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Health, Safety & Security Review

VOLUME 2 | ISSUE 4 2016

Middle East

A SAFER SULTANATE

Increasing fire incidents are pushing Oman to put in place better safety standards

INSIDE...

Exclusive: Dubai Civil Defence on 2016 UAE Fire & Life Safety Code

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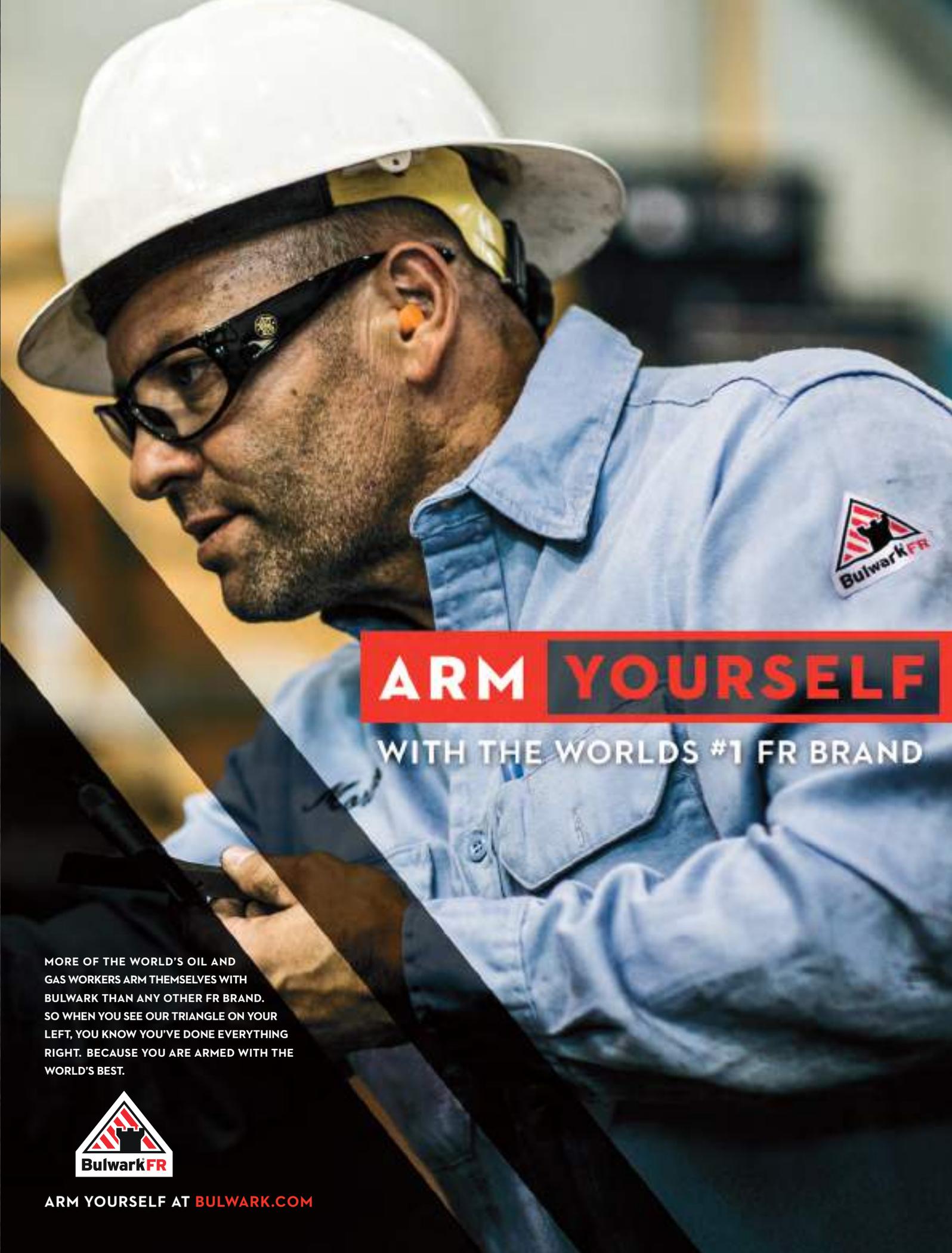
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Issue Four 2016 in this issue...



16



20



24



31

News

Market news 6
Developments from across the HSE industry in the Middle East

Calendar 10
A round-up of upcoming industry events worldwide

Fire Safety

Interview 12
An exclusive interview with Dubai Civil Defence on the 2016 UAE Fire & Life Safety Code

In the line of fire 16
A report on how Oman is addressing fire incidents as summer temperatures rise

Oil & Gas

Maintain asset, prevent accident 24
Why it is important to manage asset integrity in the upstream oil and gas sector

Security

'Smart surveillance can protect us better' 28
AgilityGrid provides an insight into the latest CCTV technologies

Occupational Health

Don't brush off 31
IOSH's latest campaign focusses on tackling silica dust exposure

Events

OFSEC 32
A preview into Oman's most comprehensive exhibition on fire, safety and security

Heat stress campaign 34
Dubai Municipality's initiative to fight heat-related illnesses

Arabic

News Analysis 4
6

editor's letter

The recent increase in fire incidents, many due to the summer heat or negligence, has led to one key question: How can we prevent these incidents from happening? *In the line of fire* (p16) takes a look at Oman where the government is taking concrete steps towards ensuring fire safety. To support the Sultanate's efforts, OFSEC will be held in Muscat to address fire and protection issues, and we have a full preview of the show (p32). A report on asset integrity management reveals how vital it can prove to be for efficient drilling operations (p24), while Eaton Middle East offers its advice on safe electrical distribution systems (p18).

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Alain Charles
Publishing

Veolia to build waste recycling plant in Saudi Arabia's Jubail Industrial City

The construction of the plant is expected to start by Q1 2017. (Photo: Cylonphoto/Fotolia)



WASTE MANAGEMENT

French water management company Veolia and OGE have signed an MoU to build, own and operate a hazardous waste landfill, recycling and incineration plant at Jubail Industrial City in Saudi Arabia.

The agreement, which includes industrial and medical waste collection and treatment services, will reach a total investment of US\$100mn, according to sources

close to the plant deal.

The preliminary licenses to develop the facilities have already been obtained by OGE and the construction is expected to start by Q1 2017, *Saudi Gazette* reported.

Veolia will operate the integrated hazardous waste treatment plant that will serve Jubail, the largest industrial city in the Middle East. Veolia expertise in this area will support the Royal

Commission for Jubail and Yanbu to comply with their regulations, standards and guidelines to control substances emitted, discharged, and deposited within the industrial cities.

Xavier Joseph, managing director of Veolia Middle East, said, "Veolia has now become a trusted environmental partner for the industry in Saudi Arabia. Partnering with OGE is in line with our commitment to build local alliances to bring a strong and enduring team to deliver this ambitious project. This announcement our commitment to support sustainable industries in Saudi Arabia."

Hisham Al Gannas, OGE president, added, "Successful visions are based on strong pillars. Our partnership is the strongest pillar in the upcoming success in waste management business in the Kingdom."

Atkins, EDF to launch nuclear training centre

TRAINING

Atkins and EDF Energy have partnered to open a nuclear training academy in the UAE to support the development of its nuclear leadership and safety culture.

Atkins, UK's nuclear consultancy firm, is assisting EDF Energy, the UK's largest nuclear generator, to export its knowledge and skills in a commercial environment internationally for the first time.

David Haboubi, Atkins' head of strategy for Middle East & Africa Nuclear, said, "EDF Energy's expertise and Atkins' long-standing relationship in supporting the development of the UAE's peaceful nuclear programme makes this a win. We have a deep knowledge of local processes, people and culture which will complement EDF Energy's leadership development programme."

EDF Energy's director of safety and assurance for generation Mike Harrison added, "The nuclear industry is unique in its approach to collective learning, particularly in improving safety. The passion among all organisations, including EDF Energy and Atkins, to share knowledge and expertise is unlike any other industry."

"EDF Energy is the UK subsidiary of EDF SA and we are able to bring the experience to bear of our French colleagues alongside industry partners from across the world."

Atkins has been providing consultancy services to EDF Energy for more than 30 years.

'Middle East O&G sector facing wider cyber attacks'

CYBERSECURITY

According to Repository of Industrial Security Incidents' (RISI) data, cyberattacks against oil and gas organisations in the Middle East make up more than half of the recorded instances. Meanwhile, in the USA or other Western countries, they make up less than 30 per cent of recorded instances.

Katharina Rick, partner and managing director at Boston Consulting Group (BCG), said that the rate of cyber attacks targeting companies in the regional oil and gas sector is notably high, compared to global figures. In recent years, there has been a growing prevalence of cyber attacks in the region.

Cybersecurity firm Symantec reported that Trojan Laziok, an aggressive malware program, had attempted to steal data from energy companies around the world, some based in the Middle East last year. Also, 25 per cent of the attempted cyberattacks targeted companies in the UAE versus 10 per cent in both Saudi Arabia and Kuwait and five per cent in both Oman and Qatar.

The dangers posed by large-scale threats are significant, given the physically expansive infrastructure of oil and gas production and distribution. For instance, the ramifications of a successful cyberattack on an oil and gas company in the Middle East could carry grave implications on national security. In most countries in the region, the oil and gas sector is the main source of income for the government and accounts for 60 to 70 per cent of fiscal spending resources.

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Connected-vehicle solution for safer and efficient regional transport sector



SMART VEHICLES

ICT solutions provider Huawei has signed an MoU with SamTech Middle East, a regional systems integrator specialising in smart vehicle tracking systems, to develop integrated solutions for the transport sector in Dubai.

SamTech will develop customised applications that integrate with Huawei's connected-vehicle solution to improve public safety and comfort across all forms of transport including buses, taxis and heavy goods vehicles.

The connected-in-vehicle offering is part of Huawei's 'Smart City' solution and is underpinned

by its 'Leading New ICT' initiative designed to facilitate the evolution of traditional IT architecture of enterprises into a cloud-based model. It is a combination of technologies that include cloud computing, Big Data, IoT, 5G and SDN.

"The regional transport industry is about to make a major leap into the future, with new ICT solutions enabling increased levels of capability in safety, efficiency and comfort," said Safder Nazir, regional vice-president of Smart Cities and IoT, Huawei Middle East.

"Huawei's connected-in-vehicle solution coupled with SamTech's intelligent software delivers on a key capability for regional smart city initiatives whilst enabling critical control capability for transportation and emergency service stakeholders."

The joint smart vehicle solution offers a variety of safety and security services such as in-vehicle video surveillance, accurate passenger tracking, emergency services communication, real-time vehicle health data analysis and even allows for a host of multi-media services for passenger's entertainment.

By enabling high-speed internet connectivity to transport vehicles, stakeholders can also access high-definition in-vehicle video surveillance to monitor driver and passenger status, analyse driver performance, highlight potential safety issues such as passengers not wearing seatbelts and even allow for swift connectivity to emergency services in the event of a road collision or accident.

Qatar's RasGas achieves safety milestone

WORKER WELLBEING

RasGas Company Limited's (RasGas) offshore production department (Shorebase) has completed 19 years of operations without a lost time incident (LTI).

RasGas Shorebase serves as a hub supporting the offshore gas production operations and drilling operations. It supports the logistics involved with the production of nine billion cubic feet per day of natural gas and the drilling of more than 150 offshore gas production wells.

COO Fahad Mohammed Al Khater said, "RasGas has a long established culture of safety awareness, and our rigorous and systematic approach to reducing and eliminating workplace risk has made us an industry leader in safety performance. This is a testament to our focus on accident prevention and our commitment to maintaining an injury-free workplace."

Al Khater also congratulated the company's contractor workforce for playing a critical role in ensuring safety is a priority and maintaining a secure work environment in all RasGas locations.

While the safety challenges in the oil and gas industry are significant, Al Khater noted, "These accomplishments demonstrate that working together as a team and embedding safety as a core value in everything we do, brings RasGas closer to our goal where 'Nobody Gets Hurt!'"

Harlow International divisions first to win accreditation in Iraq

SECURITY

Harlow International's Iraqi subsidiaries Al Murabit Security Services (AMS) and Al Thaware Security Services (ATS) have been awarded the ISO 18788:2015 accreditation.

Both companies are the first to be awarded the UKAS and IQ Verify witnessed assessment on ISO 18788:2015 in the world. The globally recognised benchmark is the highest accreditation in the

security services industry and both companies are also the first Iraqi-owned businesses to attain the standard through UKAS.

The ISO 18788 is awarded to security services operators who reach the highest operational and management standards. As a challenging standard, ISO 18788:2015 provides the principles and requirements for a security operations management system (SOMS).

ATS and AMS are notable among security providers in Iraq and 97 per cent of the workforce is local. This ensures that their approach to security is informed by a unique perspective: they are committed to building local knowledge, skills and expertise in the areas in which they operate.

Harlow International operates primarily in Iraq with business development offices in London, Dubai and South Korea.

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→ events calendar 2016

August 2016

24-26	OS+H Asia	SINGAPORE	www.osha-singapore.com
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September 2016

5-7	OFSEC	MUSCAT	www.muscat-expo.com/ofsec
12-14	India Security Expo	MUMBAI	www.indiasecurityx.com
25-27	The Big 5 Kuwait	KUWAIT CITY	www.big5kuwait.com
26-28	SPE Annual Technical Conference and Exhibition	DUBAI	www.spe.org

October 2016

17-19	SAOGE	DAMMAM	www.saoqe.org
18-19	Annual Middle East Firesafe & Fire Fighting Summit	DUBAI	www.middleeastfiresafe.com
23-24	2nd Annual Health, Safety & Security Forum 2016	DUBAI	www.hse-forum.com
30-31	Gulf Safety Forum	DOHA	www.europetro.com/en/gsf2016

November 2016

7-9	ExpoProtection	PARIS	www.expoprotection.com
7-10	ADIPEC	ABU DHABI	www.adipec.com

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

Dubai to host inaugural SPE technical conference in Middle East

EXHIBITION NEWS

The Annual Technical Conference and Exhibition (ATCE) of the Society of Petroleum Engineers (SPE) will take place in Dubai from 26-28 September 2016.

To be hosted for the first time in the Middle East in its 92-year history, ACTE will be held under the patronage of HH Sheikh Mohammed bin Rashid Al Maktoum, the Vice-President and Prime Minister of the UAE and Ruler of Dubai, at the Dubai World Trade Centre.

Among the new features at this year's ATCE are two plenary sessions, in which industry leaders will explore the conference theme 'E&P 2.0 – Transforming and Shaping the Future.' Six interactive panel sessions will offer a chance to hear from international and national oil companies and service providers on topical industry issues including talent management, improving efficiency, project

management, collaboration and innovation. The conference also will offer 13 sessions, a mixture of technical and strategic in nature, which will address challenges, opportunities,

innovative and emerging technologies from around the world.

There will be also be a technical programme and more than 2,000 papers were submitted for this year's event, of which 540 will be presented in 58 technical sessions, covering all phases of oil and gas exploration and production.

Khalid Zainalabedin, manager at Saudi Aramco, and ATCE 2016 programme committee chair, said, "SPE is privileged to receive support from the key leaders of the industry, and we promise our members and attendees an exceptional experience through the exciting new high-level sessions and the exclusive activities at ATCE in September".

ATCE is expecting more than 10,000 attendees, who will also have the opportunity to visit a world-class exhibition with more than 250 exhibitors showcasing state-of-the-art technologies.

SPE ACTE will be held at Dubai World Trade Centre. (Photo: Stéphane Gally/Flickr)



Safety at the forefront at London's ExCeL



The winners and recipients at the BSIF 2016 Safety Awards, which was held during the Safety & Health Expo

SAFETY & HEALTH EXPO

More than 13,800 people congregated at the Safety & Health Expo 2016 at London's ExCeL for three days of product releases and networking events.

Featuring the latest developments in safety standards and a full programme of educational content, the Safety & Health Expo brought together exhibitors from all over the world to London to share their latest health and safety solutions, innovations in PPE and occupational health solutions.

The event took place alongside IFSEC International, FIREX International and Facilities Show and Service Management Expo, with a host of new features including The Professional Clothing Show, which attracted more people than ever before to SHE Live!, the PPE, workwear and corporate wear catwalk.

Maintaining its interactive approach with platforms such as the FPA Fire & Evacuation Theatre and the Training and Career Zone, while three inspirational speaker sessions

topped off an educational programme covering all aspects of health and safety. Headline speakers Colonel Tim Collins OBE, BBC news correspondent Kate Adie OBE and British Olympian James Cracknell OBE, discussed how they have overcome adversity and challenges throughout their careers at a packed 400-capacity theatre each day. Elsewhere at the exhibition centre was a mock 'smart home' and a new 'Drone Zone' at IFSEC International.

Among the many product launches were Canon Europe's eight 2MP network cameras, unveiled for the first time at IFSEC International, including an outdoor 360° endless panning model with 30x optical zoom and fast autofocus, and two fixed box 'bullet' models with 20x optical zoom, while Siklu launched a 60GHz radio with interference-free connectivity.

In total, all events, which took place over the three days, drew more than 45,000 visitors to the ExCeL representing a four per cent increase on 2015.

BSIF Safety Awards winners announced

BSIF SAFETY AWARDS

Portwest Ltd was the major winner at this year's British Safety Industry Federation (BSIF) 2016 Safety Awards. The company won the BSIF Product Innovation Award for its Peakview Helmet, as well as the BSIF Service Award.

The awards celebrate new and innovative products that will contribute to improvements in occupational safety and health.

In the BSIF Product Innovation Award category, Highly Commended went to BM Polycro for its Pirtek Fluid Power Glove and 3M for its E-A-Rift Dual Ear Validation System.

The final category, the BSIF Safety Excellence Award, which is based on case studies submitted by members, was won by Dorsavi with Highly Commended going to Acre Frameworks.

BSIF CEO Alan Murray said, "Delivering a first-class health and safety product or service is something that all of these organisations have in common and we are delighted to be able to recognise this work."

Expo highlights safety and security opportunities in the Middle East

MIDDLE EAST FOCUS

Among the thousands of safety and security professionals on hand at the ExCeL London during the Safety & Health Expo and its co-located events were a number of exhibitors showing an increasing interest in markets throughout the Middle East.

Kim Struthers, sales manager at noise and dust monitoring equipment manufacturer Casella, told *Health, Safety & Security Review Middle East*, that the Middle East was an expanding market for the company with major construction projects, especially in the

UAE and Qatar, leading to new opportunities.

"There has been a really high focus on monitoring dust at Middle East construction sites, especially with events like the FIFA World Cup in Qatar on the horizon," Struthers remarked.

"The exposure at all the construction sites has both public nuisance and health impacts. The region has an influx of construction workers coming from around the world and the last thing you want after 10 years is them coming back and saying that they are ill because they were not protected in their

workplaces. Qatar, for example, has really upped the ante by looking at what the exposure issues are at the country's construction sites."

Simon Cook, sales engineering manager EMEA and APAC for Genetec, a leading innovator in IP-based security systems exhibiting at co-located IFSEC International, said, "We have a lot of high-end clients in the Middle East and it is a huge market for us. We have a large and growing office space, we've recently hired a lot more people within the region and it's a huge focus for us."



New fire safety code to usher in accountability

As the emirates await the release of the 2016 UAE Fire and Life Safety Code, Dubai Civil Defence's Lt. Col. Jamal Ahmad Ibrahim speaks exclusively to *Health, Safety & Security Review Middle East* about new clauses and amendments that have been introduced in the updated version.

ABOVE: Lt. Col. Jamal Ahmad Ibrahim is the director of preventive safety department at the DCD. (Photo: Health, Safety & Security Review Middle East)

The Dubai Civil Defence (DCD) is set to launch the 2016 UAE Fire and Life Safety Code in the coming weeks as the UAE seeks to reduce fire incidents in the country. Built on the 2011 version, the updated code has prescribed guidelines for builders and consultants to ensure a fire-safe environment. Designed in cooperation with

contractors, construction equipment manufacturers and building experts, tough measures including fines will be levied on those who fail to comply with fire safety standards.

Speaking about why safety is of utmost importance in the UAE and in particular, Dubai, director of the preventive safety department at the DCD, Lt. Col.

Jamal Ahmad Ibrahim, says, "Dubai is not just a city. It is a brand that means value for investors and residents alike. This is the reason why we need to create a safe emirate. Not just in terms of saving lives, but securing properties as well."

When asked about a fire incident that took place at an under-construction hotel site in

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2016, the director states that even with prescribed rules for safety in place, contractors failed to understand the perils of non-conformity to safety regulations.

“The building in question lacked safety measures such as access to the top floors and a water pump nearby. Investigating further, the DCD realised that the contractors did not follow safety standards as prescribed,” he explains.

With a new chapter dedicated to responsibility in the 2016 UAE Fire and Life Safety Code, the DCD now aims to hold people accountable for fire accidents in the future. This means that owners, builders and even occupants will all be answerable to the DCD.

“Most times, we see that violations occurring in homes like children playing on balconies, misuse of electronics and overheating of sockets. These violations need to be put in check and tenants will be held accountable,” Lt. Col. Ibrahim warns, adding, however, that the biggest responsibility will rest with consultants who approve faulty structures.

Accountability

Once the new code is in place, the consultants will be the ones at the receiving end if a building is unsafe, in terms of fire and life safety, according to Lt. Col. Ibrahim.

“Consultants approve a building’s architecture and then pass it over to us. If the

consultant does not follow the tiniest of safety details, the aftermath could be disastrous. This is the reason why they need to be held accountable,” he states.

The new code will outline practices that consultants would need to follow, among which is the requirement to employ fire engineers who will liaise with building consultants.

Focussing more specifically on fire engineers, Lt. Col. Ibrahim reveals that the DCD, in partnership with professional trainers, will train engineers to become specialists in fire safety regulations.

“The training is mandatory and every consultant in the UAE will have to employ fire engineers, certified by DCD,” Lt. Col. Ibrahim notes.

He also adds that the benefits of consultants working with fire engineers are enormous and profitable.

“Every consultant who hires a NFPA-approved fire engineer will receive design approvals on priority basis. Each fire engineer

“Dubai is not just a city. It is a brand that means value for investors and residents alike. This is the reason why we need to create a safe emirate.”

Lt. Col. Jamal Ahmad Ibrahim, director of DCD’s preventive safety department

will be given a username on the DCD system, which will help them receive direct approvals. However, the DCD will still carry out building inspections and will have final authority. If there are gaps in the designs, the consultants will be held responsible,” he asserts.

Lt. Col. Ibrahim reiterates that the code will be very much in place and it will be the consultants’ duty to implement it properly. Until now, the DCD has dealt with consultants, main contractors, sub-contractors, agents and manufacturers, and it has proven difficult to hold a particular authority accountable, Lt. Col. Ibrahim remarks.

Quicker response times

In an attempt to move towards efficient fire rescue operations in minimum time in Dubai, Lt. Col. Ibrahim divulges that the DCD is building five additional fire stations in the emirate.

“Our earlier response time to reach incident sites was six to eight minutes. Now we are aiming to halve that response time to four minutes. We are redesigning and building five new fire stations located at strategic points so that the distances covered are shorter and more easily accessible,” he says.

The DCD also plans to build fire stations within landmark projects in Dubai and is currently in talks with big developers.

“There will be in-house fire stations at Dubai Parks & Resorts, Dubai Museum, Dubai

Investment Park, Mall of the World and Sheikh Mohammed bin Rashid Football Stadium. These will ensure minimum response times.

“At the Expo 2020 Dubai site, we will have two fire stations – one permanent and the other temporary,” he affirms.

New technology in town

As the UAE attempts to go by the fire safety rule book, the DCD is also utilising newer technologies that will help improve safety.

Lt. Col. Ibrahim reveals the DCD has initiated a radio-frequency identification (RFID) project that will help tackle construction violations like the use of unregistered and counterfeit products.

With the RFID technology, the DCD can monitor and control the movement of all equipment registered with the body. This way, tracking and maintaining ownership data of building materials will be easier. Also, only registered materials will be allowed to be used in new buildings in the UAE.

The DCD has strict regulations already in place regarding the use of fire and life safety materials. With RFID technology in place, safety practices will become even more stringent and monitored.

While the final touches are being made to the 2016 UAE Fire and Life Safety Code, the update will give the country the impetus to fulfil the UAE Ministry of Interior’s vision of a ‘safer and more secure country’. ❖

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Such huge investment underlines a robust approach to security, especially in the region's oil and gas sector, from ensuring physical asset protection to stopping hackers from accessing energy companies' IT systems.

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In the line of fire

As increasing fire accidents continue to challenge the Sultanate, the government is making sure that Oman emerges the winner.

“An adequate number of fire-fighting appliances must be installed and maintained in operating condition at all times in the insured premises.”

A New India Assurance official

ABOVE: Royal Oman Police reveals that fire threats remain a major challenge for establishments in the Sultanate, especially during summers. (Photo: Skeeze/Pixabay)

Oman is a booming economy with the construction sector worth an estimated US\$5.2bn in 2014, up from US\$4.9bn in 2013, and forecasts show that it will continue to grow rapidly, to US\$6bn in 2016.

But as construction activities continue to rise and the arid climate creates more heat, the country has become victim of an increasing number of fire incidents. In the race for numbers, safety is often overlooked, experts agree. Also the use of highly flammable components in construction materials and faulty wiring are major concerns.

“There are multiple cases of faulty or counterfeit electrical wiring, which, when coupled with cables overheating due to high temperature, leads to fire incidents,” say Omani government authorities.

Anthony Cole, technical director at the Aman Fire Protection Consultancy, said,

“Most electrical fires are caused by the improper use of an electrical cord or extension cord instead of permanent wiring. The other cause is the improper termination of electrical wires or using wires that are too small for the electrical load.

“Besides, the use of non-listed electrical power strips, improper wiring installation and the poor quality of electrical wiring can also lead to mishaps.”

In March this year, Colonel Said Al Asmi, assistant general manager for operations at the Royal Oman Police (ROP), stated that threats due to fire remain a major challenge for establishments in Oman, especially during summer months.

“The unorganised storage of cables and inflammable materials in many buildings raise the risk of damage by fire,” Col. Al Asmi warns.

The Public Authority for Civil Defence and Ambulance (PACDA) also notes that the rise of construction activities leads to

laxity in safety regulations and storage of hazardous materials in unsuitable areas.

It is recommended that inflammable materials should not be kept near electrical panels, switch boards or live electrical wires. “There are cases where a single socket is used for charging mobile phones, TVs and audio devices via an extension cord, thereby increasing the load, which heats up, thus causing fire,” a PACDA official points out.

In May 2016, three fires were reported in Oman in a 24-hour period, and in another incident a week later, goods worth US\$428,570 were destroyed when a fire engulfed four warehouses in Al Ansab.

According to insurance experts, failure to maintain and update fire safety equipment is also another reason for fire accidents in the Sultanate.

“The number of fire accidents increases in summer months because of overheating of wires or maybe due to improper



agreement to impart HSE training to staff members. The one-month programme, which is being run in conjunction with the Ministry of Education, will assign an experienced Arabic-speaking health, safety and environment (HSE) adviser to coach teachers and assistants on potential safety hazards and the correct procedures for dealing with them. Besides fire safety, the programme deals with electrical and chemical safety and housekeeping management.

PACDA has also released two books – *Public Safety* and *Evacuation* – for better safety practices. Free to download, *Public Safety* has five chapters and includes tips on how to keep children safe from any undesired contact with electricity and water in kitchens and swimming pools.

The book also provides guidelines on the usage of fire extinguishers and blankets.

Second book highlights what must be done during accidents and crisis. *Evacuation* contains instructions on carrying out successful evacuation, and explains the role of rescue teams.

To make fire fighting teams more efficient, PACDA also carries out regular training for personnel to deal with industrial accidents in cooperation with ROP, PDO and Oman Oil Refineries and Petroleum Industries Company (Orpic).

The training is aimed at measuring the performance of the handling hazardous materials sector in managing such accidents and the readiness of the first response teams in the companies operating in the area.

Following safety guidelines is the best way to avoid such incidents, a PACDA official said. “Building owners and residents

must follow fire safety guidelines and ensure periodic maintenance of equipment. Highly flammable materials should be stored in suitable places and workers should be provided with training on how to extinguish small fires. Appointing a supervisor for security and safety is also recommended,” he adds.

Insurance companies also play an important role mitigating risks to life and properties. On their part, insurance companies in Oman like New India Assurance and Muscat Insurance Company have been providing advice for safer practices.

According to New India Assurance, in 2015 the firm received 71 claim intimations under the fire and property insurance policy, most of them being from faulty wirings.

“The causes for most were mainly stated to be short-circuits in air-conditioners, switches, electrical panels, and other areas. This is because of faulty products. In most cases, this could be avoided.

“Out of the 11 fire incident claims settled by us in 2015, nine were debatable, in which the insured had not followed safety precautions,” Philip K Philip, group CEO of Muscat Insurance Company and Muscat Life Assurance Company, told *Times of Oman*, adding, “We have seen several cases of lack of safety and we advise all to have safety precautions in place before insuring their property. But often this is not the case.”

He reiterates that regular training on fire safety methods must be made mandatory in residential and commercial areas all across the Sultanate.

As the government, official authorities and insurance

companies continue to grapple with fire accidents caused by heat, experts have advised that good housekeeping practices must be implemented and maintained at all times.

“An adequate number of fire-fighting appliances must be installed and maintained in operating condition at all times in the insured premises, and in such a manner that they are easily accessible. Also it is necessary to impart basic safety training to residents to fight emergency situations,” a New India Assurance official advises.

Another area of concern during summer months, which also leads to fire mishaps, is the overheating of vehicles.

In a warning issued by ROP recently, it mentioned, “Heat is the main reason for vehicle fires, which is the second most common cause of fire in the Sultanate.” It further said that poor maintenance, negligence of safety instructions and service delays can be dangerous and vehicles prone to incidents. “As the temperature rises during summer months, loose cables, attached to the car’s headlights and old wiring can cause sparks to burst,” says an ROP official.

In such cases, it is recommended to maintain and check tyres before driving as rubber-made materials are susceptible to heat. The ROP also advised motorists to make sure a fire extinguisher is always available in vehicles.

The government is fully aware of the importance of improving safety. However, it is equally important for private citizens to be aware of the potential hazards and conform to safety standards. An integrated approach will lead to a safer Sultanate. ❖

storage of hazardous materials. However, a lack of safety precautions is the main reason behind the occurrence of such fire incidents,” Oman-based insurers reiterate.

Even as new buildings comply with safety standards, which means being equipped with basic safety equipment such as fire extinguishers and smoke alarms, a lack of awareness can be dangerous. Failure to comply with or understand with safety norms can be fatal, officials say.

PACDA also reveals that in 2015, the Muscat Governorate recorded the highest number of cases with 1,036, while North Al Batinah Governorate witnessed 960 fire incidents.

This has led to the government and authorities, along with private players, to take concrete steps towards the prevention of fire accidents.

Putting safety first

Petroleum Development Oman (PDO) recently signed an

Beware of electrical risks

Electrical distribution systems are an integral part of a building makeup and extra care needs to be taken to avoid any overload that can cause fire, Eaton Middle East advises.

“As system reliability and continuity of power supply are vital, buildings with critical power needs are more vulnerable to power failures.”

Frank Ackland, general manager, Eaton Middle East

For power-critical commercial buildings such as process plants, hospitals and factories, a continuous supply of electrical power is essential.

The provision of reliable power in such buildings is reliant upon low-voltage distribution panels that lie at the heart of the electrical installation. The demands placed upon these panels, particularly as operations and infrastructure expand over time, leaves them intensely vulnerable to arc fault.

An arc fault in an electrical distribution panel is difficult to ignore. A massive build-up of pressure within the panel, rising to 25 tonnes per square metre, can lead to an explosion, resulting in lengthy downtime.

New research conducted by Eaton found that for a typical food industry plant, the cost of production downtime alone could escalate to US\$44,000 in 24 hours. Then there is the cost of replacement switchgear and potential legal action.

Frank Ackland, Eaton Middle East general manager says, “Despite these dangers, electrical distribution panels are easy to overlook in a safety

analysis of commercial building infrastructure. The equipment is generally tucked out of sight and the prevailing view is that the switchgear is safe as long as it conforms to necessary regulatory requirements.

“However, simple compliance with the standard may not be sufficient for maximum protection and may require a higher level of safety that can be achieved with implementation of new technologies,” he adds.

Safety requirements

According to Ackland, building owners have a legal obligation to ensure that the switchgear assembly that drives processes meets the requirements set by the IEC, the international standards and conformity assessment body for all fields of electrotechnology.

“However, even businesses that meet safety standards are not immune from the risk of arc faults,” he notes. “Over time, energy intensive companies may expand operations, adding new installations onto existing ones.”

Ackland adds that the end result is that the switchgear assembly can overload causing an arc flash. “In some cases the cause may be that the chosen

switchgear is unsuitable for the particular application, which can cause dangerous levels of overheating.

“In other cases, an arc fault can arise from incorrect operation, insufficient servicing or hot or humid operating conditions,” he warns.

Buildings with critical power needs are more vulnerable to power failures. For this reason, system reliability and continuity of power supply are vital.

To maximise safety, Eaton advises on two effective strategies – first, check for any unusual temperature rise, and second, ensure that, in the event of an arc fault, the event is identified in real-time to instantly shut down the switchgear and minimise damage to the panel.

Ackland asserts, “As a region that is growing rapidly, with a significant urban population and diversifying economy, it is vital that the degree of safety and security to protect people, business and asset is constantly increasing. Therefore, it should not be merely standards that define the levels of safety we are prepared to put in place, but also the steps we take to ensure no negligence in our efforts.” ♦



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Initiating foolproof measures

As the Dubai Civil Defence prepares to announce the revised UAE Fire and Life Safety Code, Ducab is also taking steps to educate and create safer products to tackle fire incidents in buildings and high-rises in the country.

“The aim of the revised UAE Fire and Life Safety Code is to set out tough new measures including fines for consultants who use non-regulation materials in construction.”

Rashid Thani Al Matrooshi,
director general, Dubai Civil Defence

ABOVE: Dubai is home to more than 900 completed high-rises, 88 of which exceed 180 metres, according to International Bar Association. (Photo: Bir/Pixabay)

As the UAE continues to tackle fire incidents in high-rise towers in the emirates, the looming issue of safety cannot be ignored.

It is often seen that contractors continue to use inferior claddings on high-rise office and residential towers and this ‘inferior’ work is believed to be the reason for at least a dozen soaring fire incidents in the UAE since 2011.

The Dubai Civil Defence (DCD) has always taken prompt action to ensure the safety of residents and address the issue of building material and bad construction practices. In this regard, the DCD will soon release a revised UAE Fire and Life Safety Code, which aims at including strict regulations and standards for construction consultants for new buildings and increase the accountability of consultants and owners involved in a building’s development.

The DCD also recently announced a major review of all buildings in the country to ascertain their fire safety risk as majority of UAE’s towering buildings were built prior to the most recent fire safety codes.

Curbing the cause

Faulty and sub-standard wires

are one of the single biggest cause of fire in buildings and this is where the responsibility lies with builders and contractors who are the key influencers and decision makers for the material used in the construction of these buildings. This primary target group is often complacent due to incomplete awareness of the hazards of low quality wires and cables and their improper installation.

To address this gap, UAE-based manufacturer of high-quality cables and cabling products Ducab, in association with the UAE Civil Defence, launched an educational awareness initiative titled ‘PowerOverFire’ in February 2016.

In the previous edition of *Health, Safety & Security Review Middle East*, we talked about the efforts taken by both to campaign for a fire-safe region (*Leading the way*).

The campaign is primarily tailored to educate and raise awareness amongst electrical distributors, retailers and contractors about the importance of using safety compliant electrical wiring. About 93 per cent of visitors, said that they would immediately check their homes

or offices using the UAE Civil Defence checklists to ensure optimal fire safety.

According to Ducab, educating the masses and spreading awareness is one step towards fire safety, but sufficient importance must be given to implementing safety measures and cables that meet superior standards post aggressive testing. At Ducab, rigorous fire tests are conducted on the cables, carried out for a period of three hours, at temperatures of 950°C and involve assessment of resistance to fire alone, fire with water and mechanical shock.

The result is Ducab’s FlamBICC, a certified range of low-smoke and halogen-free cables, designed to survive and operate during hazardous conditions. The FlamBICC range is third party certified by the loss prevention certification board (LPCB-UK), which ensures that the products meet the fire and safety standards required to perform effectively.

As the country continues to build an increasing number of high-rise towers dotting the sky line, it is only right to emphasise fire safety and ensure complete adherence to fire safety standards and requirements. ❖

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Maintain asset, prevent accident

Managing asset integrity in oil & gas drilling operations and taking fool-proof measures can safeguard both lives and offshore installations.

Asset integrity requires a robust systemic approach in organisations and should be embedded in the organisational structure and be more than just preventive or planned maintenance activities.

ABOVE: In the Middle East region, about 70 per cent of the rigs are older than 25 years and some exceed 40 years. (Photo: Nesta/Fotolia)

Major incidents such as Deepwater Horizon offshore Gulf of Mexico in 2010 indicate that oil and gas assets are exposed to risks at all times. Therefore, it is absolutely necessary that companies have a robust asset management system in place.

As drilling operations happen in frontier areas, deep water, remote locations, high temperature reservoirs, life extension and maintenance become key issue. Due to the high intensity of drilling, oil and gas rigs are exposed to higher levels of stress, which require additional inspection.

According to DNV GL, from 700-800 offshore installations in the Middle East region, about 70 per cent are older than 25 years and some exceed 40 years, while the UAE alone has about 450 offshore installations. It is evident that the ageing process can affect structural integrity of offshore installations and ultimately lead to catastrophic incidents like Alexander Kielland in 1980 where 123 people lost their lives.

Recently, BP conducted a comprehensive project on asset integrity and found there exists a huge gap on drilling rigs maintenance scheme, regardless of the region or rig type.

This article outlines some of the key factors in management of asset integrity in oil and gas drilling operations and how companies can manage assets.

What is asset integrity?

Asset integrity is defined as “the ability of the asset to perform its required function effectively and efficiently throughout its lifecycle whilst safeguarding life and environment”. Reliability refers to equipment and systems working properly. The correlation between risk and reliability is obvious. Undesirable events that is triggered by equipment or system failures can be reduced by improving components and system reliability.

It can be subdivided into –

- **Design Integrity:** Ensure facilities are designed according to required standards and meet specific

operating requirements

- **Technical Integrity:** Ensure appropriate work process for inspections and maintenance exist
- **Operational Integrity:** Ensure appropriate knowledge and experience and competence to operate the plant, as intended throughout its lifecycle

In a wider scope, management of asset integrity means going through the process of knowing the asset, equipment, design and safe operation of the oil and gas plant, systems and the ability to predict as to what could go wrong. It also means ensuring effective measures are in place to prevent and control undesired events. Availability of competent personnel and adequate monitoring systems such as audits and inspections must be in place to achieve the required results. Management of all the above will result in safe process and ultimately secure overall asset integrity.

Therefore, asset integrity requires robust systemic

Save Lives



Starting with your own

Safety is an attitude you take towards your life and a few precautions make a huge difference. Safety is paramount no matter which industry you are operating in, or where you are located. Whatever your trade, work clothes need to be tough to survive the rigours of the site or workshop, at the same time ensuring comfort and protection during the course of a long working day.

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Finding competent people for running and maintaining assets became a big challenge for drilling industry. (Photo: corlaffra/Fotolia)

approach in organisations and should be embedded in the organisational structure, and be more than just preventive or planned maintenance activities.

Both hardware and software systems should be considered for the proper working of asset integrity management. This issue becomes more important as drilling rigs become more sophisticated. Failure to manage rig equipment software, in the past, has led to equipment damage and considerable non-productive time, as confessed by many oil and gas companies.

Safety critical elements (SCEs)

To prevent any incident, identification of SCEs and defining performance standards for reliability and survivability of drilling equipment plays a big role. In highly regulated health and safety regimes, SCEs are cross-referenced to incidents in asset safety/HSE cases.

These are the components whose sole purpose is to mitigate major incident hazards.

One the main SCEs in drilling operation is blow out preventer (BOP) that acts as secondary control when there is an uncontrolled release of wellbore fluids. Following the Deepwater Horizon incident, the BOP has

been core focus for most equipment-related work and since then, major changes in relation to standards and requirements. But the reliability of BOP is still one of the major concerns for drilling companies and the stakeholders.

Regulatory requirements

Regulators and oil and gas operators are pushing for more documentation and proof of work from drilling contractors. The majority of contractors are continuously exposed to the regulatory and commercial changes, in addition to frequent alternation of customer demands. For instance, companies adopt themselves with rigorous UK regulatory regimes and must also adopt themselves to different standards of the Middle East and Africa. Moreover, the workforce's cultural differences make this industry far more complex than any other, which ultimately makes management of asset integrity a significant challenge.

Regulatory bodies, today, have become more oriented to asset integrity management. The final report on Deepwater Horizon published by USA Chemical Safety Board and Norwegian Petroleum Authorities indicated the failure of well control

equipment. Furthermore, recent reports by major regulatory bodies in Norway and the UK indicate that the industry is not meeting its targets in relation to managing risks related to asset integrity and reliability of SCEs.

Even though contractors follow the regulations, they do try to keep oil and gas companies happy and this could lead to undesirable consequences. Around 10 years ago, UK's Health and Safety Executive conducted function testing of SCEs rather than auditing paper works and it revealed functional defects in it. It also illustrated that some of the paperwork was prepared to satisfy the regulator rather than to guarantee drilling rig and platform owners.

Risk analysis and barriers management in asset integrity

Implementation of robust risk management process and identification of credible risks is the cornerstone for any asset integrity management. The drilling contractors should conduct a comprehensive risk analysis on the design and layout of the equipment to identify potential hazards, and in particular in relation to SCEs, they should provide additional

redundancy or protection to reduce risk levels. In recent years, Bow-tie risk assessment methodology has been used by companies to demonstrate their robust risk control regime and indicate various barriers including SCEs. Bow-tie methodology indicates that the all foreseeable risks are managed rather than just analysed. In fact, Bow-tie links a company safety management system and the risk assessment and an audit can easily reveal evidence of competence assurance and asset integrity, proving that managing major incidents based on reality and owned by workforce.

Failure mode effect and criticality analysis (FMEA) is also widely used in design and construction stages of drilling rigs. Such risk assessment methodology give an opportunity for equipment manufactures and drilling rig crew to know the equipment design, operation and maintenance and prescribe tangible control measures to enhance the rig reliability and reduce the associate risks. Such risk analysis is critical for highly automated and complex systems.

Low oil price scenario

The recent downturn in the oil and gas industry and low oil



On the evening of 20 April 2010, a gas release and subsequent explosion occurred on the Deepwater Horizon oil rig working on the Macondo exploration well for BP in the Gulf of Mexico. (Photo: Wikimedia Commons)

price has significant impact on maintaining assets. Typical management reaction in current challenging economical conditions is to cut maintenances costs or contain them. The KP3 inspection on 2008 by UK Health and Safety Executive indicated cost cutting on asset integrity started following decline in oil price. Furthermore, previous downturns in oil and gas industry have witnessed experienced staff laid off, which resulted in asset specific knowledge being lost forever. Therefore, the ability of any company to determine the best time to do the maintenance, in safe and efficient way has become more important than before.

Given that maintenance costs in offshore exploration and production operations are much higher compared to onshore activities, companies should

maintain a balance between safety, extending asset service life and costs. Therefore, using advanced technology and related software is much necessary to help to schedule maintenance and avoid unnecessary costs.

Based on industry norms, predictive maintenance only cost 15 per cent of maintenance after breakdown and preventive maintenance are typically 50-60 per cent less than breakdown maintenance costs.

Computerised maintenance management system (CMMS) can assist oil and gas companies to manage their maintenance activities and achieve asset integrity management objectives. In this regards, 'Asset Integrity Dashboard' software assists companies to manage their asset integrity with consideration of related costs. The software is capable of monitoring drilling parameters, predicting critical

asset failures, and providing insight into the overall health of the rig with immediate feedback to operation, maintenance and management personnel.

Human asset

Drilling, per se, poses a great deal of challenge between personnel interaction, technology and organisation. For instance, a driller should monitor the screens and gauges, control of the well, lead the works on rig floor and deal with automated equipment in his cabin. Human errors can play a significant role in equipment failures. Moreover, finding competent people for running and maintaining assets has now become a huge challenge for drilling industry.

Following Deepwater Horizon incident, significant efforts and capital have been invested to establish innovative simulator-based training centres and

competency assurance programmes. But oil and gas industry downturn has led to the dismissal of large number of skilled workers due to shortage of exploration activities. An asset integrity management should be embedded in an organisational structure because it is crucial.

Key performance indicators

"If you don't measure it, you can't manage it". The key performance indicators (KPIs) can measure and show drilling contractors how valuable asset integrity is in an organisation. Typical KPIs are the number of raised non-conformities and improvement suggestions in relation to asset integrity, number of inspections, audits, implemented remedial actions, awareness trainings, breakdown and preventive maintenances, apart from risk analyses sessions.

Due to regulatory and customers requirements, ageing of assets, downturn in oil and gas industry, asset integrity has become a significant challenge for oil and gas drilling contractors. A robust asset integrity management could prevent major incidents during oil and gas drilling operations. ❖

By Shahram Vatanparast MSc., CFIOSH, FIIRSM from Loughborough University with MSc degree in occupational health and safety management. Currently, he is working as a freelance QHSE consultant in both onshore and offshore fields.

'Smart surveillance can protect us better'

AgilityGrid CEO Costa Bouloukavas speaks about its new Snap surveillance system, which is both unique and cost-effective, and why it is ideal in today's scenario.

"Even with budget cuts subject to lower oil prices, security is still a big market because of the times we live in."

Costa Bouloukavas,
CEO at AgilityGrid

In the wake of increasing terrorist attacks all over the world, security has taken prominence. Heightened global tensions and limited number of security personnel poses serious challenges to a country. But the good news is – in this age of digitalisation, video surveillance can help shield man and properties from disasters.

Offering complete CCTV solutions and catering to multiple industrial sectors, Dubai-based security solutions company AgilityGrid speaks to *Health, Safety & Security Middle East* on how it aims to make the region a safer place.

CEO Costa Bouloukavas reveals that AgilityGrid is, for the first time, looking into transportation surveillance that

is fast gaining ground globally.

"We are looking to create a system that studies behavioural changes. This means we do not just track the 'suspect', but we read their body language as well. The software will have an input table of normal and abnormal behaviour, which can help authorities narrow down on targets."

Talking about their new offerings, AgilityGrid has now brought to the fore its Snap technology for highly sensitive environments.

"We have initiated Snap FMx and Force Multiplier. Snap FMx gives operators the tools to respond more effectively to incidents and pursue subjects throughout large IP camera networks. With Force Multiplier, tracking a target becomes faster and seamless.

"Technically, a lot of data is amassed during recordings. But most of the times, we do not know what to do with the data. Also, a lot of software do not record frame to frame events. The users of Force Multiplier can navigate through both live and archived streams, including both forwards and backwards in archives to aid forensic investigation – thereby performing virtual walkthroughs of remote sites to determine the flow of incidents, without actually going to the site."

Together with VMS platforms

including Milestone XProtect Corporate, Avigilon Control Center and Genetec Security Center, Snap FMx provides an operator the experience to track with continuity and certainty, both live and for incident reviewing.

The features include patented tracking algorithms; video pursuit of individuals through large sites; learning physical relations or overlaps between cameras to track a person from one camera to another; show all available views (cameras) and display in one monitor and then automatically shows where to look next; export AVI video of the tracked target from all cameras as one single movie; follow several targets at the same time. The software supports video management systems, which currently include Honeywell's DVM, Milestone XProtect Corporate, Genetec Security Center and Enterprise, and DVTel Latitude.

Talking about the recent market downturn affected by oil price, Bouloukavas is of the opinion that even with budget cuts, security is still a big market because of the times we live in.

"Security, in the Middle East, will remain a big part of the national budget. These are tough economics times but we have Expo 2020 Dubai and 2022 FIFA World Cup Qatar that will keep the sector busy." ❖



ABOVE: Bouloukavas spoke about the unique solutions that the company is offering worldwide and in the Middle East. (Photo: AgilityGrid)

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Enhancing the driver experience

Volvo Truck's new and improved features can help tackle driver fatigue, common in heavy machinery industry, and thereby increase efficiency.

The heavy machinery sector in the Middle East region has been witnessing fatigue and stress in drivers due to increased project pressure, and drivers frequently work more than the specified number of hours. With increased competition, companies may not be willing to cut man hours. Therefore, Volvo Trucks has taken steps to fight driver fatigue by introducing and revamping safety technology in all its trucks.

Dynamic steering

With Volvo dynamic steering, the effort to steer is drastically reduced, making the job easier and safer while minimising the strain on the muscles.

It is ideal for construction trucks where rough terrains, heavy loads and challenging manoeuvring at low speeds are part of the job. An electric motor is attached to the steering gear, which works with the hydraulic gear. At low speeds, it replaces the driver's muscle power and the truck can be steered without any effort.

At its demonstration centre in Swedish city of Gothenburg, Volvo Trucks showcased some of the health and safety features that can lead to better driver comfort.

The Volvo FMX series has a robust exterior, an ergonomically sound interior and efficient technology that makes the driver's job easier.

Apart from the dynamic steering, the new features in Volvo Trucks also include:

Optimised rear axle pressure

Most construction trucks drive at least half of the time unladen. Normally, this is a bumpy ride with a lot of vibration propagating through the chassis. However, this may not be the case with air suspension, which provides a smooth ride – thereby saving the driver, the truck and the cargo from unnecessary wear. The air suspension is specifically designed for construction trucks, and is now also available for 4×4, 6×6, 8×6 and 10×6 configurations.

I-Shift gearbox

The new F-gen I-Shift with crawler gears provide stress-free driving, great fuel economy and easier manoeuvring due to a host of intelligent gear-shifting software functions. I-Shift with crawler gears is available for Volvo Trucks' 13- and 16-litre engines in the Volvo FM, Volvo FMX, Volvo FH and Volvo FH16.

Rear air suspension in combination

The new option of combining air suspension on the rear axle with driven front axle improves the drivability in trucks with all-wheel drive. While leaf springs are designed for heaviest weights, air suspension has the flexibility to adjust to the actual weight of

the load. This leads to improved handling, less effort from the driver and reduction in the wear on the truck and the road surface.

Tandem axle lift

Raised drive axle leads to lower fuel consumption. The Volvo FM, Volvo FMX, Volvo FH and Volvo FH16 are now available with the all-new Tandem axle lift, a feature that allows the rearmost drive axle to be disengaged and raised when you unload. Just like a tag axle would, this greatly improves the turning radius and reduces the fuel consumption – by up to four per cent when unladen.

Automatic traction control

If the driver is manoeuvring in extreme terrain, they need a truck with a driven front axle or all-wheel drive. Automatic traction control (ATC) is a new feature that automatically engages the front axle, but only when it's needed and helps avoid getting stuck.

Increased front axle load

In the case of construction machineries, load capacity plays a big role and every extra tonne carried translates into better profit margins. This also increases productivity and greater flexibility. Volvo Trucks has risen the load capacity of the front suspension from 18 to 20 tonnes for dual front axles. And the driven front axle can now handle loads of up to 10 tonnes. ♦

ABOVE: The Volvo FMX series includes the new F-gen I-Shift gear, touted to be the most intelligent gearchanging system invented for distribution, construction and long-haul operations. (Photo: Volvo Trucks)

Don't brush off

The Institution of Occupational Safety and Health's (IOSH) ongoing campaign is currently focusing on how to tackle harmful effects of silica dust exposure, which is one of the major causes for cancer, with expert advice from president Dr Karen McDonnell.

IOSH has identified that a lack of understanding or awareness of silica dust as a hazard is a common cross-industry barrier to effective control of the issue.

Dr Jukka Takala and Boon Kiat Tan, of Singapore's Workplace Safety and Health Institute, have estimated that, every year, more than 940,000 people are exposed to silica dust at work in the Middle East and about 250 people die every year due to lung cancer caused by that exposure.

Silica is a natural substance found in stone, rocks, sand and clay, as well as construction materials like bricks, tiles, concrete and plastic composites.

It is safe if left alone. But construction activities can release silica dust in the air, which can be harmful and lead to lung cancer, silicosis, emphysema and bronchitis. This is why silica is the current focus of IOSH's *No Time to Lose* campaign.

The drive, which began in November 2014, has already focused on diesel engine exhaust emissions and solar radiation. Now the current focus of the campaign is to raise awareness of the harmful effects of silica dust.

Controlling exposure

Activities such as laying ballast, sweeping up, cutting concrete, bricklaying, tunnelling and stone working can create silica dust and construction workers, digger drivers, engineers, grinding



operatives, sandblasters, tunnel workers and welders are at a heightened risk. The good news is that it can be controlled.

Companies can look at cutting down the risks by considering what activities involve working on materials that contain silica at the design stage or start of a new project. For example, if a new building is being designed, one needs to make sure that it includes pre-built recesses for plumbing, gas and electric wiring so there is less need to cut or drill masonry and concrete during the construction phase. It is also better to use a different product which does not create a harmful dust. For example, organisations can substitute olivine for silica sand in abrasive blasting.

If one cannot avoid exposure to silica dust, the next step is to

monitor or assess the exposure and identify the jobs and tasks that need better controls. In a workshop or factory, it is recommended to use water suppression on fixed machinery, hoods or enclosures to contain the dust, and local exhaust ventilation to extract the contaminated air at the point it is produced.

Respiratory protection

In many cases, it is not possible to cut down dust. So if air sampling shows that there is still too much dust, there is a need to wear personal respiratory protection. When used, it must fit the wearer properly to be effective. Individual factors need to be taken into consideration during respiratory protective equipment (RPE) selection including the medical fitness of the wearer, and their facial and physical characteristics.

IOSH's *No Time To Lose* campaign is calling for businesses to pledge for action and many have already signed up for the cause including Al Hammadi Hospital in Riyadh, Saudi Arabia. IOSH also offers free practical advice and resources for organisations to enable them to protect workers. ♦

For more information, visit www.notimetolose.org.uk

ABOVE: If workers use hand-held power tools, it is advisable to use tool-mounted ventilation or water suppression. (Photo: IOSH)



Converging fire safety and security in Oman

Oman Fire Safety and Security Expo (OFSEC) 2016 is designed to meet the local and international requirements, and strengthen collaboration between authorities and industries.

The exhibition will be the gateway to current and future market trends in the fire, safety and security sectors.

The Middle East has a fast-growing safety and security market with a growth rate of 10 per cent annually, since 2012, a recent G4S report showed. (Photo: Prathan/Fotolia)

Oman Fire Safety and Security Expo (OFSEC) 2016 will bring together local and international exhibitors who will showcase their avant-garde solutions, latest technologies and innovations, and cost-effective products. Their services are expected to meet the requirements of governments, businesses, industrial and commercial entities, aviation, construction, infrastructure, transportation, manufacturing, oil and gas and utilities sectors.

Dynamic economic and infrastructure development in Oman and the region has made the Middle East one of the most vibrant safety and security markets in the world, with a growth rate of over 10 per cent annually, since 2012. According to a recent research by G4S, there is a diverse demand for fire, safety and security equipment, ranging from the smallest of businesses to large corporate and home-users.

According to the organisers Muscat Expo, OFSEC is designed to meet the needs of the local,

regional and international markets by linking practitioners, suppliers, distributors and manufacturers from the fire, safety and security industry, with key decision makers from the government and private sectors, making it a definitive networking platform, where new projects and partnerships are initiated and visionary objectives are implemented. This event also aims to create synergy and strengthen the collaboration between the authorities and the industries.

The three-day exhibition is expected to attract participation from a large number of exhibitors and representation from over 30 countries, with a slew of product and service launches.

OFSEC has collaborated with government bodies, leading industry associations, research partners and specialists to establish the exhibition that caters to the entire fire, safety and security sectors, making it an imperative convergence point.

The expo is aligned with the demand and supply of the market across the board of industries to share best practices, tackle challenges, and explore break through methods for the integration of safety and security technologies.

The exhibition will also highlight a wide spectrum of products and services from the fields of commercial security, emergency rescue, homeland security, crisis and risk management, fire and protection, information security, critical infrastructure, transportation safety and security, hazard and disaster management.

The exhibition is expected to lay the foundation and be the gateway to current and future market trends in the fire, safety and security sectors for industry professionals to communicate, share ideas, identify solutions, operate effectively and efficiently.

OFSEC will also confluence and strengthen business engagement and encourage investment, the organiser asserts. ❖

HSE at the core of Bahrain's biggest refining event

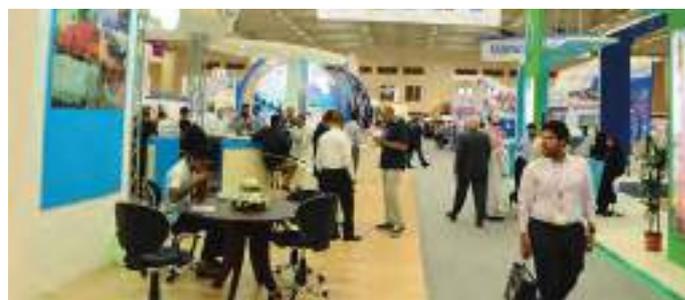
Middle East Petrotech 2016 will address health and safety issues in the downstream industry, besides focusing on energy conservation and operational excellence.

A series of 'Meet the Experts' sessions will provide delegates with the opportunity to meet, consult and learn from decision makers on key topics including hydrotreating process, fired heaters and reforming process.

More than 3,500 refining and petrochemicals industry professionals from 30-plus countries will converge in Bahrain from 26-29 September 2016 for the 10th Middle East Refining & Petrochemicals Conference and Exhibition (Middle East Petrotech 2016).

Held under the patronage of Bahrain's Prime Minister HH Prince Khalifa bin Salman Al Khalifa, Middle East Petrotech 2016 aims to play a significant role in the development and transfer of downstream hydrocarbon technology in the region. It has incorporated a four-day high level conference organised by a committee of NOCs, IOCs and major service providers, and a parallel three-day exhibition organised by Arabian Exhibition Management.

Bakheet Al-Rashidi, Middle East Petrotech 2016 chairman and CEO of Kuwait Petroleum International, said, "The conference theme 'Teaming Up for Excellence: Industry, Government and Education' is focused on the symbiosis between downstream oil and gas professionals, government officials and those active in the education and training fields. The synergy between these sectors will lead to



the advancement of the downstream industry through maximisation and exploitation of oil and gas resources, implementation of best practices and benchmarking utilisation.

"Understanding the latest developments and trends in the global economy and future shifts in market dynamics is of vital importance. Top management and economists will discuss possible ways forward in an uncertain world at Middle East Petrotech 2016."

Optimising the best return on assets will also be a focus of the conference, through energy conservation, new tools for the successful completion of projects, operational excellence and encouraging a culture of reliability and efficient turnaround maintenance.

Health, safety and environment (HSE) will be showcased in a bid to encourage the creation of a culture of plant safety and

environmental practices to help ensure that future generations are safe and healthy.

The pre-conference forum, on 26 September at the Ritz Carlton, Bahrain Hotel & Spa, will discuss the vital roles of industry, education and government across three sessions, and will be followed by the conference opening ceremony, which will begin with welcome address by Bahrain's minister of oil Shaikh Mohammed bin Khalifa bin Ahmed Al Khalifa.

Over the next three days, the conference will feature 63 technical sessions with insights on case studies, best practices and industry advancements across nine distinct tracks: operational excellence, plant reliability and integrity, project challenges, energy management, HSE and risk management, smart plant and technology, market intelligence, catalyst management and people development. ♦

ABOVE: In 2014, the 9th Middle East Petrotech attracted a total of 3,645 trade visitors and conference delegates. (Photo: Middle East Petrotech 2016)

Stop stressing

Dubai Municipality, in collaboration with Dubai Civil Defence, recently launched a three-month summer campaign to create awareness related to heat stress. The organisation is also taking efforts to tackle workplace stress along with ILO.

“The campaign, launched in June 2016, aims to ensure that companies follow safe summer guidelines for better productivity from workers.”

Raed Al Marzouqi, head of occupational health and safety at Dubai Municipality

ABOVE: Al Marzouqi speaks at the Safe and Healthy Summer Campaign. (Photo: Dubai Municipality)

Dubai Municipality celebrated the launch of Safe and Healthy Summer Campaign on 2 June 2016.

In effect until August, the campaign is aimed at spreading occupational health and safety guide related to heat stress and the risk among workers. Soaring temperatures and mounting humidity levels have led to heat exhaustion and the effects can be felt even while staying indoors.

At the event, Raed Al Marzouqi, head of occupational health and safety at Dubai Municipality, spoke about the steps that need to be taken to avoid heat stress among workers. “It is important that we specify guidelines for those who work outside in high temperatures to understand hazards related to heat,” he says.

Some of the summer safe guidelines entailed in the programme include:

- Conduct heat stress training and workshops
- Monitor urine colour to check hydration level
- Maintain a well-balanced meal and water intake
- Importance of clothing, midday breaks and acclimatisation
- Precautions to be taken to avoid heat-related illness

Choosing the right hydration drink is also necessary, Al Marzouqi points out. He elaborates that the right hydrating drink must contain necessary electrolytes like sodium, potassium, magnesium and calcium. “Also ensure that tasty drinks are encouraging as bad taste can lead to nausea in workers,” he instructs.

The campaign also laid out the challenges of heat stress and how to prevent them. Few of them include heat cramps, heat exhaustion and heat stroke. Apart from fighting heat-related illness, the campaign also talked about how to prevent fire incidents and the correct use of first aid.

Workplace stress

In April this year, Dubai Municipality, along with International Labour Organisation (ILO), held ‘Workplace Stress – A Collective Challenge’ workshop.

In the year 2014-15, 60 per cent of the stress among workers was recorded to be work related. Al Marzouqi pointed out that stress is needed at an optimum level but not to the point where it breaks a person.

Stress is one of the most challenging issues at a workplace,

which represents potential risk in the field of occupational safety. The impact of stress on health can vary according to individual response. However, high stress levels can contribute to developing health-related impairments, including mental and behavioural disorders such as exhaustion, burnout, anxiety and depression, as well as other physical impairments such as cardio-vascular disease and musculoskeletal disorders. There are also emerging coping behaviours such as alcohol and drug abuse, smoking, unhealthy diet, poor sleep, and their relation with an increasing rate of workplace accidents and non-communicable diseases.

Dubai Municipality has understood and identified the need to mitigate risks for a safer and healthier workplace.

“Our attempt is to discuss the different levels of stress and how everybody is participating in lowering stress levels – directly or indirectly. We are trying to fulfil our commitment towards the different categories of employees in the society. We are looking to adapt best practices, trying to ensure that we are in accordance with the international standards.” ♦

SAOGE 2016 set to tackle hydrocarbon challenges

Saudi Arabia's premier oil and gas exhibition, to be held from 17-19 October, aims to provide a platform for industry players to discuss and critically evaluate commercial and technological innovations, against the backdrop of depressed crude prices.

Given the trend in reduced global demand, depressed pricing and oversupply looming over the international oil and gas sector, Saudi Arabian Oil & Gas Exhibition (SAOGE) 2016 is set to address the need for innovation, asset optimisation and efficiency in the sector to secure and ensure healthy refining margins.

According to the event organisers, with planned international investment opportunities, sector restructure and privatisation as well as the divestment of Saudi Aramco assets, the Saudi Arabia oil and gas industry is set to play a key role in mitigating the Kingdom's exposure to global hydrocarbon fundamentals risk.

The 8th edition of SAOGE, hosted in Dammam, under the patronage of the Governor of the Eastern Province, HH Prince Saud Bin Naif Bin Abdulaziz, aims to provide a platform for local and international industries to assess the key fundamentals and drivers forging the global markets.

The event is expected to bring together more than 250 private



and public companies, research institutions and government agencies, in a gathering of all the oil and gas leaders working in the Eastern Province of Saudi Arabia.

International platform

Founded in 2008, SAOGE has enjoyed steady growth over the past eight years with a successful 23 per cent year-on-year annual growth rate, both internationally and from within the Kingdom, the organisers stated.

In 2015, the show attracted 7,953 visitors. In the past seven years, SAOGE has played host to more than 1,000 companies from 50 countries, with 40 per

cent of exhibitors from the GCC and 60 per cent of exhibitors from other nations.

This year, the three-day event will be conducted concurrently with the Machine Tools Exhibition (MTE), which is expecting more than 100 companies from more than 20 countries, the event organisers added.

A strong international presence is also expected at the event with 68 per cent of participation from international attendees.

Participants from countries including China, Egypt, France, Germany, Italy, South Korea, Russia, the UAE, the UK and the USA are expected at the event. ♦

This year, the three-day event will be taking place concurrently with the Machine Tools Exhibition (MTE).

ABOVE: SAOGE 2015 attracted around 7,953 visitors. (Photo: SAOGE)

OS+H Asia to enhance safety practices

The Occupational Safety + Health Exhibition for Asia (OS+H Asia) will return for its tenth edition from 24-26 August 2016 in Singapore.

With safety at work, health-maintaining working conditions and a healthy workforce fast gaining momentum as paramount initiatives for all companies particularly within ASEAN member countries, OS+H Asia 2016 will present the latest in occupational safety and health solutions, technologies and products across diverse industries and sectors that are more current than ever. Based on the success of the last event in 2014, the 2016 event will feature three enhanced focus areas namely safety, security and health at work.

“These three established themes have traditionally been OS+H Asia’s focal points, but in 2016, you will see an enhanced presentation of safety monitoring and surveillance systems, solutions for work safety at high risk areas, industrial first aid equipment, ergonomically designed work solutions and environmental and fire protection gear among many others, in keeping with current trends and oriented towards the needs of the core target groups from corporate safety and the health

management sector,” said Gernot Ringling, managing director at Messe Düsseldorf Asia.

In view of the changing work landscape occurring all over the world as companies strive to raise OSH standards, technology development championing workplace safety and health alongside all measures of action are becoming increasingly significant, according to Ringling.

“OS+H Asia is a unique platform that provides significant impact in helping companies improve their safety and health standards and in developing a proactive and preventive approach to safety and health in the workplace,” he added.

Over the last few years, many ASEAN member countries have made rapid progress in raising OSH standards as governments in the region step up workplace safety policies.

For OS+H Asia 2016, the growing demand for workplace safety and health products and solutions, fuelled by the government and industry’s heightened call for companies to achieve a zero-harm and accident-free state, will be reflected at the trade fair with more than 200 international exhibitors and leading brand names. ♦

Tank World Expo grows, rebrands itself to StocExpo Middle East Africa

CRUDE STORAGE

Tank World Expo 2016, the tank storage event for the Middle East and Africa region, brought together bulk liquid storage industry’s key players from over 45 countries, with more than 1,200 visitors, 85 suppliers and 18 speakers over a span of two days.

The show, which took place on 12-13 April 2016, achieved an increased footfall, with major companies such as Fujairah Oil Terminal, Emirates National Oil Company (ENOC), Galana Refinery Terminal SA, Hajar Oil, Port of Salalah and VTTI Fujairah Terminal in attendance. The show also witnessed discussions on safer storage of crude and maintaining regular safety checks in oil terminals.

However, analysts maintained that even with lower oil prices, the efforts to maintain and increase storage capacity across Middle

East and the world have not slowed down.

Following the success, developments are underway for 2017 which will see the show rebranded to StocExpo Middle East Africa. According to organisers, this is in line with the world’s largest and most recognised tank storage exhibition StocExpo (Rotterdam & Antwerp), giving the show the recognition it has earned over the last three years.

Nick Powell, StocExpo & Tank Storage portfolio event director, said, “We acquired Tank World Expo less than a year ago, and then proceeded to merge it with our own event, Tank Storage Middle East. The results have been outstanding, managing to attract many more visitors to an already established show, which is a phenomenal achievement. We are thrilled for making the show such a success. The feedback from visitors and exhibitors has been fantastic.”

Tank World Expo 2016 also had an expanded show floor, with many exhibitors using the show to launch products to the Middle East and African markets.

Alec Keeler, managing director at Loadtec Engineered Systems, added, “Once again Easyfairs have organised a high quality show with high quality visitors. It is worthwhile and a regular event in our diary.”

Powell concluded, “It is great to be part of such a vibrant show, and we are already deep in our planning to make 2017 even better.

“In fact, I can officially announce that Tank World Expo is rebranding, and will now be StocExpo Middle East Africa, meaning that it further aligns with our current portfolio of events across the world.”

StocExpo Middle East Africa will take place again at the Dubai World Trade Centre on 26-27 April 2017.

Spotlight on Doha as Gulf Safety Forum approaches

Held under the Patronage of HH Sheikh Abdullah Bin Nasser Bin Khalifa Al Thani, Prime Minister and minister of interior of Qatar, Gulf Safety Forum 2016 will take place on 30–31 October in Doha.

Gulf Safety Forum is jointly organised by the Gulf Organisation for Industrial Consulting (GOIC) and Euro Petroleum Consultants (EPC). According to organisers, the event will bring together key industry players from across the Middle East to discuss strategies for continuous improvement of safety procedures.

The participants will also share successful case studies and roadmaps towards achieving the goal of zero accidents.

A platform for international safety experts and providers of safety tools and technologies to present the latest methodologies that can assist companies to achieve these goals, Gulf Safety Forum provides a unique arena for key industry stakeholders to share front line developments for the benefit of all participants, according to the organisers.

The event is designed to share the latest strategies for driving safety excellence with a blend of international and local expertise.

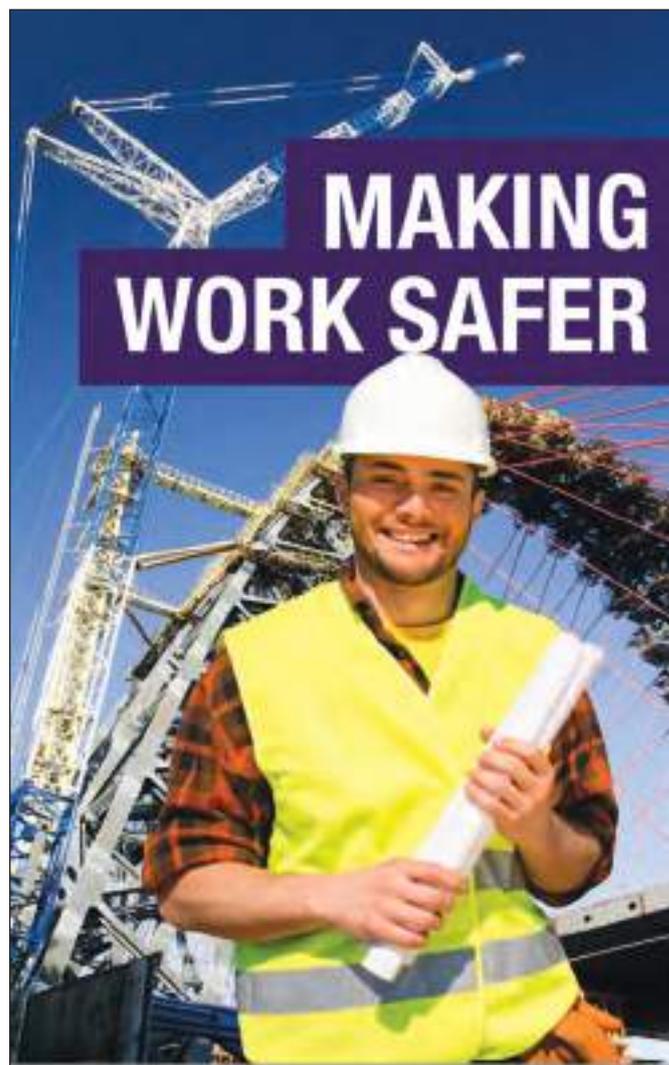
Describing the relevance of the event, EPC president Colin Chapman said, “It is now widely recognised that as organisations develop on their safety journey, it is necessary to focus on plant

safety, reliability and human behaviour in order to achieve the target of zero accidents. A focus on safety is the number one priority for companies and both manufacturers and suppliers are developing innovative and effective solutions in these areas.”

Some of the main conference topics to be covered include the regulatory environment, construction and safety in the workplace, improving workforce competence, managing mature assets safely, frontiers in plant safety, safety communications and how to develop and sustain process safety leadership.

The organisers are also conducting training workshops on ‘Fundamentals of Process Safety Management’ and ‘Operational Excellence Strategies in Oil, Gas and Petrochemicals’.

Some of the confirmed speakers at the event include Texas A&M University Regents professor and director Sam Mannan, health and safety laboratory head of international unit Laurence Cusco, ORYX GTL head of safety Martin Murray, KOC TPL planning specialist Yousef Sabri, Qatar Rail health and safety senior manager Paul Williams. ♦



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New flame detectors to keep personnel and facilities safe

SENSOR TECHNOLOGY

Emerson has announced the release of its Rosemount 975 flame detectors, a complete line of optical flame detectors designed to perform in harsh environmental conditions and connect directly to alarm or automatic fire extinguishing systems.

Emerson vice-president and general manager for flame and gas detection Lara Kauchak said, “When you’re concerned with protecting lives and the future of your operations, you need an optimum solution for each facility and location. This comprehensive new line of flame detectors provides the reliability and functionality to meet all of our customers’ flame detection coverage needs.”



The new line incorporates a variety of flame detection technologies. (Photo: Emerson)

The new line incorporates a variety of flame detection technologies that provides optimal coverage for a range of process industries, including upstream oil and gas installations, chemical plants, and refineries. The multi-spectrum infrared sensor

technology detects hydrocarbon fuel and gas fires as well as ‘invisible’ hydrogen fires with wide area coverage and strong false alarm immunity. Integrated ultraviolet and infrared sensor technology rapidly detects hydrocarbon-based fuel and gas fires, hydroxyl and hydrogen fires, as well as metal and inorganic fires with robust false alarm immunity.

Built to be extremely durable and weather-resistant, the flame detectors feature heated windows for operation in harsh weather conditions such as snow, ice, or condensation; broad operating temperature ranges from -55°C to 85°C and multiple output options for maximum flexibility and compatibility. The Rosemount 975 line is approved to Safety Integrity Level 2. The detectors can even be tested in-field with a specially designed flame simulator at distances of up to 12 metres from the detector, eliminating the need for personnel.

Dialight launches high efficiency Zone 1 SafeSite high bay

SAFETY LIGHTING

Dialight has unveiled its first-ever high-efficiency ATEX/IECEX Zone 1 SafeSite high bay. Each high bay feature Dialight’s latest in-house designed power supply and a full 10-year, full performance warranty and up to 110 lm/W efficiency.

The high output 23,500 to 9,650 lumen high bays claim to offer better illumination and efficiency for oil and gas, chemical, petrochemical, pharmaceutical and other hazardous area applications. The bays also include an integrated power supply with 6kV surge protection and their light weight and low profile makes for easy installation. It also allows for a three-metre cable or integrated wiring junction box. With typical mounting heights up to 13 metres, the SafeSite LED High Bays are L70 lifetime rated for more than 150,000 hours and can operate in temperatures ranging from -40°C to +60°C.

Innovation in high-pressure breathing air compressors

TECHNOLOGY

Bauer Compressors Inc. has created UNICUS 4i, a compressor package, which centralises all high pressure breathing air system components into one appliance type package. Central to the compressor is an air-cooled compressor coupled to a high pressure breathing air purification system.

It incorporates touchscreen technology to the operations panel, providing immediate operator interphase with the unit. This would allow the customer to turn the compressor on

and off, control the processed air into or out of the onboard ASME air storage cylinders and even fill self-contained breathing apparatus (SCBA) cylinders within a three-position NFPA compliant containment fill station while at the same time controlling the function of individual fill pressures at each SCBA filling position.

Their other product Lab On Locale 2 is a proprietary option which can help in obtaining air samples for analysis and locating a qualified lab. A specific hardware

component is integrated into UNICUS 4i and at the keystroke on the operator interphase the user gains immediate access to a qualified third party lab over the internet.

Additionally, RFID technology utilises proprietary antennas to read SCBA tags to record all data in accordance with National Fire Protection Association (NFPA). This is done to note the history of SCBA, especially useful in case of an accident. The ‘Gas-Tek’ sensor allows tailoring the gas monitoring requirements to user-specific needs.



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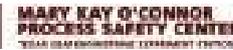
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KISS brings 'Starlight' to UAE

SECURITY

Korean Integrated Security Solutions (KISS), a Eurostar Group subsidiary, recently introduced Starlight technology, an advanced feature in IP CCTV camera that enables HD night vision, in the UAE.

The latest Starlight cameras can produce high resolution colored images of 2 MP or higher at night and without any supplementary lighting, even at 0.002 Lux (F1.2) low light conditions.

Eurostar Group chairman Raju Jethwani said, "We are very pleased to introduce the latest innovations in security technology in the region.

Security, for any industry, plays a vital role in the world today. Our new venture, KISS, is focused on bringing the best available technology in the world to ensure greater safety for our customers in the GCC region.

KISS COO J.G. Lee added, "The latest advancements in security technology have ensured that the security system in any facility is not just about security,



Mr. Lee, COO of Korean Integrated Security Solutions

but offers true business value such as asset management and marketing intelligence to any organisation.

"As a specialised security system integrator, we work closely with our customers, right from the planning and pre-installation stage of a project, to offer the best solutions that not only protects their business but also helps enhance security."

He added that quality solutions such as Starlight technology with number plate recognition and video analytics ensure a

completely hassle-free secure environment for the customers, while also assisting in optimising their operational efficiency and resources.

"We are very pleased to offer these solutions and services in the GCC," Lee noted.

KISS' range of security solutions include video analytics, number plate recognition, security maintenance service, access controls and smart home controls. The technology partners of KISS include leading Korean brands, UNV and Digifort.

New HEPA filter testing service launched

TESTING & CERTIFICATION

AESG has announced the launch of its new high-efficiency particulate air (HEPA) filter testing and certification service. The service helps to ensure the sterility of a clean room environment.

This is the first time that such a service is being offered in the Middle East. The testing and certification is in accordance with BN EN 14664-1, the international clean room certification standard.

AESG said that it has worked closely with local regulatory authorities to ensure that its service can enable clients to achieve the highest level of standards compliance.

According to AESG director of commissioning Gary Williams, his team can test for a pass rate of less than 0.01 per cent of the most penetrative particles, and accurately uncover not only the inefficiencies but also the 'difficult to pinpoint' leakages.

Crowcon's gas detectors meet SOLAS X1-1/7 regulation

GAS DETECTION

Crowcon has announced that its Gas-Pro and T4 multi-gas detectors enable vessels to comply with the SOLAS X1-1/7 directive, effective on 1 July 2016.

The imminent SOLAS X1-1/7 directive requires all EU-registered vessels with a gross weight of over 500 tonnes to carry one or more gas detectors for the remote monitoring of hazardous gases prior to entry into an enclosed space.

The gases covered by this regulation are oxygen (O₂), flammable gas, hydrogen

sulphide (H₂S) and carbon monoxide (CO).

The Gas-Pro detectors can monitor the presence of up to five different gases, including all of the gases mandated by the SOLAS X1-1/7 directive. The detectors use an integrated pump that enables the atmosphere inside an enclosed space to be sampled and tested prior to entry.

The T4 detector, used with a manual aspirator, provides an alternative solution for sampling atmospheres in enclosed spaces. This lightweight unit can withstand drop-testing from up to four metres and is ideal for

use aboard a ship. The 24-hour battery life ensures extended periods of use before recharging is required, the company said.

Both the Gas-Pro and T4 detectors are equipped with Crowcon's positive safety traffic-light status indicator that allows your units' compliance status to be instantly confirmed.

Suitable for enclosed space entry checks, both devices are also designed for use as personal gas detectors. Both Gas-Pro and T4 multi-gas detectors are approved by the Marine Equipment Directive.



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موظفينا وشركائنا والجمهور بشكل عام».

أوجه التعاون الدولي

شاركت كل من شركة كونوكو فيليبس وجامعة تكساس إيه أند إم في قطر في استضافة «الندوة السنوية السابعة للسلامة العملية» في الدوحة. وتناول هذا الحدث، الذي استغرق يومين تحت عنوان «تعزيز الكفاءة في السلامة العملية»، موضوعات تشمل إدارة السلامة العملية، والظواهر الخطرة وتحليل النتائج وتقييم المخاطر. وقد استضافت ندوة السلامة العملية في قطر هذا العام معرضا للصناعة يعرض المنتجات والخدمات ذات الصلة بالسلامة العملية في قطاع النفط والغاز.

وفي هذه المناسبة، قال جاري سايكس، مدير شركة كونوكو فيليبس قطر: «إننا، بدعم ندوات على غرار هذه الندوة، نوفر ساحة لتبادل الأفكار والآراء في مجالنا، وهو ما يتيح لنا الاستفادة من رصيد خبراتنا العالمية وتميز أدائنا لتعزيز رؤية قطر الوطنية ٢٠٣٠».

وقدمت شركة إكسون موبيل قطر أيضا ١٣ دورة تدريبية لـ «تميز» بين يناير/كانون الثاني ومارس/أذار ٢٠١٦ لعدد ٢٨٠ موظفا من قطر للبترول والمشاريع المشتركة رأس غاز وقطر غاز وتسويق وناقلات. من جانبه قال أليستر روتليج، رئيس شركة إكسون موبيل قطر: «نحن في إكسون موبيل قطر ملتزمون بتطوير القدرات البشرية على جميع المستويات وعبء المجالات المختلفة، وذلك حتى نتمكن من تعزيز قدرة قطر على الإبداع والتكيف والازدهار. ونحن نقوم بذلك من أجل دعم رؤية سمو الأمير لمجتمع قائم على المعرفة، وهي الرؤية التي يمكن تحقيقها فقط بالاستعانة بقوة عاملة يتم استغلال أقصى طاقتها». يجدر بالذكر أن «تميز» توفر فرص التنمية المهنية والشخصية عبر ستة مجالات مستهدفة للكفاءة الجوهرية، وهي القيادة والكفاءة الشخصية، وإدارة المشاريع، والنواحي التجارية، والتفوق العملي، والنواحي الفنية، والصحة والسلامة والبيئة.

وفي هذا الصدد قال ياسر الجمال، نائب رئيس المكتب الفني للجنة العليا للمشاريع والإرث: «نحن فخورون بالتكريم لالتزامنا بسلامة المواقع، إذ نحرص على أن يواصل جميع العمال العمل في بيئة صحية وآمنة».

ويتولى المكتب الفني للجنة العليا للمشاريع والإرث أيضا مهام تسليم الملاعب ومواقع التدريب والمرافق الداعمة. وهناك حاليا ٦٥٠٠ موظف يعملون في مشاريع اللجنة العليا للمشاريع والإرث من بينهم ٥١٢٦ عاملا بمشاريع المكتب الفني، ولم تشهد مشاريع اللجنة أية حوادث أو وفيات متعلقة بالعمل حتى يومنا هذا.

الوقاية من الحريق

في مطلع أبريل/نيسان ٢٠١٦، وعقب وقوع حادثي حريق خلال أقل من ٢٤ ساعة، تعرضت قطر لانتقادات عنيفة بخصوص لوائح السلامة. فقد اندلع الحريق الأول في أحد المطاعم، بينما نشب الآخر في قطر مول قيد الإنشاء. غير أن السلطات القطرية نجحت في التعامل مع الحادثين بمهنية عالية. ولم يتم الإبلاغ عن أية إصابات. وللتعامل مع مثل هذه المواقف والاستعداد لها، أطلقت سكك الحديد القطرية - حديثا - مركز تدريب في الدوحة لتدريب حوالي ١٥ ألف عامل، في إطار جهودها للتأكد من تطبيق أعلى معايير الصحة والسلامة في مواقعها. ولن يقتصر التدريب على الموظفين.

وقد تم اعتماد هذا المركز المتطور، الذي يعد الأول من نوعه في المنطقة، من قبل معهد تشارترد للصحة البيئية البريطاني. ويوجد المركز في مكاتب الخط الأخضر تحت الأرض، ويعتبر الموظفون، الذين يتلقون التدريب، ضمن فريق العمل الرئيسي في إنشاء مشروع مترو الدوحة.

وقد صرح جاسم الأنصاري، أحد مديري مشروع الخط الأخضر، بقوله: «يعكس المركز الأهمية التي توليها سكك الحديد القطرية للعمل وفقا لأعلى المعايير الدولية للصحة والسلامة المهنية. وتعد المعلومات والدعم، اللذان نوفرهما عبر المبادرة، أدوات لتشجيع ثقافة الصحة والسلامة المهنية، كما تساعد أيضا على حماية

هذه الأزمة. وقال حسن الذوادي، الأمين العام للجنة العليا للمشاريع والإرث في خطابه في منتدى الأمم المتحدة الإقليمي لآسيا حول الأعمال التجارية وحقوق الإنسان ٢٠١٦ في ٢٠ أبريل/نيسان: إن قطر ملتزمة بإحراز التقدم المتواصل لرعاية العمال في الدولة. وأردف قائلاً: «عندما شاركنا في قرعة كأس العالم، لم نفكر في أن يكون هذا الحدث الرياضي العظيم حافزا لوضع خطط تطوير الدولة فحسب، وإنما نلتزم أيضا بالتطوير المتواصل».

وأضاف: «أطلقنا هذا العام أيضا منصة تدقيق مخصصة لتكنولوجيا المعلومات لأننا على دراية تامة بالمشكلات التي واجهناها في سلسلة التوريد المعقدة. ونحن نعتبر حدث كأس العالم هذا حافزا على التغيير المستدام طويل المدى. وسوف نواصل السعي لتحقيق التزاماتنا حتى بعد ٢٠٢٢».

ومن جانبه تحدث موفد الاتحاد الدولي لكرة القدم «فيفا» أمام اللجنة، مؤكدا على التعاون المتواصل الذي يتم مع اللجنة العليا للمشاريع والإرث حول رعاية العمال في مواقع الإنشاءات. وقد صرح فيدريكو أديتشي، رئيس شعبة الاستدامة بالاتحاد الدولي لكرة القدم بقوله: «نواصل تبادل المعلومات مع اللجنة العليا للمشاريع والإرث بخصوص هذا الموضوع، فيما يتعلق بصحة وسلامة ورعاية العمال. ونعتقد أن التدابير التي اتخذتها اللجنة إيجابية للغاية».

وأقرت بعثة منظمة العمل الدولية، في تقريرها، بأن الحكومة والمتحدثين الآخرين الذين التقت بهم في قطر، قد اتخذوا تدابير ملموسة مؤخرا لتحسين ظروف العمل للمهاجرين.

كما أشادت الجمعية الملكية للوقاية من الحوادث، ومقرها المملكة المتحدة، مؤخرا بالجهود المتواصلة في مجال الصحة والسلامة والتي يتولاها المكتب الفني للجنة العليا للمشاريع والإرث في جميع مواقع كأس العالم، حيث منحت المنظمة جائزة الصحة والسلامة الذهبية للجمعية في أبريل/نيسان ٢٠١٦. وتأتي هذه الجائزة تقديرا للالتزام بالتحسين المتواصل في منع وقوع الحوادث والوقاية من الأمراض في المشاريع الكبرى.



استمرار نمو الإنشاءات في قطر على الرغم من انخفاض أسعار النفط

قطر تخطو نحو التقدم

وضعت تصنيفات شركة الاستشارات الإدارية «ميرسر» لجودة الحياة، قطر بين أفضل ١٠٠ مدينة من حيث السلامة الشخصية للمغتربين في الشرق الأوسط وأفريقيا. وتحتل الدولة، الراحية لكأس العالم لكرة القدم ٢٠٢٢، المرتبة السبعين في التصنيف. هناك فقط بضع مدن في هذه المنطقة واردة في تصنيف المائة للسلامة الشخصية - تحتل أبوظبي أعلى تصنيف (٢٣)، وتليها مسقط (٢٩) ثم دبي (٤٠).

التحتية. ومن المتوقع أن تبلغ استثمارات قطر في البنية التحتية حوالي ١٥٠ مليار دولار خلال السنوات المقبلة حتى موعد كأس العالم، تماشيا مع خطة التنمية في قطر، وذلك وفقا لتقرير نشرته شركة قطر الأولى للتطوير العقاري.

غير أن قطر قد عانت من انتكاسات متمثلة في مزاعم منظمة العفو الدولية عن تعرض العمال لانتهاكات في مواقع الإنشاءات. فقد ذكرت المنظمة أن العمال، المعينين بتجديد ملعب كأس العالم ٢٠٢٢ في قطر، يتعرضون لانتهاكات لحقوق الإنسان بعد عامين من وضع منظمي البطولة لمعايير رعاية العمال في أعقاب الانتقادات الموجهة إليهم. غير أنه مع صدور التقارير التي تؤكد على إحراز قطر التقدم في ملف إنهاء العمالة القسرية، وتحسين أحوال العمال المهاجرين، والرغبة في تفعيل قانون جديد بداية من شهر ديسمبر/كانون الأول ٢٠١٦، حسبما ذكرت منظمة العمل الدولية، ينتاب الكثيرين شعورٌ إيجابيٌّ بأن الدولة ستتخطى

بفضل رؤية قطر الوطنية ٢٠٣٠، المتمثلة في سياسة التنوع الاقتصادي التي تنتهجها الدولة، فضلاً عن اقتراب الموعد النهائي لكأس العالم لكرة القدم ٢٠٢٢، والذي استعاد نشاطه على الصعيد الرسمي بعد انتخابات رئاسة الاتحاد الدولي لكرة القدم «الفيفا».

ووفقا لمنظمي مشروع قطر، حددت الدولة النقاط الإرشادية لصناعة الإنشاءات من حيث الجودة وعدد العقود الممنوحة في مجال البنية

فالسلامة هي عامل مهم تأخذه الشركات متعددة الجنسيات في اعتبارها عند إرسال العمال المغتربين إلى الخارج، وذلك لاهتمامها بالسلامة الشخصية للمغتربين. ولأن لهذا تأثيرا كبيرا على تكلفة برامج التعويض العالمية، حسبما أورد تقرير الشركة.

وقد أشارت التقارير والدراسات الجديدة إلى وجود أدلة مستمرة على نمو الإنشاءات في الدولة، وذلك على الرغم من انخفاض أسعار النفط،

كاميرا مراقبة جديدة خلال الشهر الماضي في الحرم المكي، وربطها بغرف مراقبة تديرها قوات خاصة تراقب تحركات الحجاج خلال الحدث المرتقب في شهر أغسطس/آب، حسبما ذكرت الصحف السعودية.

التي تعد أكبر تجمع سنوي للمسلمين في أنحاء العالم، قد شهدت العديد من حالات التدافع والحرائق وأعمال الشغب التي خلفت ضحايا فيما مضى، مع محدودية قدرة السلطات على التحكم في الحشود. ولهذا، قد تم وضع ما يقرب من ألف

الصلاة وتوصلهم بمكتب مساعدات متعدد اللغات يقدم خدماته للحجاج غير المتحدثين بالعربية خلال مناسك الحج المختلفة. علما بأن المملكة تتوقع أن يبلغ عدد الحجاج إلى مكة أكثر من مليوني مسلم من جميع أنحاء العالم. وكانت مواسم الحج،

مرسى الموج العماني يعزز السلامة برنامج تعقب جديد



يضم مرسى الموج أطول حاجز مائي في العالم بطول يبلغ كيلومترين.

يضم مرسى الموج أطول حاجز مائي في العالم بطول يبلغ كيلومترين. وهو يسهل حركة القوارب واليخوت ويتيح الإرساء بأمان تام.

في مشروع الموج مسقط في قلب قرية المرسى. وهو مرسى رئيسي ووجهة مميزة لليخوت، حيث يسع اليخوت التي يتراوح طولها بين ١٠ و٤٠ مترا. كما

أعلن مرسى الموج العماني عن تدشين نظام تعريف آلي جديد بالتعاون مع مؤسسة Qnective لتعزيز التحكم في حركة مرور القوارب واليخوت وتفاذي اصطدامها ببعضها البعض، وتحسين السلامة الملاحية في المرسى بمسقط.

فبإمكان أية محطة تحكم في نظام التعريف الآلي مراقبة أي قارب أو يخت مزود بهذا النظام ضمن حدود التغطية، كما يمكنها تحديد موقعه في الوقت الفعلي. وقد تم تركيب النظام التجريبي واختباره بنجاح في المرسى، وهو يعمل حاليا بكامل طاقته عبر زورقين ومحطة تحكم واحدة. وحسبما ذكرت السلطات، يُكرس مرسى الموج جهودا كبيرة لتحسين مرافقه ودعم القطاع البحري في السلطنة بالقيمة المضافة. وتأتي هذه الإضافة الجديدة لنظام التعريف الآلي تماشيا مع هدف المرسى بتعزيز أمن وسلامة العمليات. ويقع مرسى الموج

مفكرة رجال الأعمال ٢٠١٦

أغسطس / آب

سنغافورة

٢٦-٢٤ معرض آسيا للسلامة والصحة المهنية - OS+H Asia

مايو / أيار

مسقط

٧-٥ معرض عُمان لمكافحة الحريق والسلامة والأمن - أوفسيك

مومباي

١٤-١٢ معرض الهند لمعدات الأمن

الكويت

٢٧-٢٥ معرض بيج فايف الكويت

أكتوبر / تشرين الأول

الدوحة

٣١-٣٠ الملتقى الخليجي للأمن

نوفمبر / تشرين الثاني

أبوظبي

١٠-٧ معرض أبوظبي الدولي للنفط - أديبك

مفاعل بركة الإماراتي ينهي اختبارات السلامة في الوحدة الأولى



عملت فرق المؤسسة مع شركة ديكوكو الكورية والهيئة الاتحادية للرقابة النووية لإجراء عملية الاختبار المقدمة

انتهت مؤسسة الإمارات للطاقة النووية مؤخرا من إجراء الاختبارات المهمة في الوحدة الأولى بمفاعل بركة للطاقة النووية في الإمارات. وقد استغرق إجراء اختبار السلامة الهيكلية، واختبار معدل التسريب المتكامل عدة أسابيع في الوحدة الأولى، وذلك تحت إشراف كامل من الهيئة الاتحادية للرقابة النووية والامتثال لأعلى المعايير الدولية للسلامة والجودة.

وحسبما ذكرت مؤسسة الإمارات للطاقة النووية، أظهر كلا الاختبارين متانة وسلامة المحطة من حيث القوة ومنع التسريب التام، والقدرة على العمل بشكل آمن في الأحوال العادية والاستثنائية.

وقد اختص اختبار السلامة الهيكلية بتقييم قوة المبنى الذي يحوي المفاعل، والهيكل في قلب المحطة، والذي يضم المفاعل والمكونات الكبرى، وذلك من خلال الضغط على المبنى لمحاكاة الظروف العادية والاستثنائية. وبالمثل، اختص اختبار معدل التسريب المتكامل بتقييم قدرة المبنى على منع التسريب في مختلف الأحوال.

وقال محمد الحمادي، الرئيس التنفيذي لمؤسسة الإمارات للطاقة النووية: «إننا فخورون بالمحافظة على سجل حافل من السلامة والجودة باستكمال اختباري السلامة الهيكلية، ومعدل التسريب المتكامل، وخاصة أن مرحلة الاستعداد للعمليات التشغيلية في محطة الطاقة النووية هي خطوة مهمة على طريق تحميل الوقود. فقبل ذلك، يجب إخضاع المحطة للاختبارات وفقا لأعلى معايير السلامة والأمن والجودة».

وأضاف الحمادي: «وإننا، مع استكمال هذين الاختبارين في الوحدة

الأولى، نقرب أكثر من تحقيق هدفنا المتمثل في تزويد الإمارات بربع احتياجاتها من الكهرباء عبر الطاقة النووية المستدامة التي تقل فيها انبعاثات الكربون. وسوف نواصل العمل في البركة لدعم إستراتيجية تنوع الطاقة في الإمارات، علاوة على تحقيق النمو الاجتماعي والاقتصادي في الدولة».

وكانت فرق المؤسسة قد عملت بشكل وثيق مع الشركة الكورية للطاقة الكهربائية «كيبكوك»، والهيئة الاتحادية للرقابة النووية، وذلك لإجراء عملية الاختبار المعقدة.

المملكة السعودية توفر أساور ذكية للحجاج

سوف تطرح المملكة العربية السعودية أساور إلكترونية لتحديد الهوية لجميع الحجاج الوافدين إلى مكة حرصا على سلامتهم هذا العام. فوفقا لما ذكرته وكالة رويترز، كان عدد المتوفين قد بلغ ٢٠٧٠ حاجا خلال حادث التدافع الذي وقع عند تلاقي الحجاج في تقاطع بالقرب من مكة المكرمة في شهر سبتمبر/أيلول الماضي من العام الماضي. وقالت وكالة الأنباء السعودية إن الأساور سوف تحتوي على معلومات شخصية وطبية من شأنها مساعدة السلطات على توفير الرعاية الصحية وتحديد هوية الأشخاص. كما ستُعلم هذه الأساور، المقاومة للماء والمتصلة بنظام تحديد المواقع العالمي «جي بي إس»، الحجاج بمواقيت



السعودية تتخذ احتياطات أمن قصوى لضمان سلامة أكثر من مليوني حاج قد يفدون إليها هذا العام

فني هذا العدد ...

أخبار:

- ٤ مفاعل براكا الإماراتي ينهي اختبارات السلامة في الوحدة الأولى
- ٤ المملكة السعودية توفر أساور ذكية للحجاج
- ٥ مرسى موج العماني يعزز السلامة ببرنامج تعقب جديد



تحليلات:

قطر تخطو نحو التقدم

ماضى محتويات القسم الإنجليزي:

التطورات: تطورات السوق.

تحليلات: الرمز الكودي لمكافحة الحريق وحماية الأرواح للدفاع المدني في دبي، مؤتمر

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Advertiser Index

Company	Page
Al Garawi Group	22
Al Majdal Trading Co. LLC	19
ATG Glove Solutions	7
Bauer Kompressoren GCC FZE	9
DMG World Media Abu Dhabi Ltd	15
Dubai Cables Company	13
Euro Petroleum Consultants DMCC	39
Evac+Chair International Limited	47
IIR Exhibitions	4
Karam Safety DMCC	21
Muscat Expo LLC	29
RRC Training	37
Schefferville Trading LLC	25
Tank International Petroleum Equipment	2
VF Imagewear Majestic UK Ltd*	3

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