will be seven zones on the show floor of Australian Manufacturing Week, each with their own distinct specialisations. These include:

- Austech Machine Tools, sponsored by ISCAR
- Additive Manufacturing Zone
- Australian Manufacturers Zone, sponsored by Sutton Tools
- Manufacturing Solutions Zone, sponsored by Adobe
- Robotics & Automation Zone
- Weld and Air Solutions Zone, sponsored by AtlasCopco
- Plastic Technology Zone

"AMW2022 at ICC Sydney was a great success and we look forward to an even better AMW2023 at the Melbourne Convention Centre in May," said Frank Yao of Innofocus Photonics Technology.

Register now to attend:

www.australianmanufacturingweek.com.au.

Australian Manufacturing Technology Institute Ltd
www.amtil.com.au

Delivering best practice for workers' mental health



Since January 2021, the OzHelp Foundation (OzHelp) has been delivering its Health in Gear (HiG) program to transport and logistics workers all throughout Australia.

Developed in collaboration with truck drivers and the transport community, the HiG program was created to support the health and wellbeing of transport and logistics workers on the job and at home, focusing on the health and wellbeing of workers and their families. Nationally, truck drivers represent the second highest occupational group, after construction workers, at risk of suicide.

Throughout 2022, OzHelp partnered with Coles Group (Coles) to deliver the HiG program for Coles' inbound, primary and receiving drivers, reaching over 300 inbound drivers.

The partnership between OzHelp's Health in Gear program and Coles speaks to the Coles vision for its 2021 Sustainability Strategy, through creating safer choices and greater places to work through innovative partnerships. The Health in Gear program visited six locations, connecting with 332 drivers, of which 235 undertook a health screen.

The delivery consisted of Truckie Tune-Ups and access to 24/7 support and free counselling. Insights gathered through the rollout from participants will be shared with Coles to help further understand the challenges drivers are facing and how to best support them into the future.

The HiG program is delivered through funding from the National Heavy Vehicle Regulator's Heavy Vehicle Safety Initiative, the Australian Government Department of Health and OzHelp, with additional support from OzHelp's corporate partners.

Transport and logistics workers and their families can access free counselling and 24/7 phone support by calling 1800 IN GEAR (1800 464 327).

For 24/7 crisis support, please call Lifeline on 13 11 14.

Health in Gear 2021–2022 program highlights:

- Connected with 1124 drivers, with 656 completing a Truckie Tune-Up.
- Implemented a 24/7 phone support line for workers and their families.
- Delivered the Health in Gear program to 20 locations around Australia.
- 614 support phone calls conducted with transport and logistics workers.
- 32,000+ individuals connected with HiG's services, information, tools and awareness campaigns.

OzHelp Foundation
www.ozhelp.org.au



Westwick-Farrow Media
A.B.N. 22 152 305 336

www.wfmedia.com.au

Head Office:
Unit 7, 6–8 Byfield Street,
(Locked Bag 2226)
North Ryde BC NSW 1670,
AUSTRALIA
Ph: +61 2 9168 2500

Editor: Amy Steed
ss@wfmedia.com.au

Assistant Editor: Ashna Mehta

Publishing Director: Geoff Hird

Art Director/Production Manager: Julie Wright

Art/Production: Linda Klobusiak, Marija Tutkovska

Circulation: Dianna Alberry
circulation@wfmedia.com.au

Copy Control: Mitchie Mullins
copy@wfmedia.com.au

Industrial Sales:
Candice Stannard
Ph: 0467 000 147
cstannard@wfmedia.com.au

If you have any queries regarding our privacy
policy please email privacy@wfmedia.com.au

ISSN 1447-8277
PP 100007391

Printed and bound by Bluestar

All material published in this magazine is published in good faith and every care is taken to accurately relay information provided to us. Readers are advised by the publishers to ensure that all necessary safety devices and precautions are installed and safe working procedures adopted before the use of any equipment found or purchased through the information we provide. Further, all performance criteria was provided by the representative company concerned and any dispute should be referred to them. Information indicating that products are made in Australia or New Zealand is supplied by the source company. Westwick-Farrow Pty Ltd does not quantify the amount of local content or the accuracy of the statement made by the source.

FREE

to industry and business professionals



The magazine you are reading is just one of 11 published by Westwick-Farrow Media. To receive your free subscription (magazine and eNewsletter), visit the link below.



www.WFMedia.com.au/subscribe

The completely modular filter system for the toughest working environments

- Pre-filter, particle filter and gas filters fit SR100 and SR200
- Provides more efficient respiratory protection
- Can convert to air supply with SR307

BUY A PRODUCT
GET A SYSTEM

