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Health, Safety & Security Review

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Middle East

PPE IN THE ERA OF COVID-19

INSIDE...

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Combustible dust
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August 2020 in this issue...



News

Market news 4
HSE developments from around the region

PPE

PPE in the era of COVID-19 10
Leading PPE suppliers share their thoughts on the PPE market and the importance of selecting the correct PPE

Safety

Working in leading edge applications 13
Advice for safe edge working

The hidden dangers of combustible dust 18
The hazards of combustible dusts are often underestimated

Occupational health & safety

Putting worker health and safety first 20

The safety of workers must be at the heart of COVID-19 recovery plans

Setting the standard 22
An ambitious project in Saudi Arabia is raising the bar for health, safety and sustainable development standards

Technology

Digitalisation of EHS processes - a top-down approach 24
The key drivers in adopting technology to manage HSE

Innovations

Product news 28
The latest product releases in health and safety

Arabic

Analysis 4
Front cover image: Adobe Stock

editor's note

With the easing of lockdowns and resumption of most commercial and industrial activities, the safety of workers should be at the heart of COVID-19 recovery plans for every business. Our article on p20 provides some useful advice. Getting back to work safely in this new normal throws the spotlight on PPE, both in the workplace and in our everyday lives, with the need to ensure the selection of high quality and appropriate PPE (see p10). In this issue we also cover safety at height (p13), the hidden dangers of combustible dust (p18) and the digitalisation of EHS processes (p24), as well as featuring The Red Sea Project in Saudi Arabia, which is setting new standards of health, safety and sustainability.

Louise Waters, Editor

Editor: Louise Waters

Email: louise.waters@alaincharles.com

Editorial and Design Team: Mariam Ahmad Prashanth AP, Fyna Ashwath, Miriam Brtkova Praveen CP, Manojkumar K, Nonalynka Nongrum Abhishek Paul, Samantha Payne, Rahul Puthenveedu and Deblina Roy

Managing Editor: Georgina Lewis

Magazine Sales Manager: Richard Rozelaar
Tel: +44 20 7834 7676 Fax: +44 20 7973 0076
Email: richard.rozelaar@alaincharles.com

Head Office:

Alain Charles Publishing Ltd, University House,
11-13 Lower Grosvenor Place, London SW1W 0EX, UK
Tel: +44 20 7834 7676, Fax: +44 20 7973 0076

Middle East Regional Office:

Alain Charles Middle East FZ-LLC,
Office L2-112, Loft Office 2, Entrance B,
PO Box 502207, Dubai Media City, UAE
Tel: +971 4 448 9260, Fax: +971 4 448 9261

Production: Srinidhi Chikkars, Swati Gupta, Nelly Mendes and Arjun S
E-mail: production@alaincharles.com

Subscriptions: E-mail: circulation@alaincharles.com

Publisher: Nick Fordham

Chairman: Derek Fordham

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GCC leads in COVID-19 recovery rates

Health

NEW RESEARCH HAS revealed that the COVID-19 recovery rate in GCC countries is significantly higher than the global average, according to figures from CoronaTracker.com, which provides data from a variety of international media and public agencies, including the World Health Organisation (WHO), the Disease Control and Prevention Centres, and the European Centre for Disease Prevention and Control.

According to the figures, an average of 81.4 per cent of cases in Bahrain, Kuwait, Saudi Arabia, the UAE and Oman have recovered – well above the global figure of 57 per cent. Each GCC member country also individually scored well above the global average.

Dr Waleed Khalifa Al Manea, an undersecretary at the Bahrain Ministry of Health, commented, “International praise for our work from the WHO is evidence that we have taken the right approach to tackle the virus. This should be an incentive to remain

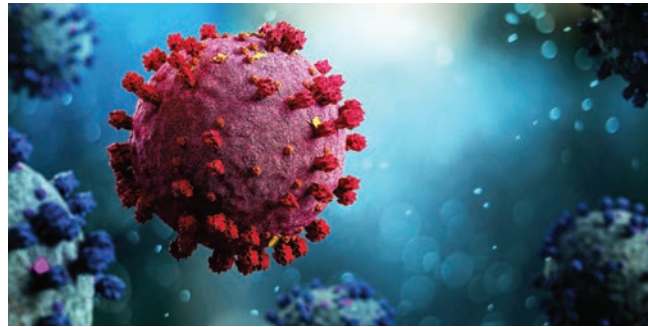


Image Credit: Adobe Stock

The GCC's recovery rate from COVID-19 is higher than the global average.

resilient as national containment efforts continue.”

The GCC earlier earned praise from the WHO for its early, rapid, and robust collective response to the outbreak. Bahrain was one of the world's first countries to shut down all educational institutions and to take swift action on ground flights until there were quarantine facilities. Meanwhile, Saudi Arabia banned foreign pilgrimage to the holy city of Mecca before even one case of infection had been registered. Equally crucial has been

technological innovation and digital connectivity. In the UAE, police deployed smart helmets capable of scanning hundreds of people's temperatures every minute. Bahrain, meanwhile, has used multilingual robots on isolation wards to check body temperatures, administer medicines, serve meals and sterilise treatment rooms with beams of ultraviolet light. Both Bahrain and the UAE lead much of the world in testing rates, ranking fifth and sixth respectively globally for rate of tests per million people.

F5 Networks launches new PoP

Security

TECHNOLOGY COMPANY F5 Networks has launched a new Silverline Cloud Platform Point of Presence (PoP) in Bahrain. The move is part of a global expansion strategy to help clients better adapt to rapidly evolving threat imperatives and new opportunities for cloud consumption.

Silverline allows security services to be deployed for every app – irrespective of location – without upfront investments in IT infrastructure and support. The new PoP will provide improved application performance and reduced latency for customers of Silverline Managed Services in the Middle East and Africa.

“Bahrain PoP enhances our ability to provide high-value managed security services. It is also an acknowledgement of the Middle East's continued and growing leadership in the cloud computing space,” said Mohammed Abukhater, F5's regional VP for the Middle East and Africa.

Emirates Driving Institute receives RoSPA award

Driver safety

DUBAI-BASED EMIRATES DRIVING Institute has received a RoSPA Fleet Safety Trophy for working hard to ensure its staff, customers, suppliers, contractors, and partners get home safely to their families at the end of every working day.

Following the principles of the RoSPA National Safe Driving Award scheme, these awards are judged on verifiable historical performance data of accidents and the

identification of an effective, cohesive corporate road risk management programme.

Mahmood Al-Khamis, director – Overseas Projects, Emirates Driving Institute said,

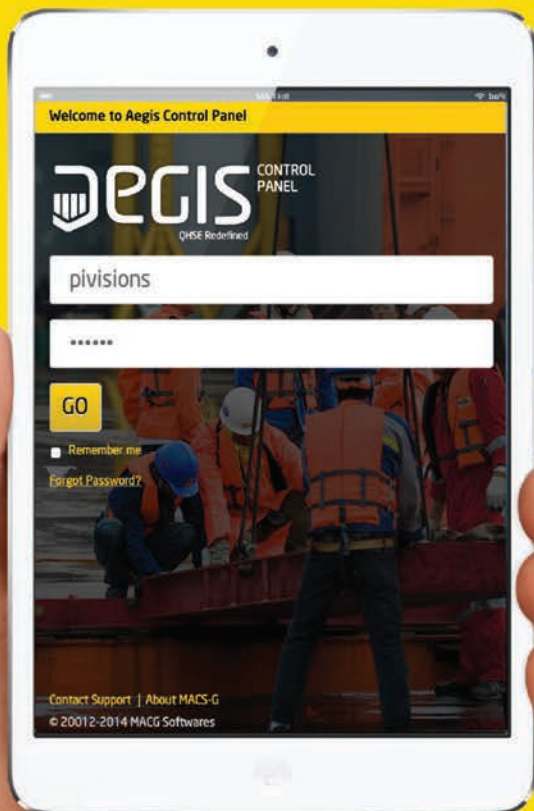
“We are extremely honoured to win this prestigious safety award from the most sought-after global accolades in health and safety. At EDI, we strive to create better, skillful, and safe drivers, and this award is a strong reiteration of our commitment towards it. It is also a reward for all our staff

members who have successfully contributed over the years to create the brand ‘Emirates Driving Institute’. This award inspires us to further strengthen our reputation as the leading learner and driver training organisation in the Middle East.”

Organisations that receive a RoSPA Award are recognised as being leaders in health and safety practice. Nearly 2,000 entries are received annually for the UK's longest-running health and safety industry award.

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2

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Strata diversifies into health technology

STRATA, MUBADALA INVESTMENT Company's aerospace manufacturing unit, is looking to diversify into the health technology sector as the Covid-19 pandemic fuels demand for medical equipment, according to a report in the UAE's The National.

The company is holding talks with potential partners on seven to eight projects to produce personal protective equipment and medical consumables, chief executive Ismail Abdulla told the newspaper.

It seeks to bring more high-tech manufacturing capabilities to the UAE and a decision on new health technology investment could be reached within three to six months, he said, stressing that it is looking at long-term opportunities

Strata is looking to diversify beyond aerospace as the coronavirus pandemic has decimated the global aviation industry, as a result of which Strata is reported to have recorded a 40 per cent decline in orders for aircraft parts. It expects to start



Image Credit: Mubadala Healthcare

Strata is diversifying into health technology and the provision of essential medical supplies in the fight against COVID-19.

production of PPE as demand for medical equipment increases due to the spread of the virus.

"We are pivoting into a new area and believe we can generate some exciting opportunities to bridge that 40 per cent reduction in demand," Mr Abdulla said.

Strata launched a collaboration with Honeywell in May to produce N95 masks at its Al Ain facility, the first of its kind in the GCC region, which will have an annual output capacity of more than 30 million masks. This will

help address the critical demand for N95 respirators, bolster the resilience of the UAE's PPE supply chains and transform the UAE into an exporter of this critical PPE product, according to the company.

Strata is also collaborating with Mubadala Healthcare to manufacture essential medical supplies and support the fight against COVID-19, utilising additive manufacturing to produce intubation capsules, face shields and ear guards.

New contract for Iris ID

Security

IRIS ID IS providing Securiport, an airport security and border management technology provider, with its contactless IrisAccess biometric readers. This will enhance traveller convenience and safety, while helping prevent criminals from crossing borders undetected, said CEO and Securiport president, Enrique Segura.

Iris ID vice-president, global sales and business development, Mohammed Murad, added,

"Securiport's solutions also include proprietary Epidemic Control System software to identify and control possible carriers of viruses such as COVID-19 and ebola. Our contactless technology can authenticate the identities of people carrying digital health certification. Our readers are also effective when people are wearing personal protective equipment like gloves, masks, and goggles. We are seeing a huge increase in worldwide demand for non-contact and frictionless biometric applications."

Al Muqarram urges use of certified flame-retardant building materials

Fire safety

THERE IS AN urgent need for stakeholders in the construction sector to ensure their buildings and tenants are protected against fires, most of which occur during the summer season, said Al Muqarram Group.

"The recent spate of fires in the region, if not brought under control, could reverse the gains made in the real estate sector. It is, therefore, crucial that players in the construction and real estate sectors embrace

technologies that will protect buildings against fires," said Safdar Badami, managing director, Al Muqarram Group.

As the region continues to undertake mega-building projects, the focus has shifted to the hundreds of high-rise buildings being built using a variety of flammable materials which generate fire safety concerns.

"It is encouraging to see that the relevant authorities are enforcing tighter regulations and guidelines to protect buildings and the

people living and working in them. On our part, we are also investing in research and development to produce highly-effective products that help to insulate buildings against fire hazards," added Badami.

Al Muqarram Group produces Dolphin Fire-Stop Silicone Sealant, a single component, neutral cure, gun-grade certified fire-stop product that has been approved by the Sharjah and Abu Dhabi Civil Defence and can withstand extreme heat for up to four hours.

→ events calendar 2020-2021

October			
12-14	OFSEC	OMAN	www.muscat-expo.com/ofsec
November			
2-4	IFSEC FIREX	CAIRO	www.ifsecandfirexegypt.com
9-12	ADIPEC	VIRTUAL EVENT	www.adipec.com
TBC	Dubai HSE Forum	DUBAI	www.hse-forum.com
December			
2-3	International Security Expo	LONDON	www.internationalsecurityexpo.com
January 2021			
24-26	Intersec	DUBAI	https://intersec.ae.messefrankfurt.com
March 2021			
TBC	Bahrain HSE Forum	MANAMA	www.hse-forum.com
TBC	Kuwait HSE Forum	KUWAIT	www.hse-forum.com

Readers should verify dates and location with sponsoring organisations, as this information is sometimes subject to change.

Partnership for testing hospitality sector employees

Infection control

RAS AL KHAIMAH Tourism Development Authority (RAKTDA) has partnered with the National Crisis & Emergency Management Authority (NCEMA) and Ras Al Khaimah Preventive Medicine Department (PMD) to provide free COVID-19 PCR testing for staff in the hospitality sector in the emirate.

This partnership complements existing efforts by the authority to implement the highest level of safety and precautionary measures as restrictions on domestic and international tourism are eased, and inbound visits to Ras Al Khaimah continue to increase.

RAKTDA has supervised regular COVID-19 screenings for the hospitality staff at the hotels of the emirate, and through this



The partnership will see free COVID-19 PCR testing for hospitality staff in the emirate.

Image Credit: RAKTDA

partnership with NCEMA and the PMD, further free testing will be provided to ensure the safety of both guests and staff.

Raki Phillips, CEO of RAKTDA, commented, “Our industry has been resilient in the face of challenging times, and we have unveiled a number of strategies, ranging from tourism support initiatives to earning recognition as the world’s first

safe city and the first safe emirates to be certified by Bureau Veritas and the World Travel & Tourism Council (WTTC).

“These measures ensure our partners in the sector can continue to operate as we enter the ‘new normal’. Ongoing testing of hospitality staff is an important step in our efforts to reaffirm to our visitors that the emirate has taken extensive

measures to prioritise the safety and wellbeing of guests and residents.”

Mahra Mohammad Bin Sray, logistics support and field examination officer at RAKTDA, said, “Conducting regular COVID-19 tests is a mandatory procedure to flatten the curve and control the number of cases nation-wide. With visitors returning to Ras Al Khaimah, we have to ensure that all people working in the hospitality sector are regularly tested and adhere to the necessary precautions.”

As part of RAKTDA’s ‘Stay Safe’ Hotel Certification, hospitality staff testing is conducted to align with global best practices and enhance the security measures in place across the 45 hotels in the emirate.

PPE in the COVID-19 era

Leading PPE suppliers share their thoughts on the PPE market and offer advice on the selection of the correct product.



Image Credit: Adobe Stock

“The awareness of PPE protection overall has increased in both industrial and commercial markets.”

Daryl Johnson, regional sales manager Gulf region, JSP Safety

JSP Safety globally have unsurprisingly seen a major increase in demand for all of our COVID-19-related protective products. Much of this demand is seen in our disposable masks range, and also in our semi disposables, as well as in a surge in the use of PAPR (Powered Air Purifying Respiratory systems). Eye and face protection, and socially distancing products such as cones and barriers have also seen an increase.

With ‘PPE’ being front page

news, the awareness of PPE protection overall has increased in both industrial and commercial markets, and PPE manufacturing worldwide has become incredibly important to meet the current demands to combat the virus. The importance of increasing our manufacturing capabilities globally and local stocking of PPE products has become apparent during this crisis. This, in turn, has highlighted the importance of using correct and appropriate PPE, not only in the workplace, but in our everyday lives, and this looks set to continue for some

time to come.

We have introduced some new innovative products into our range to help combat the spread of the virus when in close proximity to others, and then taking this further by creating educational content on our website (www.jspsafety.com), using a specific COVID-19 support section, highlighting all the recommended NHS products. These products can also integrate with all our other PPE products.

The difficulties we have been facing are the longer lead times and in some cases very high raw material prices, due to extremely

PPE manufacturers are seeing a major increase in demand for COVID-19-related products.

high demand. We have also prioritised the healthcare frontline whilst trying to maintain our existing industrial business customers, however as a true manufacturing company, we do have control over the lead times and the allocation of our production, with our customers being extremely professional and patient when frontline healthcare has had the necessary priority.

We have seen an increase in substandard/non-compliant products coming into the market as a global trend, in part due to the increased demand, and some opportunistic companies and individuals trying to take advantage of this situation. Many sub-standard disposable masks have been introduced into the GCC region and we are aware that the KN95, which has not been deemed acceptable to EN standards, is creeping into hospitals and clinics in the UAE, which is a cause for concern. Purchasers need to make sure they do their due diligence, by checking the certification and contacting third party certification companies or notified bodies to confirm their authenticity.

Education is definitely key in this, and it is part of our role as manufacturers, along with the local metrology agencies to educate the market as best as possible for people to understand what they should or should not be wearing during this time.

At JSP Safety FZE here in the UAE or any of our other global hubs we are constantly contactable to offer advice and training on the correct use of “above the neck” PPE including RPE, and welcome anyone interested to contact us directly on info@jspafety.ae



Image Credit: MSA Safety

MSA Safety has seen an increase in demand for integrated head and face protection.

“As we return to work with a renewed sense of appreciation and vigilance, safety will become more prominent within the workforce.”



Image Credit: JSP Safety

JSP Safety's Force 8 splashguard can be fitted to a Force 8 halfmask to help prevent exhaled bacteria and virus hitting the wearer's face.

Adil Afzal, customer marketing manager, MSA Safety Middle East

As an essential business within the safety industry, we have been able to continue operating throughout lockdown while still focusing on protecting the health and safety of our workforce. Many of our customers have and continue to require protection to continue to work in times of global crisis, including first responders. We've also seen demand for PPE generally increase as restrictions are lifted.

In particular, we've seen a significant increase in demand for integrated head and face protection – safety helmets that can integrate with spectacles and visors. Since the pandemic we have seen a definite trend towards customers preferring this to separate, individual items of PPE. As workers get used to a ‘new normal’ we expect this trend to continue.

From a practical workplace perspective, issuing workers with a single integrated safety helmet and visor/over glasses solution offers several advantages. Our V-Gard 950 is doing really well at the minute in the context of this integrated protection. We developed it in conjunction with 250 businesses and it was beta tested with more than 300 workers. It is the lightest helmet of its category on the market.

There is no doubt that the recent pandemic has had a big impact on organisations around the globe. In this ‘new normal’, now more than ever, safety will play an important role in enabling teams to operate efficiently and effectively.

As we return to work with a renewed sense of appreciation and vigilance, safety will become

more prominent within the workforce. Head and face protection will now be required in almost every industry, and workers in all situations need to be focused on their task, confident in their PPE and assured they can get on with their job safely. So, taking all that into consideration, we are seeing, and expect to continue seeing, an increasing appetite for high quality PPE.

Naturally, ensure the right PPE is chosen for the right application – understand the scenario, the risks and then think about what item is best. It is also important to check all PPE is tested and approved to the right standards and meets the latest legislation. An upfront investment into higher quality PPE can give a much better long-term result.

The current priority for everyone must be getting people working safely in a new normal, and that means a focus on the best possible PPE.

Jason Lin, general manager, DEREKDUCK INDUSTRIES CORP.

Since the outbreaks of COVID-19 in early 2020, the demand for ULTITEC protective clothing has surged in the Middle East, including UAE, KSA, Qatar, Jordan and Kuwait. Owing to the shortage of certified PPE, purchasers in these countries are eager to request the products which meet the required standard.

Prior to COVID-19, ULTITEC offered the whole range of protective clothing to the global market. However, due to the increased PPE demand for disease control during the pandemic,

ULTITEC put priority on providing the products of ULTITEC 2000 and ULTITEC 3000T, which protect against infective agents (EN14126) as well as exceeding WHO protective clothing specifications both option 1&2 for infection control.

In the first half of 2020,

Image Credit: ULTITEC



The ULTITEC 3000T coverall protects against infective agents.

COVID-19 caused a surge in demand for coveralls in the global market, and this resulted in higher cost and limited supply as well as longer lead time. ULTITEC has taken vertical integration and maintained the stability of the supply chain to minimise the impact.

We have seen lower quality products springing up in the past couple of months. If products are made below the satisfactory quality or lack of surveillance, it will be a higher risk for the wearers to rely on this coverall and get appropriate protection. They may not be aware that they are equipped with substandard PPE, and then execute their mission without caution in the infectious environment. Hence, it will be important for the purchaser to ensure the quality meets the consistent standard.

Purchasers should select the PPE products which meet the requirements of Regulation (EU) 2016 / 425 and fit the protective clothing recommendation from WHO. Secondly, a reputable and experienced PPE brand is also recommended as they offer reliable and certified products for years. ULTITEC has built its worldwide know-how experience over the past decade, and consistently keeps the brand promise of providing premium quality and comfortable products to front-line users as their safety shield.

Melanie Kamann, corporate spokeswoman, Dräger

We are seeing a significant

“We have seen lower quality products springing up in the past couple of months.”

increase in global demand, especially for ventilators, and increased demand for ventilation accessories and light respiratory protection. The increase in demand began at the beginning of the year in China and Asia and is now continuing in many other countries, in parallel with rising infection rates. While usually hospitals are our customers, at present it is increasingly health authorities or government agencies that ask for our products.

As a result of the COVID-19 pandemic, we decided to expand our production capacity for light respiratory protection in the USA and Europe. To this end, we are building one new plant each in the USA, France and the UK. Existing production facilities in Sweden, South Africa and Germany will be partially expanded. Together they will form a production network that will allow us to react flexibly.

Our international production network enables us to react very quickly and specifically to national or local requirements on the one hand, and to cover international requirements in a closely networked and flexible manner on the other. Dräger thus operates a highly responsive manufacturing system for certified FFP respiratory protection masks, with a product design originating from our own development in Germany. ♦

Working in leading edge applications

Adhering to the relevant standards, following best practice, comprehensive training and selecting the right equipment for the job, are critical for safe edge working, says Tim Bissett, technical manager for fall protection at MSA Safety.

“Work in leading edge applications presents its own unique challenges and safety hazards.”



Image Credit: Adobe Stock

“LEADING EDGE” WORK or “edge working” is defined as working at any unprotected edge of a platform, floor, or other construction point where there is a risk that the lifeline a worker is using may come in contact with an exposed edge, or edge of the working surface.

In many scenarios, leading edge applications occur when a worker is connected to an anchor point below their back D-ring, although it is also possible when anchor points are above this position.

Work in leading edge applications presents its own unique challenges and safety hazards, one of which is the greater risk of lifelines being frayed, cut, or severed on impact with the edge in the event of a fall. This is complicated further should the worker swing after falling, creating a pendulum-like motion. The friction this causes can increase the likelihood of the lifeline being cut or severed.

These potential risks place a sharp focus on testing criteria within relevant standards, following best practice and

choosing the right equipment for the job.

Standards relating to leading edge work

Before any leading edge work takes place, check that the equipment you’re using adheres to the relevant standards. Those that apply in the UK are:

PPE Regulation (EU) 2016/425

These regulations, which were first introduced in 2018, imposed additional requirements on manufacturers of PPE, including an assessment of the risks against

Leading edge work should not be undertaken lightly.

which the PPE is intended to protect and changes in requirements for product marking. It is vital that purchasers of PPE take steps to ensure that their suppliers meet these new regulatory requirements. You can do so by looking out for the CE marking affixed to PPE.

EN 360 and CNB/P/11.060

EN 360:2002, relating to retractable fall arrest devices, is currently under revision and it is likely that an updated standard will encompass twin-legged, as well as single-unit retractable devices. Overhead or traditional SRLs meeting the requirements of EN 360:2002 are not necessarily designed or rated to arrest a fall over an edge. Necessary steps should always be taken to select the absolute right equipment for the job at hand.

CNB/P/11.060 is a coordination document associated with EN 360:2002. It outlines the testing criteria for the use of SRLs in leading edge applications, specifically how SRLs must carry evidence of dynamic performance, dynamic strength, and static strength within a leading edge application with the retractable lifeline stressed over an edge. Adherence to this coordination document and the testing criteria within it are central to mitigating the potential risk of lines fraying or being cut in the event of a fall.

The hierarchy of fall protection

The hierarchy of fall protection helps to prevent a worker getting into a situation where they could fall by prioritising various applications from “most preferred” to “least preferred”. Leading edge applications will

inevitably mean working in fall arrest – the “least preferred” option. It is not something to be taken lightly and should always be a last resort, taken only once the first three options outlined below have been explored.

1. Hazard elimination. This means the removal of the hazard by designing it out wherever possible. This is the “most preferred”, safest option. If there’s no hazard, there’s no fall.

2. Collective (or passive) fall prevention. This defines products that prevent access to a fall hazard. A guardrail, for instance, acts as a physical barrier between the worker and the hazard.

3. Fall restraint. If working in fall restraint then there is no barrier between the user and the fall hazard. Instead, they are using fall protection equipment – harness, lanyard, and anchor point – that will not allow them to reach the hazard. For example, a worker who is working in fall restraint may use a six-metre lanyard to connect to an anchor point at least seven metres away from the fall hazard.

4. Fall arrest. This defines equipment designed to catch (or “arrest”) the worker in the event of a fall. This is the “least preferred” option because arresting a fall exposes the worker to significant forces, putting them at risk of physical harm. Rescuing a fallen worker can also be a challenging and potentially dangerous process.

If – after following this hierarchy – edge working remains the only option available, following are some important considerations:

Choosing the right harness for the job

All harnesses on the market

should be compliant to the relevant regulations, but a good harness – one that is comfortable, does not restrict movement, and mitigates impact on the user’s body in the event of a fall – goes beyond mere compliance.

Fit is fundamental to achieving this. Leg and shoulder straps should be easily adjustable for a comfortable, snug fit. The user’s finished position in a fall scenario should be heads up and slightly forward-leaning. This is important for correct distribution of load through the leg straps and load through the body, such that the spine and pelvis are being properly supported and protected. In a fall event, a good quality, well-fitted harness can help limit the effects of suspension trauma.

In addition to fit, many design features dictate performance, such as appropriate materials for improved fit and speed of donning, or how dirt may affect the webbing. If in doubt about which harness is most appropriate, consult with a reputable manufacturer.

The importance of training

Making sure your workers have completed a comprehensive training programme is absolutely essential. Not only do employers have a responsibility to provide suitable information,

“This is the “least preferred” option because arresting a fall exposes the worker to significant forces, putting them at risk of physical harm.”

instruction and training for their employees, but training gives those working at height the confidence, knowledge and skills required to carry out their work safely and efficiently. It will also teach operatives how to properly use, care for and maintain their equipment.

If you must, be prepared

For many, having followed the hierarchy of fall protection, edge working remains unavoidable. If that is the case stop, think and ask yourself these three questions:

1. Have my workers received the very best training for the specific job at hand? Are they as prepared as they can be to work safely and confidently?
2. Am I up to speed with and implementing the very latest legislation and best practice processes?
3. Is the equipment I am using not only compliant with the relevant legislation, but designed specifically for work in leading edge applications?

Any reputable fall protection provider will be willing to help guide you on implementing the very best and safest work at height solutions, particularly important when working in leading edge applications. ♦

Tim Bassett has been technical manager for the Latchways Engineered Systems range for 18 years. Part of his role is to contribute to the development of product standards for PPE. He is a member of the BSI Technical Committee PH/5, from which he convenes two working groups for CEN/TC 160. Visit www.MSAafety.com to view MSA’s full fall protection range, including training courses.

Fighting COVID-19 with electrolysed water

Hughes Safety showers has introduced a new decontamination misting shower, which uses electrolysed water as a disinfectant.

Recent publications have cited electrolysed water as a powerful natural tool for killing bacteria and viruses.”

IN THESE UNPRECEDENTED times as more businesses begin to re-open, the safety of the workforce is paramount.

Decontamination showers play an important role in removing contaminants from protective clothing prior to removal, and can contribute to supporting COVID-19 containment strategies.

Hughes Safety Showers has launched the PORTAdec 500, a portable multi-nozzle decontamination misting shower, suitable for general use as part of overall hygiene facilities or for the decontamination of PPE prior to removal.

The unit offers a top-to-toe decontamination of workers or of PPE prior to entering site or upon its removal, via a fine mist of electrolysed water.

A self-sanitising mat at the base of the unit ensures the soles of shoes are decontaminated prior to stepping onto the drying area of the demarcation zone mat. A 15 litre cylinder is filled with the electrolysed water and requires no power, allowing the unit to be entirely portable and suitable for use both indoors and outdoors.

All components are stored within a transportable case on



Image Credit: Hughes Safety Showers

wheels and are quickly deployed.

“With more than 50 years expertise in the design, manufacture and supply of emergency safety showers, eye/face wash and decontamination equipment, Hughes are ideally placed to offer innovative engineered solutions for demanding life-saving situations and the current circumstances we now face,” commented Paul Darlington, managing director of Hughes Safety Showers. “With enquiries from manufacturing

and petrochemical sites to dentists and adult learning centres, we believe this product could help many businesses in supporting their COVID-19 containment strategies.”

Electrolysed water is produced by the electrolysis of ordinary tap water containing dissolved salt (sodium chloride) to produce a solution of hypochlorous acid (HOCl) which can then be used as a disinfectant.

Totally natural, non-toxic and completely safe for human use, electrolysed water can be used on clothes and skin and is already in use throughout many industries such as healthcare, food safety, water treatment and for general sanitation purposes.

Recent publications on the fight against the COVID-19 virus have also cited electrolysed water as a powerful natural tool for killing bacteria and viruses. It kills 99.99 per cent of bacteria, fungi and viruses, and studies have shown it to be 50 to 100 times more effective than chlorine bleach at killing bacteria and viruses upon contact. Within a matter of seconds, it can oxidise the bacteria, unlike bleach which could take up to half an hour to do the same, whilst also being gentle on the skin. ♦

The PORTAdec 500 portable decontamination misting shower.

Practising better burner management

Mohamed Salman, SIS business development manager – MEA, Emerson Automation Solutions, discusses the main factors that need to be taken into consideration for a reliable combustion system.



Image Credit: Adobe Stock

“A BMS provides critical combustion safety functionality.”

A good burner management system can ensure safe and efficient combustion equipment.

Plants that fire boilers, heaters, furnaces, and other combustion equipment are at their most vulnerable during startup and shutdown. Fortunately, an organisation can implement measures to improve its burner management system (BMS) and ensure safe, efficient, and working combustion equipment. Whether a plant is being built from the

ground up, or an organisation is looking to improve existing BMS equipment, there are five key issues plant decision-makers should consider in order to have a reliable combustion system.

Issue 1: Safe, productive operation

A BMS provides critical combustion safety functionality. It manages safe light-off, startup,

and shutdown of the combustion unit while monitoring the process for unsafe conditions. To properly protect people and the plant, it must be designed properly to perform well over the lifecycle of the equipment.

Modern best practices should also be deployed to complement the BMS, as well as selecting and maintaining reliable field equipment, leveraging safety-

rated equipment, collecting and analysing critical BMS data and using a sequenced approach to logic design.

Issue 2: Simplified configuration and troubleshooting

The oldest legacy systems were made of relay panels designed to perform safety logic sequences. These large, hardwired Boolean logic installations were relatively reliable but difficult to troubleshoot or change. While Boolean logic still works, there is a better way – a sequenced approach.

Sequenced-based configuration changes the paradigm on BMS logic. It can be easily envisioned and understood; the permissives and operator actions are documented; and the outputs associated with each step are clearly defined. Also, the complete BMS logic design for a burner can be defined and documented on a single, relatively small spreadsheet.

Issue 3: Holistic approach to BMS maintenance

Organisations striving to ensure the best availability for their BMS should take a holistic approach to

maintenance, evaluating and maintaining all equipment connected to the combustion system. Whether a BMS enhancement is an update to a legacy system or an entirely new implementation, understanding the interconnectivity between the system and its equipment is essential.

Burner Management Project Considerations

To properly protect people and equipment, a BMS must be properly designed from the outset, and well maintained to provide peak performance over the lifecycle of the equipment.

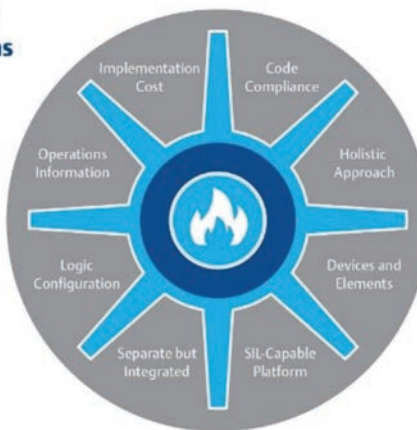


Image Credit: Emerson Automation Solutions

“An integrated control architecture results in reduced lifecycle operating and maintenance costs.”

Issue 4: Improved safety and simplified lifecycle maintenance

Although a safety integrity level (SIL) rating is not always applied to safety functions related to fire heated equipment, standards and best practices now require the use of control hardware that carries a SIL rating, which

enables better evaluation of the selected BMS.

SIL-rated controllers include a level of functionality and diagnostics that make them particularly well suited to safety applications. As SIL-rated devices significantly decrease the probability of failure, they result in fewer problematic incidents, less downtime, and increased safety at reduced costs.

When designing a BMS, as with any safety instrumented system (SIS), the safety function must be physically or logically separated from the control process controls.

An integrated control architecture results in reduced lifecycle operating and maintenance costs and simplified engineering, leading to front-end

savings. After the system is put into production, the use of integrated hardware allows a plant to manage one system instead of two, with results that drive value across the lifecycle:

Modern automation systems such as Emerson’s DeltaV integrated control and safety system can provide all the benefits of a single system while still maintaining the required separation for the logic solver.

Issue 5: Efficient operation and maintenance

The sequenced approach to safety logic design allows organisations to build an improved user interface so that their personnel can quickly and effectively react to what is happening in the BMS. The burner management sequence is presented using clear, intuitive graphics, differentiating all possible states and highlighting the active stage of the process.

The sequenced approach also enables customisation of the BMS interface. Different sites may require operations interaction to start different parts of the process or may choose to automatically advance past individual steps. A sequenced approach makes such custom designs simple to implement.

Applying modern best practice strategies to build, update, or maintain your BMS can improve safety and increase uptime for your most critical processes. Whether installing a brand-new BMS or searching for ways to improve availability of an existing system, taking advantage of new technologies can deliver significant benefits to improve functionality and lower total cost of ownership across the lifecycle of your equipment. ❖

Vision for Burner Management System Performance



A holistic approach to BMS design and maintenance helps ensure peak system performance across the lifecycle of the equipment.

The hidden dangers of combustible dust

Image Credit: Adobe Stock

Combustible dusts are present in many workplaces and industrial facilities, but the hazards are often underestimated. Louise Waters reports.

“There are many kinds of products and materials from which combustible dust explosions could occur.”

Combustible dust explosions have occurred in many different types of workplaces and industries.

MANY WORKPLACES HANDLE combustible particulate material which poses fire and explosion hazards. Combustible dusts are fine particles that can catch fire and present an explosion hazard when disturbed and released into the air in a confined area where there is an ignition source, such as a welding spark or static electricity. This can cause catastrophic loss of life, injuries, and destruction of property.

The five elements of a dust explosion are typically referred to as the ‘Dust Explosion Pentagon’. They are:

- A fuel, which is the combustible dust.

- An oxidant, which is typically the oxygen in the air.
- An ignition source capable of igniting materials when they are dispersed as a cloud.
- Dispersion, which is when the accumulated dust is spread out and creates a dust cloud.
- Confinement, which leads to pressure rise and potentially vessel rupture, facility obstruction, or structural collapse.

Sometimes a primary explosion will shake loose other accumulated dust, or damage a containment system. When this becomes airborne, it can ignite, causing a secondary explosion, which is often more powerful

than the first one.

There are many kinds of products and materials from which combustible dust explosions could occur if they are processed in powdered form. According to the USA’s OSHA, types of dusts include, but are not limited to, metal dust, such as aluminium and magnesium; wood dust; plastic or rubber dust; biosolids; coal dust; organic dust, such as flour, sugar, paper, soap, and dusts from certain textiles. Dusts are created by processes such as abrasive blasting, cutting, grinding, crushing, mixing, sifting, polishing or screening dry materials. The build-up of dried residues from the processing of

wet materials can also generate dusts.

Serious dust explosions

Dust explosions have occurred in many different types of workplaces and industries, including grain elevators; food production; chemical manufacturing (eg. rubber, plastics, pharmaceuticals), woodworking facilities, metal processing, recycling facilities and coal-fired power plants.

An example is the series of sugar dust explosions at the Imperial Sugar manufacturing facility in Georgia, USA in 2008, when 14 workers were killed and 36 injured. The explosions and subsequent fires destroyed the sugar packing buildings, palletiser room and silos, and severely damaged the bulk train car loading area and parts of the sugar refining process areas.

In this case, the machinery used to process the sugar was not well maintained and would spill sugar onto the floor and surrounding areas, and when the floors were cleaned with compressed air it would accumulate in high places such as rafters and beams, and inside ventilation ducts. Dust collectors were not maintained properly. The enclosed steel belt conveyer below the sugar silos used to transport the sugar regularly became blocked and was not ventilated properly, with steel cover panels allowing high concentrations of sugar to build up.

The first dust explosion occurred in this enclosed steel belt conveyer when an overheated bearing ignited the sugar dust, causing a violent explosion. The explosion lifted sugar dust that had accumulated on the floors

and elevated horizontal surfaces into the air which ignited, triggering more dust explosions throughout the facilities, buckling concrete floors and causing walls to collapse.

Any workplace that generates dust is therefore potentially at risk. Managing combustible dust hazards is critical to ensure the safety of the plant, personnel and operations. A risk analysis, or dust hazard analysis, should be undertaken to identify and address such hazards. The flammability and explosion risk of substances can sometimes be established from the substance's Material Safety Data Sheet (MSDS). It can also be established by testing.

Mitigating the risks

Various measures can be taken to mitigate the risks. The ideal solution of course is not to store any combustible dust in the facility at all, thus removing the hazard. Otherwise, initial preventative steps, according to OSHA, are to contain combustible dust to areas that are properly designed and located, with ignition sources either eliminated or controlled. Equipment or spaces such as ducts, dust collectors, vessels, and processing equipment that contain combustible dust should be designed in a manner to prevent leaks to minimise the escape of dust into work areas. Any dust that settles on workplace surfaces should be removed through a routinely implemented housekeeping programme. Areas or equipment potentially subject to explosions, including the dust collection system, should also be designed to relieve pressure in a safe manner, or be provided with

proper suppression, explosion prevention systems, or an oxygen-deficient atmosphere. Only dust collection /dust extraction systems designed to eliminate or control combustible dust should be used, which should be correctly installed according to required standards. Additionally, all employees should be educated about the hazards of combustible dust and how they can help eliminate the risk of fire and explosions.

Five common mistakes

Speaking in a podcast on <https://dustsafetyscience.com/dust-safety-science-podcast/>, Chris Giusto, director of Industrial projects at Hallam-ICS, highlighted the lack of awareness around the dangers of combustible dust, and identified five common mistakes companies make when addressing combustible dust hazards. These are:

1. Failure to appreciate the gravity of the hazard: not realising the potential of substances identified as a 'weak' explosion hazard (eg. sugar) to cause significant explosions, along with a lack of awareness with regards to secondary explosions and the risks associated with poor housekeeping in facilities. Managers and employees often do not realise how devastating secondary explosions can be and tend to overlook

“A risk analysis, or dust hazard analysis, should be undertaken to identify and address such hazards.”

hazardous dust build-up because the facility “has always been dirty”.

2. Tolerating poor dust collection system performance; a dust collection system that performs properly prevents fugitive dust accumulations and decreases the risk for secondary explosions. People often do not appreciate the role of a well-performing dust collection system in keeping their facility safe, and fail to take action when performance declines.
3. Not recognising electrical hazards; heat from electrical devices and sparks are common ignition sources for explosions. Sometimes facilities have standard electrical equipment in classified areas, or areas that should be classified are not, because the facility is not aware of what constitutes a classified area and what is required.
4. Non-compliant explosion venting; vent equipment vendors are not always in the position to ensure that the equipment is safely installed and all the proper guidelines have been followed. Installation by an expert is essential.
5. Vented dust collectors with no isolation; isolation prevents an explosion from travelling upstream or downstream from the vent-protected vessel into other equipment.

In the 2014 Kunshan Explosion in China, a metal production company which polished various aluminium-alloy parts, experienced a dust collector explosion, which propagated back into the main building as there was no isolation system in place. 146 people were killed, and many others injured. ♦

Putting worker health and safety first

The safety of workers must be at the heart of COVID-19 recovery plans, says Islam Adra, chairman of the Institution of Safety & Health (IOSH).

The COVID-19 pandemic has triggered a severe economic contraction in the Middle East and North Africa, impacting organisations and workplaces across the economy as nations begin to plan for post-COVID recovery and the protection of their workers.

Governments in the Middle East were among the first to respond to COVID-19 with an array of actions to battle the spread of the pandemic, including the restriction of many business activities and limiting the movement of hundreds of millions of people.

As of the easing of restrictions across countries in the Middle East, like the rest of the world, the economic consequences of these measures have undoubtedly hit home. This has been especially true in oil-dependent states where the collapsing oil prices have coupled the adverse COVID-19 effects to further exacerbate the economic situation.

As many countries in the Middle East carefully and progressively begin to ease lockdowns and allow most commercial and industrial activities to reopen, health and safety will need to be at the forefront of every business's strategy, regardless of their risk profile.

The need for a COVID-19 prevention and protection plan

Whether a company has thousands of employees with operations centring around the smelting of metal at 800°C or a retail shop with a mere two employees, COVID-19 has brought with it a new reality that will require all companies to put some serious thought in the way they do business. Failing to do so will not only put employees and non-employees at risk but may even threaten the entire



Image Credit: IOSH

“As countries carefully and progressively begin to ease lockdowns and allow most commercial and industrial activities to reopen, health and safety will need to be at the forefront of every business’s strategy.”

existence of an operation fairly quickly.

A COVID-19 incident can mean several weeks of downtime and the potential loss of customers resulting from reputational damage, which are traditional costs linked with workplace accidents. Other costs can come with an infected employee, such as facility disinfection fees, the testing of all potentially exposed employees and the associated time it takes to receive results, to name but a few.

Add up all of these costs every time an employee is infected, and one can quickly appreciate how expensive it can be not to have a solid COVID-19 prevention and protection plan in place.

ABOVE: Islam Adra, chairman, IOSH.

It is likely that all businesses, irrespective of their activities, have some staff who will have contracted the virus at some time during the COVID-19 pandemic. Moving towards ‘the new normal’, occupational safety and health (OSH) professionals have a valuable role to play in planning and supporting workers’ return to work. Specifically, they have the skills and experience that enable them to take the lead in implementing a four-point plan. This should comprise instituting or revising the organisation’s return to work policy; keeping in touch with workers who are off sick; taking a tailored approach to an individual’s return to work; and reviewing the plan as the experience of returning to work develops.

Any organisation can do this by accessing the free resources, downloadable from any device, on the Institution of Occupational Safety and Health’s webpage under planning an individual’s return to work. (<https://iosh.com/coronavirus/returning-safely/people/planning-an-individuals-return/>) This in-depth guidance, issued by its Returning Safely campaign, (<https://iosh.com/coronavirus/returning-safely/>) offers free advice to OSH professionals and business owners, including risk assessments and PPE guidance.

Challenging conditions

To make conditions even more challenging, some variables lie outside of the realm of the business that can be extremely difficult to control. While companies can install sanitising tunnels and impose temperature checks, social distancing rules, and the wearing of masks while on company grounds, controlling how employees protect themselves outside of work may not be possible. This is especially true when we consider the dynamics of shared accommodation, which is a prevalent model in this part of the world.

In a statement, Richard Jones, head of Policy at The Institution of Occupational Safety and Health (IOSH) stated, “The health and safety of workers must come first when considering restarting work during the COVID-19 outbreak, protecting workforces and communities and enhancing engagement and productivity. For organisations, that means a systematic plan–

“OSH professionals have a valuable role to play in planning and supporting workers’ return to work.”

do–check–act approach, and forward-thinking employers have already been planning for safely restarting work, once allowed to cautiously do so.”

This policy statement calling for the protection of safe systems and workplaces reinforces the importance of employers needing a planned, risk-controlled approach – based on strong leadership, worker involvement and sound health and safety advice. Additionally, cross-functional teams should assess the risks for COVID-19 security and general health and safety and ensure action before workers return.

Organisations across the Middle East and internationally need to adhere to applicable national COVID-19 security policy and guidance, including for safe travel, and conduct inspection and assessment of all relevant areas, to ensure there has been no deterioration of health and safety standards

during the lockdown.

Although the reopening of businesses is a much-welcomed initiative to ensure the continuity of our economies, it should not be assumed that this is a return to the ways of old. Companies of all shapes and sizes must bring health and safety to the centre stage of their agendas now more than ever.

Whether this means transforming jobs to work from home positions, where possible, to minimise risk, or launching serious and comprehensive mental health programmes to deal with the increasing stress and anxiety the “new normal” has brought and will continue to bring, businesses need to reopen with a new mode of thinking if they intend to be around, when and if the COVID-19 era passes. ✦

Islam Adra is a HSSE professional with more than 12 years’ experience in high-risk industries including construction, manufacturing, oil & gas, and primary metal making. Specialising in culture change, he has a proven track record in developing and implementing culture-boosting management systems for numerous Fortune 500 and FTSE 250 companies.

Maintaining a positive organisational health and safety culture during the COVID-19 pandemic

Many organisations have had to make some very rapid changes in response to the pandemic. Maintaining a positive OSH culture remains important in motivating, supporting and valuing workers. Here are some tips from IOSH:

1. Lead by example: senior managers should keep up to date with the latest government guidance and take the necessary steps to keep their workers safe.
2. Communicate constructively about any necessary steps or changes. Give regular updates to keep workers informed on safety matters, but avoid over-communicating.
3. Maintain openness and honesty about any financial pressures and other organisational concerns. Directness with workers on the organisation’s approach and response to the crisis will have a positive influence on their values, beliefs and attitudes.
4. Listen: make opportunities for workers to voice their concerns and provide answers.
5. Be clear about any variances in changes or activities across different parts of the organisation, but keep in mind any worker vulnerabilities and personal circumstances.
6. Uphold: apply a risk-based approach to new ways of working without undermining previous good practice. Any workplace modifications should make workers feel better protected. Continue to keep workers informed in operational OSH decisions.
7. Manage workers’ health: ensure workers understand procedures in place for sickness or absence and any new reporting expectations. Include any support tools available within the organisation as well as from external sources.

Setting the standard

An ambitious tourism project under construction in Saudi Arabia is raising the bar for health, safety and sustainable development standards. *Health, Safety & Security Review Middle East* met up with Brian Spraker, executive director, Health, Safety and Environment in the Projects Delivery Division, The Red Sea Development Company (TRSDC), to find out more.



“The Red Sea Project is grounded in sustainability and sustainable tourism.”

A site-wide healthcare programme will support the Phase 1 construction activities on the project.

THE RED SEA Project, a luxury tourism destination that aims to position Saudi Arabia on the global tourism map, is being developed over 28,000 km² of pristine land on Saudi Arabia’s west coast and includes a vast archipelago of more than 90 islands. The destination also features mountain canyons, dormant volcanoes and ancient cultural and heritage sites. When completed in 2030 it will have around 50 hotels and 8,000

rooms, and around 1,300 residential properties across 22 islands and six inland sites.

The first phase of the development, slated to be completed in 2022, will include sixteen hotels offering 3,000 hotel rooms across five islands and two inland sites, as well as commercial, retail and leisure facilities, an airport and other infrastructure. The resort will open its doors to its first guests in 2022, with one million expected annually by 2030.

“The Red Sea Project is one of the most ambitious tourism projects currently being undertaken in Saudi Arabia and even in the world right now, bringing together luxury, culture and sustainability,” comments Spraker. “The location here is one of the last natural hidden treasures in the world.”

A core element of Vision 2030, The Red Sea Project is forecast to contribute around 2 billion SAR to the Saudi economy. By its completion in 2030, the project’s

direct and indirect induced contribution to employment is envisaged to be around 70,000 jobs.

Progress is well underway, with more than SAR 5.3 billion (US\$1.41 billion) in contracts awarded to date, the latest and largest being for airside infrastructure works for the destination's international airport.

Spraker underlines the positive contribution the project will make to sustainable development in the kingdom.

"The Red Sea Project is grounded in sustainability and sustainable tourism," he says. "We're aligned with the UN Sustainable Development Goals, and we intend to benefit local communities and the wider kingdom, as well as enhance the delicate ecosystems of the destination. The masterplan is informed by a comprehensive marine spatial planning simulation, and we have set a goal to achieve a 30 per cent net positive conservation benefit over the next two decades."

The 30 per cent goal will be challenging but doable, given the high level support the project enjoys from the Saudi government and a host of other partners, he says.

"The destination is completely off the grid, relying on 100 per cent renewable energy, through solar farms, wind farms and various different schemes," Spraker continues. "We also have a commitment to zero waste to landfill and have contracted Averda in partnership with the Saudi Naval Support Company, to help us meet this commitment during the construction phase. This is an unprecedented goal which you don't see on many

construction projects.

"Another thing we're committed to once fully operational is zero single use plastics and zero discharge to the sea."

Worker wellbeing is key

Along with the commitment to sustainability comes the commitment to the health and wellbeing of the workforce.

"To deliver an ambitious project of this magnitude, with up to 34,000 workers spread out over an 8,000 sq km area, one thing we want to ensure is a happy, healthy and fulfilled workforce," Spraker stresses.

"We're providing a quality site-wide programme in partnership with International SOS, which will be an integral part of our commitment to ensure our workforce is valued, cared for and respected. In addition to providing site-wide healthcare of very high quality across our construction site, we are putting the same commitment into the design and construction of our housing complex, which will house 10,000 workers who will live here while building the resorts." The multinational workforce is a mixture of third country expatriates and Saudi nationals, and Saudisation within the business is currently at just over 50 per cent.

International SOS will provide site-wide medical services to support the Phase 1 construction activities on the project, including emergency response, primary healthcare and occupational health, not only for TRSDC personnel but for the entire project workforce, estimated to reach upwards of 28,000 construction workers, as well as visitors, dependents, vendors, consultants and other

authorised individuals while on site.

The heart of the operation is a central medical facility that will be located in the construction village housing complex, staffed by a full team of medical professionals, giving the workforce round-the-clock access to high quality health services.

While at its inland locations, International SOS will establish fully equipped and staffed containerised remote medical facilities to handle day-to-day healthcare needs and respond to any emergencies as a result of a work-related incident or personal health incident. These can be easily moved and located with the workforce as needed, throughout the lifecycle of the project.

ISOS will also operate a fleet of ambulances and emergency watercraft to transport any casualties rapidly back to the central medical facility, where they can receive advanced care, in the case of a serious work-related injury or medical emergency.

Outlining the benefits of this centralised and comprehensive medical solution, Spraker explains, "The aim is to have this all under one umbrella. Bringing in a contractor like ISOS means we have a consistently high quality level of care across the project and we don't need to depend on individual contractors."

"We're setting a high standard

"To deliver an ambitious project of this magnitude, one thing we want to ensure is a happy, healthy and fulfilled workforce."

of safety with our project so I don't anticipate a lot of critical work-related injuries," Spraker continues. Neither is heat stress, an occupational hazard of construction projects in the Middle East, anticipated to be a major issue, given the year-round temperate climate.

"I think we will be dealing more with personal health-related issues, such as heart attacks, strokes, diabetic episodes etc, and some work-related injuries. One of the reasons we've set up a central medical facility in the construction village is so that there's immediate access to healthcare, so hopefully any personal medical condition can be identified at an early stage before it develops into a serious medical emergency."

His experience of a similar successful set-up in a project in Kuwait had been one of the drivers behind this initiative, he adds.

"We wanted to offer our contractors and employees something above and beyond the common practice in the construction industry," Spraker explains. "We are striving to raise the bar; we believe offering high quality healthcare in conjunction with high standards of living will contribute to our goal to be the project of choice across the region, where we can attract the workforce that will want to come here, stay here and be happy here, and we can contribute to them having a better life than they would enjoy on other sites.

"We are looking to set the benchmark and be the example for other mega projects, so that contractors can pick up best practices and take them to other projects across the region," Spraker concludes. ♦

Digitisation of EHS processes – a top down approach

Patrik Cekada, head of QHSE, Mazrui Energy Services (MES) Group, and Gaurav Khupsare, head of Business Development, MACS-G Solutions discuss the key drivers in adopting technology to manage HSE, and the impact of the Aegis 360 solution in supporting this vision.



Image Credit: Mazrui Energy Services

Abu Dhabi-based Mazrui Energy Services LLC, part of Mazrui International, is one of the leading energy companies in the Middle East, with operations throughout the region. Its operations focus on engineering and oilfield services, local manufacturing, representation and investments. The company provides technical value-added solutions to a broad and long-established customer base.

MES sets very high standards in QHSE across its companies and contractors. Being an API Q1, API Q2, ISO 9001, ISO 22301, OHSAS 18001 and ISO 14001 certified company since 2006, MES was looking to target a

full ISO 45001 compliance certification for its companies which it achieved in 2018, thereby becoming one of the first companies within the UAE to implement these frameworks.

With this vision in mind, MES QHSE head Patrik Cekada was looking to digitise and subsequently improve on the QHSE culture within the group. After careful due diligence, MES decided to implement Aegis 360, by MACS-G Solutions, an innovative player in the QHSE digitisation and software management systems market.

After the successful roll out three years ago across its 11 companies, Mazrui Energy Services HSE department became

one of the leading adopters of this technology in the region.

Gaurav Khupsare (GK): What were the drivers that led you to look at technology as one of the critical factors to meet your vision towards MES's HSE culture?

Patrik Cekada (PC): Technology is basically driving everything in our corporate and personal lives. Our cellphones and computers are vastly different from even five years ago. It is natural that we as humans and our interactions have also evolved. The 'human' element within Health and Safety is key, and it is therefore crucial to realise that organisations need to use technology to evolve into something better. This is true not just for HSE, but for any process within a company.

We at MES are always looking to expand our reach, and I believed that it was the correct time to implement Software Enabled HSE into the organisation.

GK: What were the key challenges facing you as an HSE leader that you wanted technology to address, and how do you think they can be overcome?

PC: One of the biggest challenges

“It is crucial to realise that organisations need to use technology to evolve into something better.”

ABOVE: Patrik Cekada, head of QHSE, Mazrui Energy Services (MES) Group.

today across the industry is the paradigm shift into what were traditionally looked at energy resources, resulting in considerable market variations. Over the past few years, our industry has been evolving and trying to optimise the resources at hand, so we are doing more with less. Coupled with this is the ever more critical aspect of maintaining a safe workplace in the interests of competitive advantage. I wanted technology to enable our business to work smarter, not harder. Moreover, I wanted the entire organisation to ‘THINK’ HSE in everything they do, and hence reaching everyone was imperative. In effect, implementing technology was to be a CULTURE change, and we wanted it to be as fluent and smooth as possible.

GK: MES’s workforce is comprised of many different nationalities and cultures. Was this something you worried about when deciding this shift in your HSE management?

PC: Not really, we are all part of society and an organisation is no different. Technology today, especially our smartphones, enables us to communicate very efficiently with people from diverse backgrounds and beliefs. If anything, I believe implementing digitisation would only bring more coherence to how we at MES go about our HSE. Staying safe and healthy is essential to all.

GK: What were the major reasons in selecting Aegis as your QHSE Management solution?

PC: At MES, I was not only looking for a software provider but also a company which

understands what are the actual challenges we as HSE face at field level. MACS-G Solutions, with its background specifically in the Oil & Gas industry and the know-how to get such projects off the ground, coupled with a strong product, Aegis 360, made it a compelling choice to go with.

GK: And what about Aegis as a product, what were the considerations there?

PC: The first thing we were looking for was ease of use. If the system was not going to be user friendly or was going to be task intensive, then it would prove to be a challenge implementing it across our companies. Aegis was pretty well what we were looking for; an easy to use “off the shelf” product that was cost effective and simple enough to be successfully implemented at the field level. Price and the possibility to use one software across multiple companies were major factors as well.

The ability to customise the system was also a critical factor in our decision. Having the ability to essentially tailor system inputs on an as needed basis, dramatically expedited our ability to implement Aegis in the field and to make corrections and amendments in real time.

MACS-G as a company also provided support to us to customise aspects to the solution, which would be essentially tailor made to our business.

GK: How has Aegis implementation improved efficiency in terms of HSE within Mazrui?

PC: Yes, it is critical to understand the impact of such a change. Aegis has helped us to centralise much of our QHSE



The implementation of the new system has resulted in many improvements.

data, which has in turn, dramatically enhanced our internal efficiency and data analysis capabilities. The ability for the system to consolidate customisable Corrective Action assignment and mail notifications has also improved our ability to communicate and more easily verify action implementation. Some of the key findings of this implementation would be:

- Improvement of Non-Conformance Tracking: (75 per cent)
- Improvement in Reporting Events/Incidents: (85 per cent)
- Time savings in terms of Reporting overheads: (45 per cent).

Apart from this, the recent mobile app and kiosk- enabled reporting have drastically improved visibility across the organisation on all aspects of HSE, which in turn pushes the culture. This is of far more value to us as a company.

GK: What do you think will be Aegis’ role within your operations moving forward?

PC: Aegis will play a significant role in our operations. The system has been put in place to establish a baseline to measure the application of our management system in the field. Moving ahead,

I expect it not only to be a data consolidation and management platform, but also to be a proactive monitoring tool. Currently, we are in the process of implementing Aegis Insights, which is a layer of intuitive in-app analytics which I understand that the team at MACS-G is moving into the ML/AI mode. For me, it is extremely exciting to see what we can do with such a solution in hand.

GK: How do you see HSE practice in the region, what are the new trends and how do you view the future of HSE professionals in the GCC/Middle East?

PC: HSE needs to be more proactive and Safety 4.0 driven. The importance of core compliance cannot be overstated, but in order to mature the industry, we need to transition HSE and HSE professionals to be more focused on the proactive measures that have been proven to keep our workers safe. I would say behavioural change is at the core of this transformation, and we need to leverage all tools available including, but not limited to, technology to ensure that safety is no longer viewed as merely a compliance-driven need, but something that is part of the fabric of any organisation. ♦



Image Credit: Adobe Stock

Tackling security challenges in the midst of the pandemic

Risk management and monitoring across the extended and remote enterprise may prove to be beneficial. Adam Palmer, chief cybersecurity strategist from Tenable, lists five best practices that CISOs can follow.

“The threat landscape has expanded – a worrying position for any security leader.”

CISOs need to understand the risks environment and demonstrate reduction of risks based on the prioritisation of vulnerabilities.

The pandemic has changed the world, perhaps forever. Employees are working at home using personal, and often unsecured, devices and networks. For a chief information security officer (CISO), used to believing that for the corporate network perimeter “inside is safe, outside is unsafe,” now nearly everything is outside and there is no perimeter. New risks and vulnerabilities seem to be arising everywhere on many new types of devices. The threat landscape has expanded – a worrying position for any security leader.

Despite these risks, organisations expect business continuity and a way forward. CISOs must attempt to bring normalcy and predictable

functionality to this unprecedented situation. Below are five ways that CISOs can do this successfully.

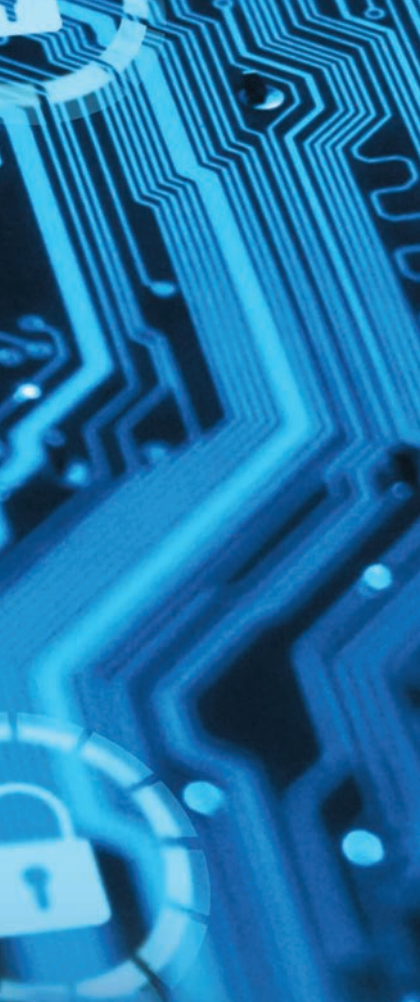
1. If everything is important, then nothing is important

During a crisis, resources are short and everyone is overloaded with demands. Everything can feel like a priority. For the CISO, the first task is to identify what is only innocent smoke from what is actually a fire. By combining tools like threat intelligence, vulnerability research, and probability risk, CISOs can begin to prioritise the most critical vulnerabilities that are now distributed across the expanded enterprise perimeter. Prioritisation focuses resources to the right area,

in the right amount, and in the right sequence.

2. Avoid box-ticking exercises

In these complex times, CISOs cannot afford to use a generic checklist to scan their extended network, which has now changed beyond earlier recognition. Work at home has meant that employees are now connecting to the network using whatever device is at hand that gets the task done – whether it is to participate or host a video call; instant chat message with a colleague; access a cloud application; or any other daily task. In short, convenience has overtaken risk as workers struggle to deliver from home. For the CISO in this environment, a risk-



being used. This will help the CISO build a unified and complete list of the vulnerabilities that have been created by distributed and remote work at home practices.

4. The Board wants risk details

The Board of Directors will want to know what risks the organisation is exposed to, and what is being done to reduce/address them. By adopting a risk-based approach, CISOs can accurately assess, quantifiably, the level of risk exposure in terms that the Board can understand.

Using a risk-based approach, the CISO can profile the distributed risk across the extended enterprise on the basis of large-scale assets, geolocation, business units and device groups, etc. The Board will be able to

“The CISO can profile the distributed risk across the extended enterprise on the basis of large-scale assets, geolocation, business units and device groups, etc.”

evaluate the business impact if any mission-critical areas are exposed compared to the cost to implement controls that reduce the risk.

5. The trap of instant gratification

In this time of crisis, and under pressure from management to deliver security, CISOs might be tempted to purchase additional tools, hoping that a single purchase order may be the key to

alleviate the overall risk levels of the organisation to deliver quick results. Unfortunately, a magic bullet simply does not exist. What is more meaningful is to better understand the risk environment and systematically demonstrate reduction of risks based on the prioritisation of vulnerabilities. CISOs could also consider using managed service providers to reduce their day-to-day overheads of monitoring risks and vulnerabilities. They can consider bringing in professional services to boost the skills capability of their internal teams to use existing tools and be more effective.

CISOs will find that implementing these basic best practices can go a long way towards reducing the risk levels of their organisation in challenging circumstances, including this pandemic. ♦

based management approach that focuses on actual risks being exploited, not generic lists of potential risks, is most effective. This also avoids overrun of the operating expense (Opex) budget.

3. You cannot protect what is unknown

One of the biggest challenges for a CISO today is visibility into what is happening in their remote work environment. The organisation's workers may have had to relocate from their normal home, or even their geo-location. Staff are connecting from multiple private and public networks, using multiple known and unknown devices, and at predictable but also unpredictable hours. The CISO needs to understand this activity pattern is now the new normal. To gain complete visibility of the extended enterprise network, CISOs should utilise authenticated agent scans that register and profile all assets



Employees working at home are often using unsecured devices and networks.

Image Credit: Adobe Stock

Fine Hygienic Holding launches Fine Guard gloves

Protective gloves

Fine Hygienic Holding (FHH), a wellness group and hygienic paper products manufacturer, has launched Fine Guard Gloves, an innovative product that delivers superior infection prevention, incorporating the same Swiss patented Livinguard technology used in the Fine Guard face mask.

A recent study by Berlin's Free University and the Institute of Textile Technology at RWTH Aachen University confirmed that Livinguard technology effectively eliminates all types of pathogens, including Coronavirus.

Compared to ordinary rubber gloves, the textile fabric provides comfort and can be washed and reused up to 30 times for a whole year without disrupting the technology's effectiveness, providing continuous value for consumers and also offering a more environmentally friendly option by reducing waste.

FHH CEO James Michael Lafferty said, "The purpose of our protective equipment, Fine Guard Masks and Fine Guard Gloves is two-fold. First and



Image Credit: Fine Hygienic Holding

The gloves incorporate ground-breaking Swiss patented Livinguard technology.

foremost, we wanted to give our consumers the greatest level of protection anywhere on the market, the second, equally important purpose is to give them peace of mind."

FHH is Livinguard's exclusive partner in the MENA region, providing one of the most technologically advanced and effective hygienic personal protective equipment (PPE) available on the market today to

communities and consumers worldwide.

The Fine Guard Mask and Fine Guard Gloves products are produced in FHH facilities in the UAE, Jordan, and Sri Lanka. The company stated that more than 30,000 Fine Guard Comfort units are in production per day in Jordan, the UAE, and Sri Lanka while 320,000 Fine Guard Gloves will be available in the first production batch.

New camera kit

Temperature screening

D-Link has announced the new DCS-9500T Group Temperature Screening Camera Kit, which can simultaneously scan up to 30 people with a rapid response time, eliminating queues in busy public areas such as office buildings, factories, schools, shopping centres etc.

The DCS-9500T features dual-lens technology for high-quality footage, while 17 viewing modes and intelligent facial recognition allow for accurate, rapid identification.

The DCS-9500T can precisely distinguish people and raise an alarm when someone has an elevated temperature. Body temperature can be measured to an accuracy of $\pm 0.3^{\circ}$ Celsius with a sensitivity of 40mK.

The total solution includes the thermal camera and blackbody, providing higher accuracy results and fewer false alarms. The DCS-9500T also comes with free management software that allows for remote management, device configuration and data analysis across multiple sites.

Honeywell introduces digitised workforce management solution

Workforce management

Honeywell has introduced a complete modular software solution to help industrial companies enforce compliance with important health and safety requirements as their employees return to work, including body temperature controls and automated entry management processes.

Honeywell Digitised Workforce Management - Business Continuity and Response solution uses digitised workforce

management with real-time location functionality to facilitate site monitoring compliance following social distancing policies and enables contact tracing and worker safety monitoring. It also includes capabilities for remote collaboration to empower enterprise operations with reduced workforce.

The system can support Honeywell thermal cameras which can be used with NDAA 2019, Section 889 compliant systems to check for elevated body temperatures and provide input

to the access control system. This can allow operators to restrict access to the entrance when detecting an elevated temperature, helping to automate the preliminary screening process and reducing manual tasks.

Digitising the entryway approval workflow for visitors and returning employees and contractors enables organisations to onboard the workforce efficiently, leveraging workforce management and access control to a new protective layer.

COVID-fighting robot deployed in Bahrain

Infection prevention

A new COVID-fighting robot that emits ultraviolet (UV) light to disinfect public spaces and offices has been revealed in Bahrain.

The autonomous machine beams out short-wavelength UV which kills Coronavirus particles by disrupting their DNA in a process known as 'ultraviolet germicidal irradiation'.

A prototype designed by Fab Lab Bahrain, in collaboration with the country's Ministry of Youth and Sports Innovation Centre, has so far been tested in industrial environments.

According to experts, the radiation emitted by UV light damages the genetic material of viruses and harms their ability to replicate. Most viruses, including SARS-CoV-2, are covered with a thin membrane easily broken apart by UV rays.

Paul Hunter, a professor in medicine at University of East Anglia, said, "That UV light inactivates SARS-CoV-2 is not surprising. UV inactivates most viruses very efficiently. Indeed,



Image Credit: APCO Worldwide

The robot uses UV light to disinfect public spaces and offices.

UV disinfection is widely used for disinfection of drinking water."

It comes after Bahrain deployed two robots on isolation wards to help frontline health workers.

The robots, which speak 12 languages, can check body temperatures, administer medicines, serve meals and sterilise treatment rooms by beaming out pulses of ultraviolet light. The AI-powered machines are also capable of identifying patients using facial recognition and can respond to voice commands from staff.

Dr Waleed Al Manea, from

Bahrain's Health Ministry, said, "We have started using the robots in the isolation and treatment facilities as part of the experimental phase to use AI in the health sector. It is certainly a new medical revolution and we want to see how this benefits patients and staff.

"This new technology will help doctors and nurses, as they can evaluate the effectiveness of the robots and help incorporate them in their daily work."

Following an initial pilot phase, Bahrain plans to roll out the robots to hospitals nationwide.

Fire protection system for EVs

Fire protection

An EU-funded project team has developed an electric and hybrid electric vehicle fire protection system which addresses and mitigates the new fire hazards associated with Li-ion batteries.

"With the rapid introduction of electric and hybrid electric vehicles in public transport, there are new challenges," said Anders Gulliksson of Dafo Vehicle, coordinator of the project.

"When the Li-ion batteries fail through short circuiting, overcharging, high temperatures, mechanical damage and overheating, this might cause thermal runaway and the release of a flammable electrolyte, which makes fire extinguishing very difficult. In addition to the dramatic fire scenario with the rapid increase in heat, there are a lot of potentially toxic gases being emitted."

The new system provides an early fire alarm and spot cooling system to prevent heat runaway while localising and suppressing fire. Li-Ion Fire will be available from 1 September 2020.

Siemens Smart Infrastructure launches fine dust sensor

Air quality

Siemens Smart Infrastructure has launched the PM2.5 duct type fine dust sensor.

Part of the Symaro product group, the sensors measure dust and dirt particles, including fine sand, transmitting them rapidly and precisely to advanced building management systems for comprehensive climate monitoring and control.

This improves the indoor air quality of residential and commercial buildings, which in turn has a positive effect on the health and

comfort of room occupants.

By ensuring the early detection of hazardous particles, the sensors help achieve energy and cost-efficient control of the entire HVAC system, says Siemens.

The new PM 2.5 air duct fine dust sensors precisely measure and monitor the indoor and outside air quality. Together with a building management system, the sensors control the air quality in air handling units and can follow the air pollution in one or multiple rooms.

The new sensor is available in two variants. One sensor has duct probes that detect fine dust PM2.5, which are harmful to humans, and PM10. The other option has multiple measurement capabilities to measure fine dust, humidity and temperature.

The duct-type fine dust sensor design makes installation and maintenance fast and easy, while their unique mechanical design, which allows air to enter and exit through the same opening, offers a very high level of precision.

BAUER KOMPRESSOREN introduces B-VirusFree breathing air protection

Air quality

BAUER KOMPRESSOREN has developed B-VirusFree – a solution that eliminates viruses at the air intake stage. The system is designed to protect firefighters, divers, pressure chamber operators and medical staff from these hazards whenever they require respiratory equipment for their daily operations.

The B-DETECTION PLUS online gas measurement system already provides accurate measurements of the commonest hazardous substances associated with breathing air, such as CO, CO₂, moisture and oil, and eliminates them using BAUER filter systems. However, a new threat now lurks in the form of viruses like SARS-CoV-2, as well as bacteria and moulds. These new dangers are particularly insidious because they are invisible and highly communicable – and cannot be measured by sensors. Inhaled in ambient air, they can pass through any commercially



The B-VirusFree protective filter system eliminates viruses at the air intake stage.

Image Credit: BAUER Kompressoren

available standard air purification system. Even the high temperatures and pressure levels of the compression process have little effect on them because of their short exposure to the process.

The new B-VirusFree protective filter system reliably neutralises – depending on the charging rate of the compressor – up to 99.9 per cent of the corona viruses, bacteria and special moulds, removing them from the

intake air. The chemical- and ozone-free technology of the patent-pending B-VirusFree System uses a special UV light source to destroy pathogens in the intake air flow before they can reach the compressor.

B-VirusFree can be ordered alongside any new BAUER system and is also easy to retrofit. The filter system is designed for flexible mounting to a wall and has a compact footprint for extra ease of handling and convenience.

New H₂S detector

Gas detection

Teledyne Gas & Flame Detection has introduced the Multitox MOS Detector for H₂S detection in desert and Arctic environments. The Multitox DG-TT7-S (Type D), Simtronics provides best-in-class support when H₂S is a constant threat. By utilising the latest solid-state Metal Oxide Semiconductor (MOS) technology, inside a rugged and durable detector head, Teledyne enables H₂S to be detected easily, without the risk of poisoning, whilst providing sensor life of up to 10 years and an extended five years warranty as standard. This, combined with the company's Telecapteur Asset Management Software, being developed in partnership with ADNOC, enables automatic visualisation of key information, including instant access to historical calibration data, enabling quick and accurate analysis instead of relying on slower paper-based processes. The software simplifies calibration by reducing the number of operators required from two to one.

Appleton explosion-proof handlamp for hazardous locations

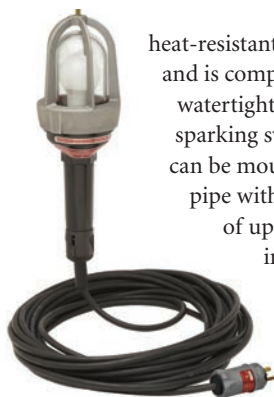
Safety lighting

Emerson's new Appleton EHLED handlamp has been engineered to provide portable task-specific lighting at hazardous industrial sites. Compact and lightweight, it can be transported and used virtually anywhere, including tight, restricted spaces.

A factory sealed, explosion-proof Class I, Division 1

approved design qualifies the handlamp for oil refineries, tank inspections, fuel storage centres and other classified areas where ordinary handlamps are not permitted.

The Appleton EHLED is built to withstand corrosive elements, features an impact- and



heat-resistant glass globe and is completely watertight. Its non-sparking swivel hook can be mounted on a pipe with a diameter of up to 3/4 inches for hands-free

operation.

The 9W LED bulb is rated for enclosed spaces providing 800 lumens of light output, or the equivalent of a 60W incandescent lamp. LED operates at significantly cooler temperatures than metal halide or HID lamps, and does not contain harmful gases, vapours or mercury, making it safer for the workplace.

Volvo Penta develops electric driveline for fire truck

Fire safety

Volvo Penta has developed an electric driveline for leading fire service vehicle manufacturer Rosenbauer's pioneering fire truck, offering zero exhaust emissions and significantly reduced noise levels. The truck – named “Revolutionary Technology” (RT) – is currently undergoing intensive testing and will soon begin real-world customer testing with fire departments in Berlin, Amsterdam and Dubai.

With its electric driveline, paired with independent suspension and a hydropneumatic chassis, the fire truck boasts excellent ergonomics, functionality and safety, as well as high loading volumes, compact dimensions and agility.

The Volvo Penta electrically-powered RT truck will help fire departments reduce their fuel costs as well as improve safety and functionality. Each axle of the truck is powered by an electric motor, and the energy storage system allows for an electricity-powered journey with



Image Credit: Volvo Penta

The electrically-powered RT fire truck.

ample time for operation at the rescue site. The truck also has a backup diesel engine on board.

“After many years of successful collaboration with Rosenbauer, we're proud to be pioneering electric drivelines and partnering with them on this revolutionary project,” said Paul Jansson, chief project manager at Volvo Penta. “This is our first industrial OEM partnership in the area of electromobility, and it's a big step towards creating a new product

platform of the future.”

“The teams at Volvo Penta and Rosenbauer have been working together closely to design a tailored solution that enables the electric fire truck to do its job in a more safe, effective and sustainable way than a conventional vehicle,” added Dieter Siegel, CEO at Rosenbauer International. “Together, we have created the most revolutionary and progressive vehicle in the fire service industry.”

New disinfection technology

Infection control

Aquila has unveiled technology combining the effectiveness of UV with the cleaning power of plasma to disinfect masks and gowns in a matter of minutes, without having to send them off site. It protects medical workers by disinfecting their mask in less than a minute whenever they take a break.

Aquila are developing a working prototype for disinfecting masks, with a larger machine to follow – aimed at processing of gowns, incorporating a unique design of disinfectant chamber to ensure thorough cleaning and supported with software to personally identify each individual mask and gown.

To ensure that every part of a gown is disinfected, Aquila uses ionised air vortex technology that inflates the gown to expose each surface to the UV light.

Areas that are not generally exposed, e.g. gown folds, etc., receive both high-intensity UVGI and plasma exposure to ensure complete disinfection within a minute.

Carrington Textiles fabrics receive NFPA 2112 certification

Flame retardant fabrics

Carrington Textiles has announced the NFPA 2112 certification of its re-engineered range of flame retardant fabrics in response to the needs of customers who want to offer garments that not only provide comfort, but also excellent performance against flash fire, electrostatic discharge, ultraviolet radiation, electric arc and chemical splash.

The NFPA 12 standard protects workers from flash fire exposure and injury by

specifying performance requirements and test methods for flame-resistant fabrics.

The Flameshield family in their 230gsm and 280gsm weight versions are 100 per cent cotton, offering lightweight, hardwearing properties and breathability. Flametuff 220AS, 250AS and Satin 330AS combine high cotton content with high tenacity nylon, offering antistatic properties and ultraviolet protection of 50+ UPF. Also providing antistatic properties, as well as incorporating

CORDURA technology for long-lasting performance is Flametougher 280AS, Carrington Textiles' next generation of stronger, tougher and more hardwearing flame retardant workwear.

Carrington Textiles' sales & marketing director, Paul Farrell, commented, “All garments can look the same, but the difference between having workwear that's NFPA 2112 certified or not will unfortunately make the difference during an on-site accident.”



سامون ت. بيرشام

توفر سوى قدر منخفض من الأمان. وإلى جانب المخاطر الفعلية تركيب مثل هذه المنتجات، فإن لها أيضاً تأثيراً سلبياً على صناعة المنتجات الكهربائية بوجه عام. وتبذل الشركات الأصلية المرموقة جهوداً حثيثة لمكافحة هذه المنتجات المُقلّدة الرخيصة والخطيرة. كما قد يتعرض القائلون بتركيبها وملاك البنائيات لإجراء إصلاحات باهظة التكلفة، إلى جانب إلحاق الضرر بسُمعتها وقد يصل الأمر إلى ملاحقتها قضائياً.

• ما هي التدابير التي يتخذها القائلون على هذه الصناعة للحيلولة دون ظهور المنتجات الكهربائية المُقلّدة؟

• بعد تنامي المخاوف المتعلقة بزيادة المنتجات المُقلّدة المطروحة في الأسواق، علاوة على مخاطرها التي تهدد السلامة وتأثيرها على الشركات المحلية، شكّل القائلون على صناعة المنتجات الكهربائية مجموعة العمل لمكافحة المنتجات المُقلّدة (ACWG) كجزء من الرابطة التجارية BEAMA في عام 2000. ويعمل بمجموعة ACWG، التي تنضوي تحت لوائها العديد من العلامات التجارية البارزة على مستوى الصناعة، فريق عمل استباقي معني بالحد من انتشار المنتجات الكهربائية المُقلّدة في الصين والشرق الأوسط وإفريقيا. وقد أتاح هذا النهج الذي يهدف لتنسيق الجهود على مستوى الصناعة لمجموعة BEAMA / ACWG مداومة أكثر من 850 مصنعاً ومخزناً غير قانوني، ومصادرة مليوني منتج كهربائي مُقلّد، وذلك خلال فترة عملها الممتدة لعشرين عاماً. وبالإضافة إلى العمل الميداني، توفر المجموعة التدريب والتوعية مع سلطات إنفاذ القانون والسلطات الجمركية في مختلف أنحاء المنطقة.

• ما هي التدابير التي يمكن للشركات المسؤولة اتخاذها لتجنب شراء المنتجات الكهربائية المُقلّدة؟

• تؤدي الجهات القائمة بأعمال التركيب والتوزيع وملاك البنائيات أيضاً دوراً مهماً في إطار مسؤولياتها لمنع وقوع المستهلكين ضحايا للمنتجات المُقلّدة. تأكد أولاً من معرفة المنتجات التي تشتريها أو تقوم بتركيبها، فتحقق - على سبيل المثال - من توافرها مع المنتجات التي توفرها جهات التوزيع المعتمدة. ثانياً، فُكر في منشأ المنتج وكيفية بيعه. حيث يبيع العديد من أصحاب

ثاني عمليات الفحص هذه هو تفقّد ما إذا كان المنتج يحمل العلامات المناسبة لنوع المنتج. هناك عددٌ كبيرٌ من النقاط التي يجب الانتباه إليها هنا، وقد طورت BEAMA مجموعة من الوثائق الإرشادية المفيدة للغاية للتحقق من علامات المنتجات. ومن بين العوامل الأخرى التي ينبغي أخذها في الاعتبار قنوات البيع. أين يباع المنتج، وما هو منشؤه، وهل قناة البيع غير معتمدة بالنسبة لهذا النوع من المنتجات؟ افحص وزن المنتج، فقد تدل خفة وزنه على وجود مكونات مفقودة. فيجب التحقق من وجود الوثائق الصحيحة والصالحة للمنتج مثل شهادات اختبار المنتج أو إعلان التوافق. كما تجدر مراعاة ما إذا كان المنتج المُباع مُستعملاً. وفي هذه الحالة لن يكون هناك سبيل لمعرفة حالة المكونات الداخلية. وإذا لم تكن عمليات الفحص البسيطة هذه تعتبر اختباراً شاملاً للمنتج، فإنها تعد مؤشرات أساسية تلفت الانتباه إلى وجود خطأ ما. وعندئذ تكون هناك حاجة للمزيد من التقصي والتقييم قبل الإقدام على شراء المنتج أو تركيبه أو استخدامه.

• ما هو حجم مشكلة المنتجات المُقلّدة ومدى انتشارها، وما هو تأثيرها على صناعة المنتجات الكهربائية؟

• يشهد حجم التجارة في جميع المنتجات المُقلّدة تنامياً متزايداً على الصعيد العالمي. وأشارت تقديرات منظمة التعاون الاقتصادي والتنمية، إلى جانب مكتب الاتحاد الأوروبي للملكية الفكرية، إلى أنه قد تجاوز نصف ترليون دولار في 2016، إنها مشكلة عالمية تواجه العلامات التجارية الشهيرة، ولا يُستثنى من ذلك سوق المنتجات الكهربائية. وهي مشكلة منتشرة على مستوى الصناعة في الصين والشرق الأوسط وإفريقيا، حيث ينصب تركيز صانعي المنتجات المُقلّدة غالباً على العناصر منخفضة التكلفة وقليلة التعقيد، مثل قواطع الدوائر الكهربائية والمنصهرات والقواطع الكهربائية ولوحات التوزيع وملحقات الأسلاك. ويستغل صانعو المنتجات المُقلّدة العلامات التجارية بشكل غير قانوني بهدف خداع العملاء، ويستخدمون في الغالب مواد دون المستوى لتفتقر إلى مكونات السلامة الحرجة، ولا تخضع لأية اختبارات، ما يعني أن هذه المنتجات الكهربائية المُقلّدة لا

العلامات التجارية الأصلية المنتجة عن طريق قنوات توزيع معتمدة ومعروفة، وإذا كان منشأ المنتج غير معلوم، فيجب عليك طرح هذه الأسئلة أولاً. ولا يغرنك انخفاض تكلفة المنتج، إذ يجب عليك التوقف والتفكير أولاً. وكما أشرنا من قبل، فإن مقلّدي المنتجات لا يهتمون بأمور الجودة والسلامة، وغالباً ما تفتقد منتجاتهم مكونات السلامة الحرجة أو يستخدمون مواد دون المستوى منخفضة التكلفة لإغراء المشتريين.

وإذا كنت من مُلاك البنائيات أو المحدّدين، فأحرص دوماً على شراء وتحديد المنتجات الأصلية. وإذا كنت من القائمين بأعمال التركيب أو المقاولين، فلا تشتري سوى المنتجات الأصلية عن طريق جهات التوزيع المعتمدة، وإذا ساورك أي شك، فتحقق من ذلك عبر الاتصال بمالك العلامة التجارية الأصلية أولاً.

BEAMA هي رابطة تجارية مقرها المملكة المتحدة للجهات المُصنّعة وجهات توفير نُظُم وتكنولوجيا البنية التحتية للطاقة. وهي تمثل أكثر من 200 شركة تنوع بين الشركات المبتدئة والشركات الصغيرة والمتوسطة، فضلاً عن الشركات الكبرى متعددة الجنسيات www.beama.org.uk.

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14 - 12

نوفمبر/تشرين الثاني

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القاهرة

معرض الوقاية من الحريق في مصر وشمال أفريقيا - IFSEC & FIREX

4 - 2

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12 - 9

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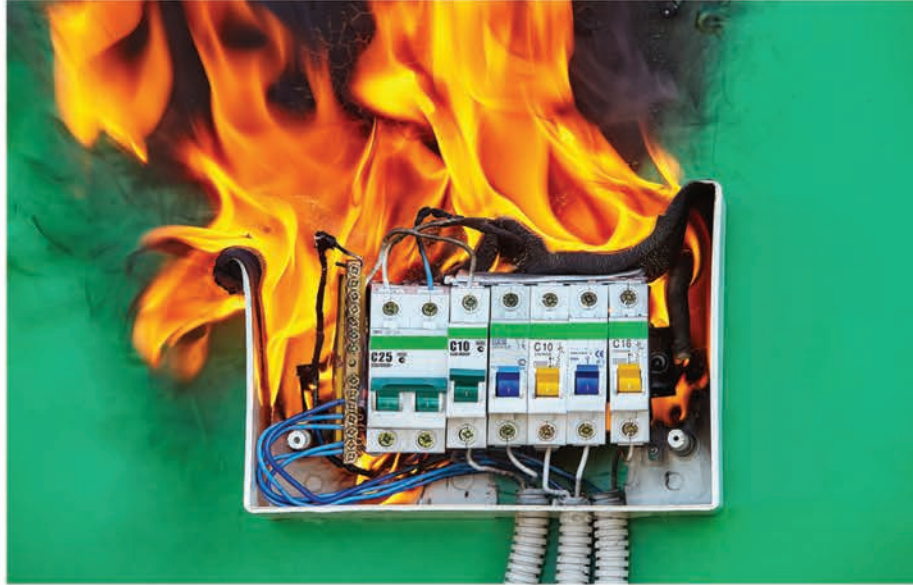
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3 - 2



المنتجات الكهربائية المعيبة قد تتسبب في نشوب الحرائق

التعاون من أجل مستقبل أكثر أمناً

في حوار له مع «نشرة الصحة والسلامة والأمن - الشرق الأوسط»، يتحدث ساهمون ت. بيرتشم، رئيس مجموعة عمل BEAMA لمكافحة التزييف، ومدير حماية العلامات التجارية بقطاع الكهرباء بشركة إيتون الشرق الأوسط وشمال إفريقيا، عن الحملة العالمية ضد المنتجات الكهربائية المقلدة وغير المطابقة للمواصفات. وهو يقول إن هذه المنتجات المقلدة خطرها كبير. إذ أنها قد تتسبب في نشوب الحرائق والصعق بالكهرباء. هذا فضلاً عن الخسائر في الممتلكات، بل والأرواح أيضاً، مما يدعو إلى الأسف الشديد. وإلى نص الحوار:

بالإضافة إلى ما سبق، يُقدم صانعو المنتجات المقلدة العلامات التجارية المسجلة بدون ترخيص على المنتجات التي تكون مطابقة أو مشابهة للمنتجات التي تطرحها الجهات المُصنِّعة الأصلية. والهدف هو خداع المشتري لكي يعتقد أنه يشتري منتجات أصلية. غير أن المنتجات الكهربائية المقلدة كثيراً ما تكون غير مطابقة للمواصفات، ما يُعرض مالكي البنايات والمستخدمين لمخاطر كبيرة.

• كيف تحمي الشركات المسؤولة نفسها من المنتجات المشابهة غير المطابقة للمواصفات؟

• هناك ثلاث عمليات فحص بسيطة من شأنها مساعدة الشركات المرموقة في تحديد المنتجات الكهربائية التي قد لا تكون مطابقة للمواصفات. وأولها فحص جودة المنتج بوجه عام، وذلك بالبحث عن العيوب في القوالب، والمواد الزائدة والحواف الخشنة. هذا، وتعتبر الطباعة ذات الجودة السيئة وسوء محاذاة العلامات والأخطاء الإملائية مؤشرات على المنتجات المشابهة بها، فضلاً عن التآكل الواضح وتغير ألوان المكونات المعدنية.

بالكهرباء. هذا فضلاً عن خسائر في الممتلكات، بل والأرواح أيضاً، مما يدعو إلى الأسف الشديد.

• ما هو الفرق بين التُسخ المقلدة والمنتجات المشابهة غير المطابقة للمواصفات؟

• هناك بعض الفروق المهمة بين هذين النوعين من المنتجات. أولاً، لا تلتزم المنتجات الكهربائية المشابهة غير المطابقة للمواصفات بمعايير السلامة اللازمة والمصممة لحماية الأفراد والممتلكات، وتجعلهم عرضة لمخاطر شديدة. وقد صُنعت هذه المنتجات ذات الجودة المتدنية وغير المطابقة للمواصفات بحيث تبدو مشابهة للمنتجات ذات العلامات التجارية الشهيرة، ولكنها تكون إما غير موسومة بعلامة تجارية أو ذات اسم غير مألوف، أو تلك التي لها اسم مشابه للمنتج الأصلي. وهي تُباع غالباً بسعر أقل بكثير من المنتجات المطابقة للمواصفات، والهدف هو خداع المشتري حتى يعتقد أنه يشتري منتجاً آمناً، وذلك من خلال تمرير المنتجات غير المطابقة للمواصفات بوصفها مرتبطة إلى حد ما بالمنتج الأصلي.

• هل لك أن تحدثنا بالتفصيل عن التحديات التي تواجه صناعة المنتجات الكهربائية في الوقت الحالي؟

• هناك شاغلان رئيسيان في مجال صناعة الكهرباء في الوقت الحالي، وهما انتشار المنتجات المقلدة، والطفرة التي تشهدها المنتجات المشابهة غير المطابقة للمواصفات. لقد صُممت منتجات توزيع الطاقة، مثل قواطع الدوائر الكهربائية الصغيرة، وقواطع دائرة الحالة المصوغة، وقواطع الدوائر الكهربائية التي تعمل بالتيار المتبقي، لحماية البنايات والأفراد المتواجدين بداخلها. وهي نتاج جهود مبدولة على مدار عقود في البحوث والتطوير، وتخضع للتطور المستمر والاختبارات الصارمة. كما توضع لها معايير الأمان المهمة. ولكن عندما يتعلق الأمر بالنسخ المقلدة والمنتجات المشابهة غير المطابقة، لا يكون بوسعنا التأكد من التزامها بتلك المواصفات وعملها على النحو الملائم.

وإذا كانت تُستخدم في المنازل أو البنايات التجارية أو الصناعية، فقد تتسبب في نشوب الحرائق والصعق

نهاي هذا العدد ...



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مدير مبيعات المجلة: ريتشارد روزيلار

هاتف: +442078347676 - فاكس: +442079730076

بريد إلكتروني: richard.rozelaar@alaincharles.com

المكتب الرئيسي:

Alain Charles Publishing Ltd, University House, 11- 13 Lower Grosvenor Place, London SW1W 0EX, UK

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Company	Page
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