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health safety[&] at work

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ADVANTAGES? **REGULATORY SAFETY COMPLIANCE:** A PRE-CONSTRUCTION **CHECKLIST TOP TIPS FOR SUPPORTING TRADIE** MENTAL HEALTH THE HIDDEN **DANGERS** OF **WORKING IN HEAT**

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The end of 2023 is now in sight, and it's time to wrap up with the final edition of *Safety Solutions* for the year. The November issue focuses on the construction industry — in particular, maintaining safety at height — and contains a product feature that showcases some of the latest in eye, ear and respiratory protection.

Falls from height are one of the most common causes of injury and death on construction sites, with the majority of incidents occurring at four metres or less. James Oxenham takes a look at the advantages of using elevating work platforms (EWPs) to improve worker safety onsite, as well as the importance of training staff in the use of this equipment.

While physical safety is obviously of huge importance in the construction industry, stats from Mates in Construction show that construction workers are six times more likely to die from suicide than an accident at work. Dan Pollard offers some top tips for supporting the mental health of tradies and changing the workplace culture on construction sites.

And finally, Australia follows a comprehensive construction compliance framework that encompasses both national and state-specific regulations. This edition of *Safety Solutions* highlights the importance of following a pre-construction checklist to ensure compliance is achieved, as well as minimising risks throughout the project. Thank you to all our readers for your support this year — I wish you a wonderful break over



the festive period and look forward to seeing what 2024 will bring for workplace health and safety.

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

IN THE NEWS

SAFETY BLITZ SHINES LIGHT ON TRENCHING RISKS

Construction sites in inner Melbourne have received a safety boost following a one-day WorkSafe safety blitz targeting life-threatening safety risks. Inspectors from WorkSafe Victoria visited 32 civil and residential building sites at Tarneit, Truganina, Mt Cottrell, Melton, Caroline Springs, Wyndham Vale, Werribee and Richmond in August, with most visits focusing on reducing trenching risks.

Inspectors raised awareness and monitored compliance on issues including exclusion zones and fencing around trenches, battering excavations and safe work method statements. Inspectors also targeted safety risks such as falls and falling objects, electrical safety and silica, and identified issues around site amenities and facilities, first aid, training and personal protective equipment. Inspectors issued 30 improvement notices and one prohibition notice, and called out a further 14 safety issues that were fixed on the spot.

WorkSafe Director of Construction and Earth Resources Matt Wielgosz said the blitz was part of ongoing work to reduce fatalities, injuries and illnesses in the construction sector. "We know trenching work, falls, electrical work and silica exposure are among the biggest causes of death, serious injury and illness in residential and civil construction, which is why WorkSafe is highly focused on these issues. Inspectors will continue to visit construction workplaces across the state to engage with employers and workers and take action when they see something that's putting people at risk of harm," Wielgosz said.





ST JOHN AMBULANCE, NATROAD LAUNCH FIRST AID TRAINING FOR TRUCKIES

St John Ambulance and the National Road Transport Association (NatRoad) have launched free online first aid training for all truck drivers that recognises their status as often being the first responder at an accident scene. The organisations are also making available a first aid kit at a discounted price, thanks to the support of a group of industry sponsors.

The training will be delivered via an online platform that will take participants through basic first aid training, with a certificate issued upon completion. The training will be accessed via a QR code which will be promoted in Prime Creative Media publications. The QR code will also be printed onto Written Work Diaries, thanks to the National Heavy Vehicle Register (NHVR).

The training goes hand in hand with the specially adapted first aid kit provided by St Joh Ambulances and NatRoad. St John Ambulance Chief Executive Officer Brendan Maher said truck drivers are an important audience for training and first aid kits. "With accidents often occurring on regional or remote stretches of road, access to emergency medical care can take time. Having basic first aid skills that can be applied until help arrives can save a life," Maher said.

NHVR CEO Sal Petroccitto OAM said the partnership with St John Ambulance and NatRoad will help truck drivers around Australia become better equipped to deal with emergencies. "Drivers are the ones out on the roads every day, so it's incredibly important to see them better prepared for those times when they're first on the scene of an accident," Petroccitto said.

SWA RELEASES GUIDANCE FOR WORKPLACE ASBESTOS REGISTERS

Safe Work Australia has released a guide to help employers prepare an asbestos register for their workplace. People with management of control of a workplace are advised to ensure an asbestos register is prepared, maintained and readily accessible to other persons in the workplace.

The new guide is designed to help employers understand what an asbestos register is and determine whether or not it is needed. The guide will also help employers develop and maintain a comprehensive asbestos register that identifies asbestos in the workplace, and will also help employers understand who is considered a "competent person" in relation to identifying asbestos and collecting information for asbestos registers.



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SILICOSIS SUPPORT SERVICE LAUNCHED FOR PATIENTS

Lung Foundation Australia is preparing for a significant influx of new silicosis diagnoses in coming years with vital support services now in place for patients. The organisation has launched a Silicosis Social Work program which sits alongside its Silicosis Support Nurse service, both free, telephone-based support networks for people living with silicosis, their family and carers.

Lung Foundation Australia Senior Manager (Occupational Lung Disease) Elizabeth Early said getting support services in place is crucial, as research shows that more than a quarter of Australians who had worked with artificial stone benchtops

have already developed the disease. "This insidious disease, which has no cure, is going to affect thousands of people over the next few years. While we're continuing to work with governments to get a ban on importing silica-containing products in place, we also need to care for those who are already affected, and who will be in future, as more and more people are screened and diagnosed," Early said.

Former stonemason Joshua Suwa, 35, was diagnosed with silicosis and then related scleroderma in 2019 after industry rumours about the materials they were working with led to getting himself tested. Suwa said silicosis support services are urgently needed.

"When I was diagnosed there was nothing but my doctor, who was very good but there is just so much to deal with on every level. Someone who can support and talk things through with you and knows what emotions you are going through would be a real help, both to me and to my family," he said.

Through the Silicosis Social Work service, patients will be helped to navigate the practical and emotional impact of living with silicosis. The organisation can provide information, support and referral pathways on a range of topics, including processing a diagnosis, coping with progression, impact on family and relationships, financial and housing assistance, and emotional and mental health support.

WA COMPANY FINED \$30K AFTER WORKERS SUFFER LEAD POISONING

Fire assay company Jinning Pty Ltd has been fined \$30,000 (and ordered to pay \$5647 in costs) after four workers recorded high levels of lead in their blood and one was hospitalised. The company pleaded guilty under the Occupational Safety and Health Regulations 1996 to two charges of failing to ensure that biological monitoring was conducted on an employee in a lead-risk job, along with two charges of failing to ensure that counselling and health surveillance were provided to workers in a lead-risk job. The company was fined \$17,000 on the two biological monitoring charges and \$13,000 on the two health surveillance charges.

The company has two locations — West Kalgoorlie and Maddington — at which fire assay work is conducted, including determining the precious metal content of core samples using lead flux. The charges relate to the West Kalgoorlie premises.

In April 2022, a worker at Jinning became ill and his blood lead levels were measured at 97.5 micrograms per decilitre; the Regulations require that a worker must be removed from a lead-risk job if their lead level is at or above 30 micrograms per decilitre. Workers in lead-risk jobs must be provided with monitoring of their lead levels to ensure they stay at or below the 30 micrograms limit.

The worker with the highest lead level was admitted to hospital where he underwent treatment (chelation therapy) to reduce his lead levels and, as a result, WorkSafe conducted an



investigation at the workplace. After the workers' high lead levels were discovered, they were all removed from lead-risk roles.

Following the investigation, Jinning has implemented new procedures to ensure blood tests are routinely carried out at both its sites, and has improved its workplace practices to reduce workers' exposure to harmful levels of lead.

IN THE NEWS





ICARE FINALISES INTRODUCTION OF SIX CLAIMS **SERVICE PROVIDERS**

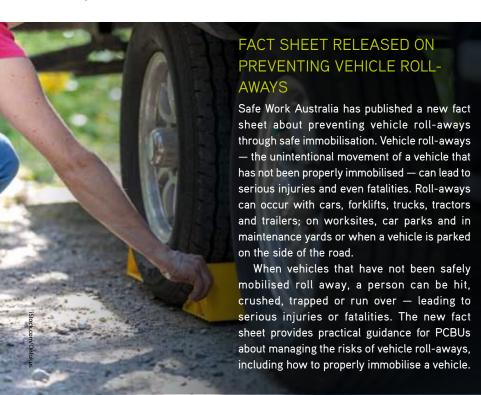
icare has finalised the commencement of its six claims service providers, marking a major development in its program to improve outcomes for injured workers and employers through the workers compensation scheme, icare CEO and Managing Director Richard

Harding said the new claims model will improve the support to 3.2 million workers and 329,000 employers by creating competition between claims service providers, offering more specialist support to injured workers and improving the financial performance of the Nominal Insurer Scheme.

"This new combination of capable, competitive and innovative providers means workers with physical and psychological injuries will receive more early interventions and tailored support when they need it most," Harding said.

icare Group Executive for Workers Compensation Tony Wessling said the changes to the scheme have been implemented this year and the work will continue to be rolled out over a two-year period. "It's an important step forward that follows three years of work to improve our Nominal Insurer scheme that protects private sector workers. Employers will also enjoy a greater element of choice, and better options for their injured workers as they recover and return to work," Wessling said.

The changes to the claims model are part of an improvement program at icare and follow broad consultation in 2021 with injured workers, businesses, unions, industry groups, service providers and the community. The full suite of claims service providers comprises Allianz, DXC Technology, EML, Gallagher Bassett, GIO and QBE, which now manage claims for the Nominal Insurer scheme under the new claims model.





VIC COMPANY FINED AFTER FORKLIFT CRUSHES WORKER'S LEG

Shipping, transport and logistics company Searoad Logistics Pty Ltd has been fined \$40,000 after a worker on a pedestrian walkway was struck by a forklift in its Port Melbourne warehouse. The company was fined without conviction, and ordered to pay an additional \$9870 in costs, after pleading guilty to one charge under the Occupational Health and Safety Act for failing, so far as reasonably practicable, to ensure the workplace was safe and without risks to health.

The incident occurred in May 2020, seconds after a forklift drove out through an open roller door, while a truck driver walked into the warehouse via the same door. As he continued along the marked hallway, the forklift reversed back into the warehouse, hitting him and crushing his leg. An investigation by WorkSafe Victoria found that it was reasonably practicable for the company to reduce the risk to health and safety by having a traffic management plan in place, and ensuring truck drivers were inducted into the workplace and advised of the plan. It was also practicable for the company to use physical barriers to stop people using the pedestrian walkways from walking into areas where forklifts were operating. Mirrors could also have been used to improve forklift drivers' visibility.

WorkSafe Executive Director of Health and Safety Narelle Beer urged employers to ensure their workplaces are safe and that employees and visitors are properly inducted. "We know that forklifts can be dangerous and there is simply no excuse for employers not doing everything possible to ensure that they operate in a way that is safe for everyone on the site," Beer said.



Transforming Forklift Safety: Introducing the BodyGuard Safety i-Tag System

When forklifts and pedestrians mix, accidents happen. Despite efforts, complete separation is nearly impossible. The BodyGuard System changes the game, creating a safety exclusion zone around forklifts. If breached, both driver and pedestrian receive unmistakable alerts - a human voice warning and a vibration alert. Easy installation, no false alarms, 360-degree coverage. Upgrade safety and productivity.

Implementing the BodyGuard System is effortless. It requires no modifications to the forklift and consists of just three simple components:

- Personal tag: A compact and portable fob that identifies employees.
- Sensor unit: Easily attaches to the vehicle within minutes.
- Cab alert unit: Communicates with the driver using a clear human voice.

Dependability is a hallmark of the BodyGuard System, with features that ensure optimal performance:

- No false alarms, eliminating unnecessary disruptions.
- Maintenance-free operation, saving valuable time and resources.
- 360-degree coverage, maximizing safety from all angles.
- Ability to detect pedestrians wearing TAS (Transponder Alerting System) through solid objects.
- Overcoming human factors such as inattention and poor safety behavior.

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Working at height is a common requirement in the construction industry, but it can also be a dangerous task for anyone who is not properly trained or prepared. The last thing anyone wants is to see a colleague or employee seriously injure themselves as a result of unsafe practices, which is why it's critical that all employees practise height safety when working in these conditions, writes James Oxenham, CEO of the Elevating Work Platform Association (EWPA) and the Hire and Rental Industry Association (HRIA).

ndustry-wide, many companies choose elevating work platforms (EWPs) to ensure construction workers can access heights safely during various phases of construction. While hiring an EWP is a safe and secure way to work from heights, it remains equally important for each and every worker using these tools to understand what they can do to keep themselves and their co-workers safe.

What are the advantages of hiring EWPs?

One of the most effective ways to enhance height safety in construction is by choosing to hire EWPs. First and foremost, these tools provide access to some of the most cutting-edge technology and design features, helping workers access safe, modern and efficient equipment purposely designed for people working at heights.

Hire companies also carry the responsibility of maintaining and servicing their EWPs in accordance with Australian standards, offering their customers reliable and wellmaintained equipment that meets the highest safety standards. This minimises the risk of accidents that occur due to equipment malfunctions.

From a safety standpoint, hiring EWPs is a good choice. Not only can it potentially provide a more economical option, but it enables employees to access some of the most up-to-date equipment available, rather than running the risk of using out-of-date or poorly maintained machines.



PROPER TRAINING NOT ONLY EQUIPS WORKERS WITH THE KNOWLEDGE AND SKILLS TO OPERATE EWPS SAFELY BUT ALSO INSTILS A CULTURE OF SAFETY WITHIN THE ORGANISATION.

The importance of training

While the advantages of hiring EWPs contribute significantly to height safety in construction, adequate training still remains vital for anyone who is working at height. This is why the Elevating Work Platform Association (EWPA) offers its Yellow Card course designed to provide comprehensive training and assessment for EWP operators. This course covers a wide range of topics, including risk assessment, inspection and maintenance, safe operation and emergency procedures.

Proper training not only equips workers with the knowledge and skills to operate EWPs safely but also instils a culture of safety within the organisation. It helps to ensure that workers know how to react in the event of an emergency and minimises the risk of accidents due to operator error. Just like any other machinery training, completing a Yellow Card course is one of the best ways to ensure that organisations and employees are operating in the safest manner while using EWPs. Site managers also play an important role once the operators have been trained to operate EWPs and several factors need to be considered, such as risk assessments, machine selection, safe work method statements, verification of competency and supervision.

The power of collaboration

Promoting height safety in the construction industry is a shared responsibility. Collaboration between organisations plays a vital role in disseminating safety messages and resources. The EWPA collaborates with a variety of stakeholders, including the Australian Constructors Association, Crane Industry Council of Australia, Working at Height Association, state and territory regulators, unions, fleet owners, original equipment manufacturers (OEMs), engineers, Standards Australia and the International Standards Organisation.

These collaborative efforts are essential in pooling resources and expertise to develop and implement safety standards. Regular communication ensures that all stakeholders are on the same page, promoting consistent safety practices across the industry. This commitment to collaboration also allows for the sharing of best practices and the development of innovative safety solutions that improve safety across the industry as a whole.

With so many construction workers required to operate from heights, it has never been more important to promote height safety techniques industry-wide. At the end of the day, height safety is not just a responsibility; it's an investment in the safety, wellbeing and peace of mind of construction professionals.

The Elevating Work Platform Association (EWPA) is a not-for-profit association and the peak representative body for the specialised access industry throughout Australia.



James Oxenham is the CEO of the Elevating Work Platform Association (EWPA) and the Hire and Rental Industry Association (HRIA).



10 SAFETY SOLUTIONS - NOVEMBER 2023

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Lowering the risk of working at height



Working at height poses a significant safety risk, but an initiative by Ventia is helping to reduce the dangers.

Working at height is responsible for at least 20% of critical control checks at Ventia, as well as generating the highest rate of high-potential (HiPo) events of any task category. A HiPo event is a subcategory of near miss, where the event could have had a catastrophic outcome.

This is especially the case for the organisation's social housing contract in NSW, where subcontractors perform the majority of tasks at height — a total of three million hours annually including more than 13,000 roof repairs.

Ventia's safety program — which collaborates with subcontractors on the social housing contract to develop their safety capabilities and protect employees — has seen reportable injuries related to working at heights fall to zero since its inception in early 2022.

Ian Ryles, Project Director of the social housing contract, said the fact Ventia has recorded no reportable injuries related to working at height is an incredible result.

"We continually monitor sites, incidents and near-misses to inform our risk-based approach to protecting our staff, subcontractors and the community from harm," he said.

Ryles said the first stage was to invite subcontractors to join a working at heights panel.

"This panel consisted of subcontractors who could demonstrate their ability to correctly undertake fundamental safety planning activities related to working at heights.

"The purpose of the panel is to focus our subcontractors on this high-risk activity and engage with them to collaboratively develop better protocols to reduce HiPo events."

The panel was invited to attend a safety forum dedicated to mitigating and managing the risk of working at heights. Speakers included a safety regulator from SafeWork NSW, who spoke on working at heights fundamentals and legislative requirements.

"The outcome of the forum was a Working at Heights Critical Risk Protocol which both Ventia and our subcontractors committed to implementing in the field," Ryles said.

"We intend to continue to develop events in conjunction with the panel to improve our shared management of this critical risk."

The panel reconvened later in 2022 to join an interactive forum with all working at heights subcontractors. One in particular had good insights to share.

"A session led by Kitely's Roofing generated important discussions between subcontractors," Ryles said.

"Endeavour Energy also led a session, highlighting the critical risks around working at heights near energised services."

These earlier sessions were followed by a masterclass which promoted Ventia's working at heights safety framework, using specific examples from the social housing contract as to how the risks can be managed.

Ryles said the forum and masterclass content has been collated to create a working at heights safety resource for subcontractors.

"It contains guides, recorded talks, posters, toolbox talk guides and other materials to support subcontractors effectively communicating with their teams," he said.

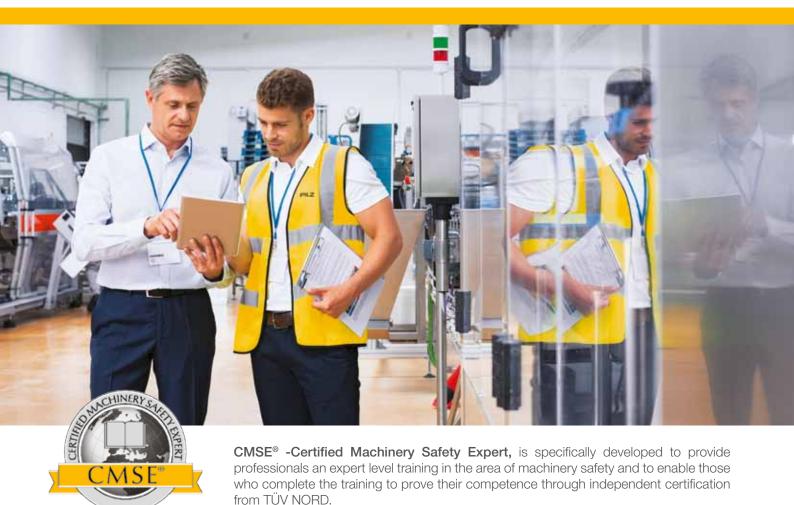
"We intend to continue to develop events in conjunction with the panel to improve our shared management of this critical risk."

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Duration 16hrs / 2days

NOTE

The course includes a multiple choice exam TUV NORD certification of "CEFS - Certified Expert in Functional Safety" is valid for four years.

*In-house Trainings can be arranged for the course

Your optimum qualification path:





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MachineSAFE Comprehensive

Functional safety in accordance with

EN ISO 13849-1 and EN IEC 62061

CEFS - Certified Expert in Functional Safety

TOP TIPS

FOR SUPPORTING TRADIES' MENTAL HEALTH

The tradie culture on worksites has often shied away from showing emotions, shedding tears or discussing mental health.

Long hours, gruelling physical tasks and relentless weather conditions can wear workers down, often leaving tradies feeling drained, disconnected from loved ones and caught in a work-life imbalance. Ignoring these issues can manifest in destructive ways, including substance abuse and other unhealthy escapes.

The stakes are high when mental health goes unaddressed. Dan Pollard, a veteran tradie and founder of Fergus, offers seven tips to support tradies' mental health.

1. Speak up

According to Mates in Construction, construction workers are six times more likely to die from suicide than an accident at work. It is important not to bottle things up, and reach out when experiencing problems. This might include chatting with a mate during a break, or calling a helpline like Lifeline or Mates in Construction.

2. Keep an eye out for mates

Safety is teamwork, and so is mental wellbeing. If a workmate is struggling, their colleagues should not turn a blind eye. Asking a simple "You all right?" can be the first step in making a big difference.



3. Limit alcohol and substance use

Alcohol in moderation is key and a clear mind is better than a foggy buzz. Try swapping out a beer for a book or a movie night with friends or family. If it is proving to be a struggle to steer away from alcohol in a social setting, try a zero-alcohol option.

4. Take a break

People often think pushing through the pain is the answer, but this is a quick ticket to burnout city. Everybody needs a breather, whether it's a weekend off or even a longer break, and stepping away gives the mind a chance to reset.

5. Get physical and eat right

After a long day, the last thing many people want to do is exercise. But physical activity releases endorphins, the body's natural mood-lifters. Even a simple 30-minute walk after work can help clear the head.



It can be tempting to grab fast food for lunch, but a person's body and mind need better fuel. Poor diet contributes to poor mental health, and a balanced meal with fruits, veggies and lean protein can boost both mood and energy. So, instead of reaching for that meat pie, maybe opt for a chicken salad instead. Or try packing a portion of dinner for lunch the following day.

6. Don't ignore the doctor

Don't ignore signs of mental strain. Regular check-ups with a doctor can help to catch mental health issues early on. General practitioners (GPs) can also refer patients on to mental health professionals. Don't wait until hitting 'rock bottom' to seek help.

7. Keep learning

Knowledge is power, especially when it comes to mental health, so it's important to be aware of the facts. Organisations like Black Dog Institute have resources that can help people under-

stand what they are going through. This can also better equip them to support a mate who might be struggling with mental health issues.

"Mental health is a real issue, and we're the ones who can change the culture around it. Let's embrace the stress that comes with growth, take ownership of our wellbeing and be the leaders in our industry," Pollard said.

"I've lost friends and seen fellow tradies go through some really tough times. So, I take this issue to heart because, when we don't get it right, we lose more than just our businesses. We can lose our relationships and, tragically, even our lives. That's why it's crucial to address mental health in our line of work.

"Remember, it's okay to struggle, but it's not okay to suffer in silence. A healthy team is a productive team. When you're feeling your best, you do your best work. It's as simple as that."

1. https://mates.org.au/construction/the-problem

Using AI to improve psychosocial safety

Nearly half of Australian workers experience stress during much of their working day, according to research.

The State of the Global Workplace 2023 Report shows that 47% of Australian workers experienced stress during a large portion of their working day, compared with the global average of 44%.

Recent statistics from Beyond Blue also underscore the mounting crisis in workplace stress and mental health, with one in five Australian workers reporting time off due to mental unwellness.

As these levels of stress and anxiety continue to increase, it has steadily become apparent that traditional interventions are insufficient to address these psychosocial risks. To help address the issue, NeuroCapability and Noa Coach have collaborated on an innovative solution to combat workplace stress through a neuroscience-based approach to psychological safety.

The companies have created an all-encompassing program that explores the intricate workings of the human brain, revealing the neuroscience behind stress and behaviour. Their 12-week on-demand program aims to empower individuals, create a psychologically safe work environment and transform the way organisations approach mental wellbeing.

This program effectively manages stress and anxiety in real time, adheres to global psychosocial guidelines and complies with mental health legislation in multiple countries.

Key features of the program include:

• Understanding the brain's response to stress: This program provides a comprehensive understanding of the biological causes of stress, empowering individuals to better recognise and handle their responses.

- Building healthy workplace habits: Facilitates purposeful exercises and techniques that align with the brain's innate functions, fostering holistic health and resilience.
- Enhancing trust and communication: Promotes constructive conversations, understanding and teamwork using techniques based on innate human social behaviour.
- Continuous learning and evaluation: Employees can proactively maintain their mental health by regularly checking their wellbeing.

With the help of an Al coach and practical tools, participants can effectively combat stress and develop healthy habits to improve their overall wellbeing.

The program's evidence-based approach draws from the latest advancements in neuroscience research, supported by data from Safe Work Australia, which shows that prioritising wellbeing leads to six times fewer sick absences and higher financial returns.

"Our program is more than a course; it's a crucial investment in human potential and global wellbeing. By helping individuals understand their brains and what triggers stress, we're empowering them to create lasting changes in their personal lives and workplaces, aligning with international standards and practices," said Penny Curnow, COO of NeuroCapability.

"By equipping individuals with the insights and tools to navigate stress and fostering psychological safety, we are not only enhancing personal wellbeing but also propelling organisations towards compliance with global psychosocial standards," said Meg Price, CEO of Noa Coach.



505 SERIES





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egulatory compliance within the construction industry is key to ensuring safety for workers. It assists the industry with adhering to established standards and guidelines, therefore mitigating potential risks and liabilities.

Australia follows a comprehensive construction compliance framework that encompasses both national and state-specific regulations. Compliance with these regulations is not only legally mandated but also essential for maintaining high industry standards and safeguarding the wellbeing of workers, the public and the environment.

By complying with regulations, construction companies also demonstrate their commitment to responsible and sustainable construction practices, fostering trust and credibility within the industry and among clients.

Preparing for construction project compliance

Documentation plays a critical role in construction regulatory compliance. To ensure successful compliance with construction regulations, it is crucial to adequately prepare and understand the requirements involved. Pre-construction preparation is a vital step in the compliance process, as it sets the foundation for a smooth and compliant construction project.

By proactively addressing compliance requirements from the outset, construction professionals can minimise risks, avoid potential delays and maintain the integrity of their projects.

Essential documentation for regulatory compliance on the construction site

- 1. Building permits and approvals: These documents provide authorisation to commence construction activities and ensure that the project meets the required safety and structural standards.
- 2. Construction contracts and agreements: Construction contracts and agreements define the scope of work, project timelines, payment terms, and any special provisions for the owner, contractor, subcontractors and suppliers. Construction contracts ensure clarity, protect the rights of all parties and provide a framework for dispute resolution if necessary.
- 3. Environmental impact assessments and approvals: These assessments include factors such as air quality, water resources, noise levels and ecological impacts in order to minimise the project's potential for negative effects on the environment.
- 4. Health and safety plans and procedures: Health and safety plans and procedures are essential documents that outline the measures and protocols in place to protect the health and safety of workers, visitors and the general public. These may include hazard identification, risk assessment, emergency response plans, and safety procedures for various construction activities.
- 5. Insurance and liability coverage: Insurance and liability coverage documentation is necessary to protect construction parties against potential risks and liabilities associ-

ated with the project, including certificates of insurance and liability policies. Insurance coverage safeguards against property damage, bodily injury, or third-party claims.

6. Licensing and certification documentation: Licensing and certification documentation establishes that individuals or entities involved in the construction project possess the necessary qualifications, licences and certifications required by regulatory bodies. This includes expertise and competency certifications for specific construction methods or materials. 7. Employment and workforce documentation: This includes all records related to the workforce involved in the construction pro-

ject. This includes employment contracts,

worker identification, payroll records, tax

documents and proof of worker eligibility.

Best practices for managing and organising compliance documentation

Effectively managing compliance documentation is vital for construction professionals to ensure regulatory compliance and streamline operations. Utilising document management systems with features like categorisation, search functionalities and version control, simplifies tracking and management. It is also crucial to maintain version control and regularly update the documentation. Adhering to these practices guarantees quick and orderly access to necessary documentation for audits, inspections or post-project inquiries.

PlanRadar www.planradar.com/au



Breathing apparatus

The MSA M1 breathing apparatus is an advanced, ergonomic and modular SCBA system, designed and developed side by side with firefighters. This breathing apparatus platform includes several innovative and customisable features that help to enhance hygiene and improve comfort.

The breathing apparatus is easy to assemble, don and train, and can be customised per the user's needs. The breathing apparatus also enables upgrades to be installed in the field. The apparatus is easy to clean and disassemble, while its dust- and water-repellent harness material reduces the time needed for mechanical cleaning. The entire SCBA is also machine washable, with no disassembly required.

The apparatus features an innovative hip belt and backplate design that distributes most of the weight on the hips. The backplate also enables one-handed height adjustment. The SCBA also features a padded S-shape harness that prevents pressure points and slipping. Its material composition increases chemical resistance, while the reflective harness elements provide greater visibility. The breathing apparatus enhances safety for service technicians due to improved cleanability and reduces the risk of snagging hazards due to guided hoses in the backplate.

All components in the breathing apparatus are designed for longer life with a 10-year warranty. They are also easy to upgrade and service without tools. The SCBA features a lightweight C1 headset that can be attached to the outside of the G1 mask. The microphone is designed to protect against surrounding sound.

MSA Australia Pty Ltd

au.msasafety.com



Safety eyewear range

PSG Eyewear and Ugly Fish have partnered up to develop two exclusive certified safety frames — the Cyclone and the Jackal. These modern and stylish frames come with a range of features, including clear or tinted side shields for peripheral visibility.

Designed for the business or commercial professional who visits the job site, the Jackal also features a protective top shelf that stops dust and debris. It is available in three attractive colour options: Pinot, Matte Black and Navy Blue Woodgrain.

The Cyclone is a close fitting semi-wrap frame that accommodates wider faces by offering a reasonable amount of flex and a contoured nose bridge to aid fitting. This frame is available in Matte Black and Matte Navy Blue.

The frames are designed to be functional, to enable wearers to tackle tough jobs. Both frames are certified to Australian Standard AS/NZS 1337.6. The frames also help to protect eyes from harm, whether the wearer is a visiting onsite professional or doing those DIY jobs around the house.

PSG Eyewear Australia

www.psgeyewear.com.au





Polarised safety glasses

The uvex polarised safety glasses range offers comfort and wearer acceptance, as well as being 100% UV compliant.

As dual-purpose eyewear, uvex polarised is suitable for not only a wide range of work environments, but also after hours in everyday life.

The entire uvex polarised range complies with the Australian Standard AS/NZS 1337.1 for comprehensive medium impact protection at work and after hours.

The uvex aquarius safety glasses features a fashionable unisex design with integrated side shields. Designed for all-day wearing, they are safe while on the job — and are stylish enough to wear after work.

UVEX SAFETY AUSTRALIA LIMITED PARTNERSHIP

www.uvex-safety.com.au



Welding and grinding helmets

Welding equipment manufacturer Kemppi has released its Zeta range of welding and grinding helmets. The Zeta helmets feature a lightweight design and enhanced visibility features. Designed for multifunctional use where the face and eyes need protection, the helmets are suitable for welding, grinding, inspection and cutting processes.

The four models within the Zeta range are equipped with an advanced auto-darkening filter for welding or a wide visor for grinding, along with many other features.

The welding helmets have a large viewing area with the ADF filter. It measures 110 mm in width and 60 mm in height. The grinding helmets feature a 200 mm-high visor with a 180° horizontal view for greater visibility.

In addition, the Zeta ADF is an improved version with VISION+ technology increasing the quality of vision and work accuracy. The ADF DIN 2.5 light-state enables sharper colours and visibility through the filter when the welding arc is inactive. The shell construction of the helmets is designed to be robust and lightweight, to help relieve the strain on the neck and shoulders.

Both the Zeta G200X and Zeta W200x helmets feature integrated LED lights. The user can manually switch the LED lights off and on, or they can select the automatic button that switches the lights off in bright conditions and then back on to help improve visibility and safety.

The helmets also feature a battery pack located on the neckband, which improves the balance of the helmet. The battery pack can be charged using a USB charger, and users can check the power level by pushing the button outside the shell.

Designed and constructed with a smooth inner surface, the helmets are easy to clean. Users can choose from four helmet models within the range. These include the Zeta G200 grinding helmet, the Zeta G200x grinding helmet with integrated LED work lights, the Zeta W200 welding helmet with automatic darkening welding filter (ADF), and the Zeta W200x welding helmet with ADF and integrated LED work lights.

Kemppi Australia Pty Ltd www.kemppi.com





Safety eyewear with anti-fog coating

The 3M Scotchgard Protector Anti-Fog Coating is now available for the SecureFit 500 Brown and Light Brown lens and SecureFit 500 Clear lens with foam gasket.

The eyewear comes in a sporty design with contemporary lens shape and a sleek profile of safety glasses that combines well with other personal protective equipment. SecureFit's flat and flexible temple design also combines well with 3M protective earmuffs.

The adjustable ratcheting temples of the SecureFit 500 series are designed to help improve the positioning of the eyewear when worn with half-facepiece respirators. The glasses resist fogging longer than traditional anti-fog coatings through up to 25 washings with water (based on 3M internal testing per EN168 test method when compared with traditional anti-fog coatings). They also offer scratch resistance in tough work environments.

The safety glasses are designed for working in challenging situations, such as heat and humidity, indoor and outdoor work, physically demanding tasks and climate-controlled areas.

The brown lenses reduce the transmission of blue light to improve contrast, while offering good outdoor UV protection and glare reduction. Meanwhile, the light brown lenses reduce the transmission of artificial blue light in indoor environments while maintaining colour recognition.

A removable foam-lined gasket helps to limit eye exposure to dirt and debris while providing added comfort and cushioning.

3M Safety & Graphics

www.3M.com.au/ppesafety

Helmet mounts

Sensear has launched its helmet mounds for its entire line of smart industrial headsets. The rugged, coated stainless steel helmet mounts are designed for harsh environments while allowing more adjustability and comfort for the user. The enhanced fit provides protection against harmful noise while withstanding abusive applications.

Sensear offers a full range of Smart Industrial Headsets with a variety of helmet mount adaptors that work with most hard hats and helmets. The enhanced fit provides protection against harmful noise while withstanding abusive applications.

Sensear Pty Ltd

www.sensear.com



Active earmuffs

The uvex aXess one is an active earmuff that provides a high level of noise reduction (SLC80 27dB, Class 5) but allows the wearer to hear surroundings sounds through the speakers at a safe and comfortable level.

When choosing a hearing protector for a task, careful consideration must be given to the level of noise, its characteristics (such as its frequency distribution), worker's preferences and comfort, the task at hand, and the compatibility of the protector with other PPE. Choosing a hearing protector with the highest level of class (Class 5) as per AS/NZS 1270 on the assumption that it will provide the best solution can lead to hearing overprotection. This is because a Class 5 hearing protector is also likely to prevent the wearer from hearing important sounds such as speech and warning signals. This places them at a greater risk of accident and injury in the workplace.

The uvex aXess one enables the wearer to communicate effectively with co-workers and hear other important sounds such as warning signals, thereby reducing the risk of accident and injuries. Wearers can therefore still receive a high level of protection from noise without being overprotected.

UVEX SAFETY AUSTRALIA LIMITED PARTNERSHIP www.uvex-safety.com.au

Personal air purifying respirator system

The Miller Vortex HDV PAPR system from Welding Industries of Australia can help to protect workers from short-term respiratory irritation and long-term illness.

With comfort and visibility in mind, the PAPR system includes a lightweight blower unit. At 1362 g, it provides long-term comfort so that welders can wear it for extended periods without causing strain. Meanwhile, the large 174 x 126 mm integrated grind shield offers a larger, clear viewing area for grinding and other tasks.

The PAPR system also offers HDV technology, which provides a sharp, detailed view at any angle with minimal distortion. This feature allows increased visibility, making it easier for welders to see their work. It also comes with ClearLight 2.0, which provides a second-generation view through the lens, enabling high-definition optics for a clearer, brighter and more realistic weld view.

InfoTrack 2.0 technology enables users to track arc time and arc counts, as well as store and switch between two custom preset memory settings.

The Vortex HDV PAPR System provides protection against solid particles, welding fumes and mists, making it suitable for welders searching to improve safety and reduce health risks associated with grinding and welding operations.

Six air distribution points help with even air distribution — providing maximum cooling and comfort — while the three air speeds allow the operator to control the volume of air to meet their work conditions. The audible and vibrating alarm increases safety by notifying the user in noisy environments of low battery due to reduced air flow.

Welding Industries of Australia www.welding.com.au



The Guarda Systems Edge Power Cutter is a masonry saw that suppresses dust, slurry and fumes while the user cuts. Through Guarda's Tri-Vac technology, the saw allows safer, cleaner cutting. It provides silica dust and carbon monoxide control via a combination of water delivered to the blade guard and vacuum suction.

The Edge Power Cutter is the first line of defence against dangerous silica dust on construction sites. This respirable dust is hazardous to operators of engineered stone, concrete and brick cutting equipment and those working nearby, causing silicosis and other long-term health issues, as well as worksite shutdowns and costly penalties for non-compliance.

The saw is quick and easy to set up, lightweight for ease of use and suitable for general purpose concrete cutting — especially indoors or in enclosed spaces where fumes, dust and slurry pose a significant hazard. The saw has a 6" (150 mm)

cutting depth, and has been independently validated to reduce silica dust by between 87% and 99+% compared to existing solutions, according to the company.

Guarda Systems guardasystems.com

PRODUCTIVITY AND SAFETY IN HARMONY: INTERVIEW ABOUT INTEGRATED SENSOR SOLUTIONS FOR ROBOTICS



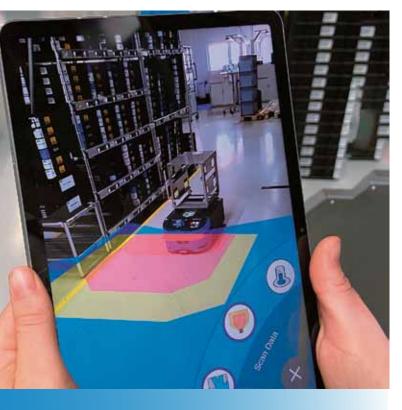
There is a paradigm shift currently under way at SICK in the field of sensor and system solutions for using robots safely and efficiently. Volker Glöckle, Senior Vice President of Integrated Automation, explains the dynamic nature of the market and SICK's transformation into a solution provider.

ICK has been instrumental in developing automation and safety solutions for robotics applications, and we intend to see a robot applications as a complete system, taking a 360-degree view of the main areas of maximum safety requirements while maintaining high productivity outputs. It goes without saying that we will be continuing to supply sensors to robot manufacturers and integrators throughout that process.

With increasing market demand in custom applications and highly complex and dynamic environments, robotic safety solutions can no longer simply be narrowed down to single disciplines. What that means for SICK is that we work in lockstep with robot manufacturers so that, between us, we can come up with the best solutions to the specific requirements of the end users.

We generate most of this data via our sensors. Our digital AppSpace and IntegrationSpace platforms and the functions and services that run on them help with consolidating and interpreting the data. Artificial intelligence, and specifically deep learning in this case, is an important building block and one that opens up new opportunities for us. Al is able to unleash its full potential when an application is expected to involve variance that cannot be accounted for by static programming. That's the case with robot based picking in logistics, for example. With deep learning, the algorithm can be retrained for a new product or different product features with a perfectly reasonable amount of effort and no need for in-depth programming skills. This ability to learn new scenarios and make changing conditions







simpler and more convenient for customers is something that we are focusing on with our systems, in addition to making them more robust.

Safety and guidance systems are integrated in the robot control units as effectively as possible. For example, our solutions can be parameterized and visualized very easily via the robot's control panel. Our SARA app, the SICK Augmented Reality Assistant, which we launched in 2022, makes things even easier. With simple fault diagnostics and intuitive operation via a tablet or smartphone, we have significantly reduced the complexity of the application for employees.



Industrial Machinery Safety Forum

Collaborating with ISO (International Organization of Standardization), IICA (Institute of Instrumentation, Control and Automation) and APPMA (Australian Packaging and Processing Machinery Association Limited), SICK is presenting the Industrial Machinery Safety Forum — a technical forum bringing you up to date with newly revised machinery safety standards and their application — to be held in Sydney on 20th & 21st November at Rosehill Bowling Club and in Melbourne from 22nd to 23rd November in Theater K321, Monash University Caulfield Campus.

All the speakers are the respective chairs of each technical committee for each standard and as a result have intimate knowledge to share on each of below topic areas.

- Safety of machinery Safety related parts of control systems
 ISO 13849-1
- Safety of machinery Interlocking devices (including Key transfer systems) | ISO 14119
- Safety of machinery Minimum separation distances (for protective devices) | ISO 13855
- Safety of machinery Whole body access (Determination and prevention) | ISO 12895
- Robotics Safety requirements Industrial robots | ISO 10218-x
- Industrial trucks Safety requirements Driverless trucks (AGVs) | ISO 3691-4
- Safety of machinery Integration of machinery into a system | ISO 11161
- The new European Machinery Regulation | (EU) 2023/1230 You will leave this forum with a greatly improved understanding of new technologies and practices that will be beneficial in your workplace or in the design of your machine. This will enable you to be proactive and advanced in providing highly productive and ergonomically sound solutions for your machinery whether you are building machinery for sale or maintaining and improving existing machinery.

Limited seats available and book your tickets now at IICA website: https://iica.org.au/events



SICK Pty Ltd www.sick.com.au

Skid steer loader simulator

Bestech Australia has introduced the skid steer loader simulator from Simlog for training operators in operating a typical skid steer loader in a typical construction environment.

The simulator training system can be set up with industrialgrade USB-ready components, consisting of an operator chair, multipurpose joysticks, PCs and monitor display. The monitor can be arranged as either one display in front or three displays in front to create a 180-degree panoramic view or three displays in front arranged side by side and a fourth display in the back.

The simulation software offers training modules that present working scenarios in the real-world environment. Each training module also has its own key performance indicators, to assess the progress of each student and teach them the correct and safe operating procedures.

Up to 66 unique performance indicators are available with the skid steer loader simulator. Students can receive feedback, such as execution time, average driving speeds, load measurement during pick up and put down, and number of collisions.

The simulator training system offers multipurpose training on a range of heavy equipment including backhoe loaders, bulldozers, hydraulic excavators and many more. This can be achieved by licensing the software for training the intended equipment.

Bestech Australia Pty Ltd www.bestech.com.au



Magnetic cable hangers

Adept Direct specialises in designing and manufacturing high-quality cable hangers and cable rollers for all industrial sectors, including mining applications. The company's FRAS magnetic cable hangers are made with robust materials to withstand the demanding conditions of these industries.

The magnetic cable hangers are easy to install, even in harsh environments. They come with a powerful magnet that can stick to any metal surface, meaning the hangers remain securely in place — even when subjected to vibrations and shocks.

The magnetic cable hangers can be used with a variety of cables, including power cables, communication cables and control cables. They can hold multiple cables at once, keeping cables organised and out of the way.

reducing clutter and the risk of tripping hazards, and saving space.

The magnetic cable hangers are built to last in harsh environments, as they are made of robust materials that can withstand extreme temperatures, moisture and other environmental factors. They are also resistant to chemicals and UV radiation, so that they remain in good condition for an extended period.

The magnetic cable hangers are thus suitable for any industrial or mining operation looking to improve safety and efficiency. They are easy to install, versatile and durable, making them useful for anyone who uses cables regularly. They can help users to maintain an organised and safe workspace, leading to increased productivity and reduced downtime.

Adept Direct

www.adeptdirect.com.au



Safety overshoe

The Gaston Mille Visitor's Overshoe is a patented accessory that slips over the top of the wearer's personal footwear. It features a 200-joule impact protection steel toecap with a moulded protection tongue that is designed to shield against splashes, cuts, dust and abrasion. The slip-resistant half-sole helps to provide stability on slippery floors.

The removable and interchangeable strap allows the product to be adaptable to different heights and it can even be worn with heels.

The overshoe has flexible material to fit just about any urban-style shoe. Since there is no direct contact between the foot and the safety overshoe, it can be re-used by multiple people, providing a hygienic solution for visitors to warehouses and other worksites.

The safety overshoe is available individually or as a kit of five pairs.

Trading Downunder

www.safetyovershoes.com.au



Safety switches

The FY series safety switches from Pizzato Elettrica feature a separate actuator with lock and techno-polymer housing. These switches are a further development of the FG series of switches.

Designed for all applications that do not require the mechanical strength of metal housings, the switches have the same spacing between the fixing holes and the same overall dimensions as the FG series switches. They add the option of installing up to two control devices and the respective contact blocks using the appropriate version of the housing.

The head and release device of the FY series safety switches are both made of metal and include three knock-out threaded conduit entries M20x1.5. The degree of protection is rated to IP65 for versions with integrated control devices, with IP67 and IP69K for versions with standard covers.

Safety levels up to SIL 3 and PL e are achieved and ambient temperatures from -25 to +60°C. Versions with an extended temperature range from -40 to +60°C are also available.

After loosening the four screws on the holding head, the holding head can be aligned relative to all four sides of the switch. The key release device and the escape release button can also be rotated and secured independently of one another in steps of 90°.

Leuze electronic Pty Ltd

www.leuze.com.au



STAYING SWITCHED ON THE IMPORTANCE OF ELECTRICAL SAFETY

Over the last four years, more than 2000 people have received electric shocks in NSW workplaces — more than five incidents per day. Not all people are required to be trained in safe operations around electricity, and as such, those who receive electric shocks are often not aware they are putting themselves and others at serious risk, writes Sam Sofi, Group Executive of Safety, Delivery & Operations at Ausgrid.

orkplaces are the first line of defence in communicating how to be safe around electricity. Indeed, chatting about risks at site toolbox talks is necessary, but this shouldn't be where safety conversations end. Electricity safety needs to become part of everyday conversation on worksites, in offices and in the home.

The risks are real

Electrocution is the second leading cause of death in the Australian construction industry. It is everyone's responsibility to look out for themselves and their workmates to ensure that everyone makes it home at the end of the day.

With continuously improving safety standards and workplace practices, working around electricity can be done safely — but everyone must remain vigilant about unsafe practices. It is very important that no one turns a blind eye to something that is unsafe. If you see something, say something.

Even the smallest lapse in judgement could be devastating when working near electricity. Whether working on scaffolding, operating a crane, driving an oversized vehicle or cleaning the area, everyone needs to be aware of electrical risks and hazards on a worksite. If the risk were to become a reality on a worksite, having a clear, commonly understood plan for emergencies could be the difference between life and death. Undertaking site inductions, knowing first aid, always having a safety supervisor onsite and, where appropriate, ensuring a Safe Work Method Statement (SWMS) is prepared are all crucial elements of keeping people safe.

Understanding is key

Electricity, particularly in an area under construction, could be where it is least expected. While there are a handful of visual aids to help identify where electricity might be, it is largely invisible — so these visual aids are not exhaustive and not always obvious.



Workers therefore need to explicitly understand their role and what to look for. Having this knowledge could ultimately save their life (or that of their workmate). If someone is not licensed or trained to work near electrical equipment, they should steer well away from the areas where they can see electrical equipment, before seeking guidance from a site safety supervisor.

A significant amount of work has been done to make working on or near electricity as safe as possible. Exclusion zones, safety observers, warning signs and temporary insulated barriers are all common practice on worksites and play critical roles in keeping everyone onsite safe.

ElectricitySafety.com.au is a valuable resource for those working in trade, around their own home or on a job site, providing a range of in-depth safety tips and information on how to stay safe around electricity. Before You Dig Australia and more recently, Look Up and Live, have also been specifically designed to display electrical assets below and above ground.

- Apprentice electricians must be appropriately supervised.
- Registered electrical contractors (RECs) must not work on energised installations.
- Ensure Safe Work Method Statements (SWMS) are prepared for high-risk construction work (HRCW) — for example, any work on or near energised electrical installations or services.
- Perform all work according to the SWMS for HRCW.

Working for tomorrow

As Australia's energy future continues to change, the workforce will continue to develop new and emerging technologies. Keeping safe while building Australia's future will ensure everyone goes home to their families at the end of the day.

All statistics obtained from www.electricitysafety.com.au.



Safety management software

Designed for organisations operating in high-risk environments or with dangerous equipment, the Safety Management Software from SafetyIQ is suitable to be used for incident prevention. Its primary goal is to reduce incidents, track the progress of corrective actions and harness data to pinpoint safety trends.

The safety management software includes a range of features, including fatigue management, lone worker support, hazard identification, comprehensive incident reporting, and reporting and analytics for enhanced insights. The software is also designed to prioritise driver safety.

The software is compatible with all operating systems and dedicated apps for Android and iOS, and also features an intuitive interface that can be integrated into existing processes. The software can also be integrated with satellite devices, to boost staff safety even in areas without mobile coverage.

Safety Management Software is a simple and effective safety solution.

SafetyIQ

safetyiq.com

Air filtration system

The HEMCO HEPA and Carbon Filtration system is designed to be mounted inline in the exhaust ducting from a fume hood or contaminant source up to 1500 cfm. The filter system includes a galvanised steel housing with hinged and gasketed access door for filter change-out.

The system also comes with a moulded composite resin inlet and outlet plenums with duct connection collars sized to meet specification. Both filters include a 30% pleated prefilter and can be paired together for applications that require particulate and fume removal.

HEMCO Corporation

www.hemcocorp.com





Light electric commercial vehicle for mining

The second generation zero-emissions ZED70 Ti is a tough, light electric commercial vehicle available for the mining industry.

Based on the Toyota LandCruiser 79 Series, the model comes with five years of development in harsh underground conditions. The vehicle features 50% more power, with fast charging in less than 25 minutes, according to the company.

The design features ZERO's HEPS (Hazardous Environment Protection System) underbody armour protection, which will help to increase the longevity and safety of the vehicle's chassis in underground applications. HEPS will also be available as an upgrade for current diesel-powered vehicles.

Under the bonnet, the ZED70 Ti features a Toshiba 60 kWh Lithium Titanate Oxide (LTO) drive battery, which according to the company retains over 70% capacity after 20,000 full-use cycles

The architecture features 22 kW Level 2 onboard fast charging and is enabled for Level 3 DC ultra-fast charging.

The three-phase asynchronous electric motor is complete with regenerative braking, with a peak power of 200 kW and a peak torque of 1200 Nm.

With a focus on safety, the system features an isolator switch, manual service disconnect, a full battery management system, automatic electrical isolating contactors, multiple mechanical HV isolators, fast-acting fusible links, an insulation monitoring device and an e-brake. All important functions of the vehicle can be monitored by the GeoTab telematics platform.

Zero Automotive

www.zeroautomotive.com.au

Are your staff able to raise HELP no matter where they are & what the risk is?

If something happens, I want to know immediately. I don't want someone's family telling me they didn't come home. ??

Mike | Conservation, Parks & Wildlife Lead

Industry leaders in Lone and Remote Worker Safety Solutions

Guardian Angel Safety understands the immense responsibility that Health and Safety professionals carry in ensuring that lone and remote workers return home safely every day. We are proud to be protecting thousands of Australian workers everyday. Let us help you find the right safety solutions, devices & monitoring for your teams unique working conditions and needs.







Pressure washer

The DEWALT DXPW3193 is a vertical and horizontal hybrid pressure washer that is designed to deliver 3100 PSI of cleaning pressure at 9.3 L/min (independently certified by CETA) from a DEWALT 165 cc OHV engine. This capacity helps users wash hard-to-reach places such as high building facades, windows and gutters.

Featuring a steel-braided 7.62 m high-pressure hose, the pressure washer also includes a pro-style spray gun with 40 cm stainless steel lance along with four quick-connect nozzles. A heavy-gauge welded frame with patented non-marking pneumatic wheels enhances the pressure washer's mobility, making it suitable for DIY and light trade use.

Meeting all of DEWALT's quality control measures, the pressure washer comes with a two-year engine warranty, two-year pump warranty and five-year frame warranty. The pressure washer therefore offers increased durability as a result of the hard-wearing and impact-resistant components.

The four colour-coded spray nozzle options are designed to deliver powerful pinpoint pressure for intense cleaning, to large and small coverage areas of metal, concrete and wood. With the ability to move heavy dirt, liquids, grime and debris, the pressure washer is versatile and can carry out daily cleaning, ongoing maintenance requirements or larger site clean-up.

Stanley Black & Decker Inc www.stanleyblackanddecker.com

Gas detection system

Honeywell has deployed its Li-Ion Tamer gas detection system to improve the safety of lithium-ion batteries in Australia and New Zealand.

The plug-and-play rack system is designed to sense the off-gassing that precedes thermal runaway battery failures in lithium-ion batteries earlier than smoke or traditional lower flammability limit (LFL) gas detection. This allows for mitigation before thermal runaway failures occur.

The technology provides a warning up to 20 min before a lithium-ion battery is about to fail, giving building and facilities managers more time to intervene and prevent catastrophic thermal runaway disasters before they occur. This technology will become more crucial as lithium-ion uptake in buildings, sites and facilities continues to accelerate across the A/NZ region.

Li-lon Tamer includes monitoring sensors installed at the battery racks — downstream convective airstreams — to monitor off-gas events; reference sensors to monitor the make-up of air; air inlets to minimise false alarms; and a controller to aggregate sensor signals and connect to the site controller system.

Honeywell Safety Productivity Solutions sps.honeywell.com/au/en



Automated guided vehicles

Dematic has launched a range of freezer-rated automated guided vehicles (AGVs), with a thirdgeneration model featuring advancements in sensor and navigation technology. Designed and built in Australia, Dematic's full range of AGVs - including high-reach and counterbalance — are now all rated for deployment in freezer environments.

AGVs operating in Australia are covered under the recently updated Australian Standard - AS 5144-4 (equivalent to international standard - ISO 3691-4). This standard specifies clear procedures for achieving safety for both manufacturers and operators.

Dematic third-generation freezer-rated AGVs include a range of safety features, such as a 360° safety scanning system with automatic slowing and stopping; accessible emergency stop buttons; visual and audible warning and alarm lights; and a compliant system.

Dematic Pty Ltd www.dematic.com.au



ustralians working in hot environments run the risk of gut damage and blood poisoning, according to a new study.

The Monash University-led research project has identified the point at which workers could face potentially serious exercise-induced gastrointestinal syndrome (EIGS), and the corresponding degree of seriousness.

Published in Temperature, the study found that a rise in core body temperature to 39°C, from two hours of exercise in hot conditions, can predict the onset of gut damage and the movement of pathogens from the gut into the bloodstream, as part of EIGS.

EIGS can cause a range of debilitating signs and symptoms, as a result of pathogenic agents (eg, bacteria or bacterial endotoxins) in the gut leaking into blood circulation. This situation may lead to more serious clinical implications such as sepsis, if the body's immune system can't cope with these pathogens in the blood. EIGS mimics similar health conditions such as ischaemic bowel disease, irritable bowel syndrome and inflammatory bowel disease.

As the core body temperature increased, the extent of gut damage, bacterial endotoxin, systemic inflammatory responses and gut symptoms also rose.

Who is at risk?

Lead author Kayla Henningsen, a Dietitian and Exercise Gastroenterology PhD candidate at Monash University's Department of Nutrition, Dietetics and Food, said EIGS could occur during sports activities or physical work.

"Physically demanding fields, such as the mining industry, military, agriculture and firefighting services, are notorious for not only the exertional activity required to fulfil the role of the occupation, but also for the potential of heat exposure," Henningsen said.

"Occupations that require high levels of physical labour while being exposed to extreme heat conditions could also experience gut symptoms from exertional-heat stress, leading to an increase in the risk of systemic shock, infections in the bloodstream or even death if not treated appropriately."

EIGS can occur when prolonged exertion in the heat diverts blood flow to the body's periphery (eg, limbs) to help cool the body. This causes the wall of gut cells to break and open as less blood is surrounding the gut and providing the cells with the nutrients they need to stay tightly sealed.

Toxins and microbes can then move from the gut into the bloodstream, causing EIGS symptoms such as nausea, vomiting, diarrhoea and possibly a full-body inflammatory response, or even death if left untreated.

Depending on the type, duration and environmental conditions, up to 85% of endurance athletes, such as marathon runners, report experiencing these gut symptoms.

How was the study conducted?

The study saw endurance-trained athletes run for two hours in 21.2-30.0°C and 35.0-37.2°C heat, with blood samples and temperatures taken at various points. It found that two hours of steady running (60% of VO2max) in hot conditions could predict the magnitude of EIGS.

Henningsen said while all parts of Australia were hot for part of the year, those working and playing sport in temperate climates such as Queensland, Northern Territory and Western Australia could be at even greater risk.

She and her team are now assessing nutrition strategies to maintain blood flow around the gut during exertional-heat stress, to help prevent gut damage. While strategies have been developed, such as carbohydrate and/or protein during exercise, consuming a high FODMAP diet and/or body cooling strategies, the new information will provide improved guidance.

"Findings from this research will not only help athletes' performance and keep them safe, but will build upon occupational health, safety and environment practices within workplace settings to prevent adverse health outcomes to individuals who are exposed to prolonged exertional-heat stress," Henningsen said.



Wireless fire alarm system

The Ramtech WES3 Wireless Evacuation and Nurse Call System has launched in Australia.

The emergency system is designed to promote worker safety on construction sites. According to the company, during a simulated emergency drill, WES3 quickly and effectively evacuated 65 people from a four-storey, commercial property under construction in just four minutes.

The system comprises manual fire and medical alarm call points that are installed onsite in accordance with the project's fire plan. These call points are designed so that the system is interlinked, meaning that all areas receive the same audible and visual alert signal, even if the fire is contained to just one of them. Greater protection is provided due to the system working on a mesh protocol, enabling WES3 to overcome common signal obstacles such as steel structures.

Additionally, Ramtech's cloud-based platform, REACT, provides accurate, real-time and custom-ised alerts and notifications of incidents and alarm activations. Relevant personnel can be notified immediately via a mobile app, text message or email on their mobile device from any location — whether onsite or not. REACT can also provide relevant documentation such as a site fire plan and further instructions.

Ramtech

www.ramtech.net.au



Bluetooth wireless earplugs

The GHS 25 I earplugs from Festool are designed to protect workers from loud noise on construction sites and in workshops. Wearers can also simultaneously make phone calls via Bluetooth 5.2 with true wireless technology.

Wearers can hear ambient noises such as speech within a safe listening volume (up to 79 dB) by using the conversation mode. It is not necessary to remove the ear protection to speak to colleagues, providing safety and convenience. Meanwhile, loud ambient noise outside a 79 dB level is blocked. Noise reduction is at 25 dB (NRR).

When making phone calls, the built-in microphone effectively suppresses disruptive background noise. The simple touch control operation directly on the ear protection offers convenience for the user. The GHS 25 I is also in line with the IP67 standard, and is therefore protected against dust, water and sweat. After work is done, the earplugs can simply be recharged in the charging case supplied, which also acts as a power bank for the earplugs when on the move. Charging enables up to 13 hours of runtime. Recharging in the charging case can extend the runtime by a further 25 hours.

Festool

www.festool.com.au

Lone worker safety software

The Guardian Angel Safety Safe Trips solution is designed for lone and remote workers in the field. Safe Trips allows users to easily log trip details in advance,

ensuring a proactive approach to risk management and employee wellbeing.

Integrated into the Guardian Angel Portal, Safe Trips allows organisations to address potential hazards in advance and ensure compliance with safety protocols to better protect their remote and isolated workers. The application can be used seamlessly with Guardian Angel Safety services and solu-



tions, such as duress devices and 24/7 monitoring and SOS response.

Safe Trips gives lone and remote workers an additional level of safety and hazard awareness when undertaking jobs in the field, from water sampling to maintenance and dog control. Staff members can record vital information about their upcoming work field trips, including trip dates and times, a comprehensive trip description, participant details, vehicle specifications and the tracking device for the journey.

Furthermore, the application automatically emails trip details to the staff members' managers and team leaders, facilitating seamless communication and enhanced safety oversight. The information stored in Safe Trips enables team leaders and managers to review proposed trips effectively, ensuring potential hazards are thoroughly assessed and experienced personnel are present when visiting locations with safety risks.

For organisations that already maintain a register of known hazard locations, Safe Trips can integrate via API with this register, providing valuable insights on hazards related to planned trips.

Guardian Angel Safety

guardianangelsafety.co/

PROTECTING HEARING IN THE NOISIEST JOBS

ccupational noise-induced hearing loss is one of the most common yet preventable occupational diseases.

More than 1.1 million Australians are estimated to be exposed to hazardous noise in their workplace, with construction workers, airport ground staff, farmers and miners working in some of the noisiest jobs.

In 2020-2021, 98% of accepted workers compensation claims for deafness were attributed to long-term noise exposure. The majority of compensation claims for occupational noise-induced hearing loss come from males aged 55-59 years, according to Safe Work Australia statistics.

"However, there's likely many more workers who have noise-induced hearing loss, but they don't realise it until it's too late. On average, it takes 10 years for people to seek help," said Karen Hirschausen, Principal Audiologist at Hearing Australia.

"Early detection can help prevent further damage. It's crucial to identify occupational noise-induced hearing loss as soon as possible and then take steps to reduce your noise exposure and prevent it from worsening. Hearing loss can have devastating effects on a person's wellbeing, contributing to mental health issues. It also has significant financial costs, with one study suggesting the total loss due to occupational noise-induced hearing loss was estimated to reach AU\$29.7 billion."

Those most at risk are often younger men with trade qualifications, and those living in rural or remote Australia.

According to the Making a Noise About Hearing report 2020 produced by NAL (National Acoustic Laboratories), Hearing Australia's research division, those living in rural and regional Australia are more likely to have hearing problems compared with those living in cities, with occupational noise exposure one of the biggest contributors.

The NAL report also reveals that hearing loss among farmers and agricultural workers is widespread, with statistics indicating that 65% of farmers aged between 15 and 75+ experience some degree of hearing loss.

"Compared to the general population, young farmers are around seven times more likely to have hearing loss than the general population of the same age. Almost 50% of farmers report tinnitus," Hirschausen said.

To help raise awareness of occupational noise-induced hearing loss, Hearing Australia has released a suite of resources called 'The Prevention Toolkit'. The toolkit includes factsheets, posters, infographics and social media content.

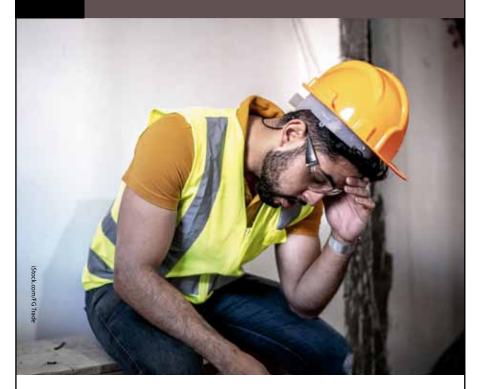
"Noise-induced hearing loss is avoidable, and more needs to be done to protect workers in high-risk industries such as construction, manufacturing and agriculture. No one should lose their hearing because of their job," said Kim Terrell, Managing Director at Hearing Australia.

10 top tips for hearing protection while on the job:

- 1. Purchase equipment which generates lower levels of noise emissions.
- 2. Always wear appropriate hearing protection such as earmuffs or earplugs — especially in noisy environments.
- 3. Ensure noise reduction aids, such as mufflers, which are used on equipment or tools, are in working order; and report any faults to managers/employers.
- 4. Limit the time spent in noisy environments and take regular breaks in quiet spaces.
- 5. Use barriers or screens to block the direct path of sound.
- 6. Use remote controls to operate noisy equipment from a distance.
- 7. Participate in training programs about hearing protection and workplace safety.
- 8. Become familiar with safety guidelines and procedures.
- 9. Report any hearing-related issues or discomfort immediately to a supervisor, safety officer or HR team.
- 10. Get hearing checked regularly, and if any changes are noticed, see a doctor or an audiologist.



Using wearable technology to beat the heat



Heat-related illness is a hazard for anyone working outside, particularly during the summer months, and can be fatal if left untreated.

However, it is preventable - as shown by a company based in the United Arab Emirates that has deployed wearable technology as part of its campaign to protect workers from the heat.

Emirates Global Aluminium, which has focused for more than a decade on eliminating heat-related illness, recently expanded its use of the Kenzen wearable technology platform. It was been rolled out to 350 employee volunteers to protect against the harsh UAE summer.

EGA's 'Beat the Heat' program is an intense, summer-long effort across the company's operations. Employees are trained to detect the early signs of heat stress in themselves and others. EGA conducts hydration tests before and during shifts, and employees are encouraged to take regular breaks and cooling showers. Cooling booths, drinking stations, icemakers and portable air conditioning units in EGA production areas help keep people cool.

Kenzen's wearable technology offers the potential to further protect the company's outdoor workers by continuously reporting core body temperature, heart rate, activity and other body indicators in real time, allowing both the wearer and EGA's safety team to detect heat strain in the body before the early signs can be felt. EGA also used wearable devices for the first time in a trial of 50 volunteers last summer.

Despite industrial processes that generate further heat, and which must run and be tended around the clock, EGA achieved zero heat-related illnesses in 2019 and 2022. In 2021, EGA recorded two cases of heat-related illness requiring treatment at the company's onsite medical centres. In both cases, the employees received rehydration via intravenous drips and fully recovered within hours.

"Heat-related illness is a serious threat to health and even life in our region, and increasingly around the world. Our work has shown that heat-related illness is entirely preventable, even in challenging industrial environments like ours. Wearable technology offers the potential to protect people even more, and I am looking forward to the results of the wider trial we are conducting this summer," said Abdulnasser Bin Kalban, Chief Executive Officer of Emirates Global Aluminium.

Kenzen www.kenzen.com



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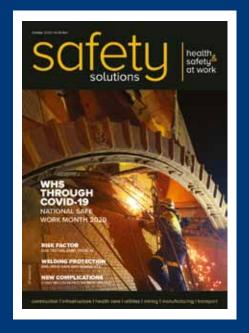
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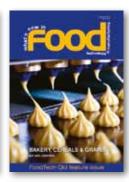


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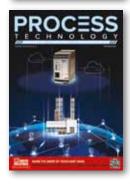










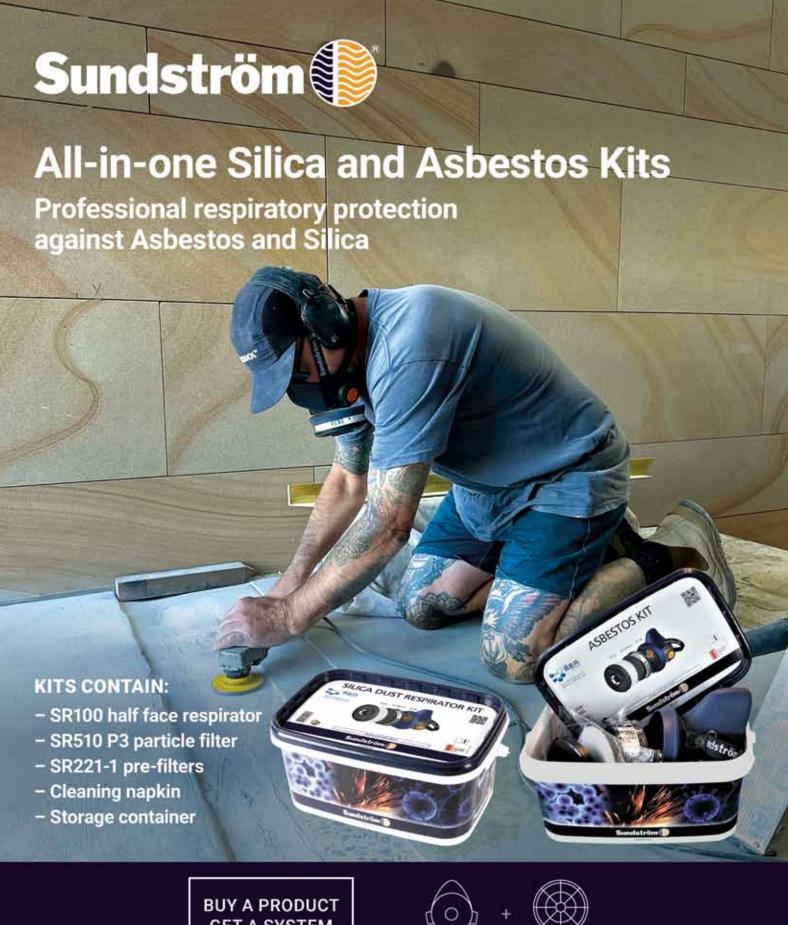












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