

UK £10, USA \$16.50

Health, Safety & Security Review

VOLUME 2 | ISSUE 5 2016

Middle East

BUILDING A MIDDLE EAST SAFETY CULTURE

The 2nd Annual Health, Safety & Security Forum

INSIDE...

ENOC Group's executive director for EHSSQ & Corporate Affairs on the skills needed to be an effective EHS practitioner

Mitigating exposure to noise and dust

The smart city - key to security

The logo for SAOGE, featuring the word "SAOGE" in a bold, white, sans-serif font on a black rectangular background.The logo for the 2nd Annual Health, Safety & Security Forum 2016. It features a stylized graphic of three overlapping hexagons in blue, green, and yellow to the left of the text "2nd ANNUAL HEALTH, SAFETY & SECURITY Forum 2016". Below this, it says "23rd & 24th October 2016 - Dubai, UAE".



 eagle **FR**

eagle
technical products ltd

CERTIFIED TO EN 1149-5 AND EN 469:2005



Torch tab and loops



DRD fitted into internal layers and accessed through back neck flap

Shoulder padded for comfort and protection



Detachable coat tail

Elasticated back panel



Side velcro waist adjusters

Reinforced hem to prevent wear & tear

Reinforced knee pads

Made of the most advanced protective fabric in the world.

For all enquiries please contact our sales partner at

ahmed@almajdaltrading.com

www.almajdaltrading.com

AL MAJDAL TRADING CO (L.L.C)

(+971) 4 3532513



KARAM[®]

knowing your needs better



GIVING YOU THE **COURAGE** TO
REACH BEYOND
YOUR **LIMITS**

KARAM provides a vast range of Permanent Horizontal & Vertical Anchorage Lines. The material of Construction of these systems is Stainless Steel hence are corrosion resistant.

They can be fixed on various structures to provide safe anchorage for extended period of time.

Vertical Anchorage Line System conforms to EN353-1:2014 and Horizontal Anchorage Line System conforms to EN795:2012

Commonly used on Telecommunication Towers, Windmills, Chimney Ladders, Industrial Ladders, Advertisement Billboards etc.



KARAM SAFETY DMCC

Unit No. 2108, 1-Lake Plaza, Plot No. PH2-T2, Jumeirah Lakes Tower,
P. O. Box : 27307, Dubai, UAE. Tel.: +971 44315221, Fax.: +971 44315727,
e-mail: dubai@karam.in; website: www.karam.in

MEFSEC

11 – 13 December 2016

Cairo, Egypt

www.mefsec.com

The region's leading Fire, Security & Safety Exhibition and Conference

2016 Focus: Airport Security



For booking and more information:

Tel.: +971 (0) 4 407 2583

Email: info@mefsec.com

Organised by:



informa
exhibitions

Issue 5 2016

in this issue...



News

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

Calendar 10
A round-up of industry events worldwide, and a preview of MEFSEC

Event

2nd Annual Health, Safety & Security Forum 12
This innovative event is receiving strong local support

Interview

Facing the challenges 15
Dr. Waddah S. Ghanem, ENOC Group's executive director for EHSSQ & Corporate Affairs, on the skills needed to be an effective EHS practitioner

Safety

Arresting that fall 20
Advice on the correct use of fall safety equipment

Occupational Health

Effective air filtration 22
Putting in place the right air filtration equipment

Mitigating exposure to noise and dust 26
The need for the construction industry to meet the requirements of the new ISO 45001 standard

Security

Smart city - key to security 30
Thales' projects to ensure the region is safe and secure

Innovations

Products and News 38
Technology and product news from around the world of HSE

Arabic

News 4

Analysis 6

editor's note

OUR VERY OWN 2nd Annual Health, Safety & Security Forum takes place on 23-24 October in Dubai. The fact that the event is endorsed by Dubai Municipality, Abu Dhabi Civil Defence and Abu Dhabi City Municipality attests to the growing focus in the region on building an effective safety culture. See our preview on p12-14. We hope to see you there! We also include an exclusive interview with ENOC Group's executive director for EHSSQ and Corporate Affairs (p15), advice on the correct use of fall protection equipment (p20), and an analysis of effective air filtration (p22).

Louise Waters, Editor
editor@hssreview.com

Editor: Louise Waters
Email: louise.waters@alaincharles.com

Editorial and Design Team: Prashant AP, Hiriyti Bairu, Luke Barras-Hill, Sejal Bhat, Miriam Brtkova, Kestell Duxbury, Ranganath GS, Rhonita Patnaik, Rahul Puthenveedu, Zsa Tebbit, Nicky Valsamakis and Vani Venugopal

Group Editor: Georgia Lewis

Magazine Sales Manager: Rakesh Puthuvath
Tel: +971 4 448 9260 Fax: +971 4 448 9261
Email: rakesh.r@alaincharles.com

Head Office:

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

Middle East Regional Office:

Alain Charles Middle East FZ-LLC, Office 215,
Loft No 2/A, PO Box 502207, Dubai Media City, UAE
Tel: +971 4 448 9260, Fax: +971 4 448 9261

Production: Kavya J, Nelly Mendes and Sophia Pinto
E-mail: production@alaincharles.com

Subscriptions: E-mail: circulation@alaincharles.com

Publisher: Nick Fordham

Publishing Director: Pallavi Pandey

Chairman: Derek Fordham

US Mailing Agent: Health, Safety & Security Review Middle East is published six times a year for US\$71 per year by Alain Charles Publishing, University House, 11-13 Lower Grosvenor Place, London SW1W 0EX, UK.

Printed by: Emirates Printing Press

Printed in: September 2016

Arabic Translation: Ezzeddin M. Ali
Email: ezzeddin@movistar.es

Arabic Typesetting: Lunad Publicity, Dubai

All information in this publication was correct at time of going to press.

© Health, Safety & Security Review Middle East • ISSN: 2059-4836

Health, Safety & Security Review Middle East



RasGas awarded top British Safety Council rating

SAFETY

Qatar's RasGas Company Limited (RasGas) has been awarded a five-star rating by the British Safety Council subsequent to an Environmental Audit, and the Occupational Health and Safety audit.

RasGas' chief marketing & shipping officer, Khalid Sultan R. Al Kuwari, stated, "At RasGas we are deeply committed to delivering cleaner energy to our customers in a manner that is safe, efficient and preserves the environment. This is a fundamental corporate goal, and the British Safety Council's rating is testament to the success of our efforts to maintain these rigorous standards."

This rating was attained after a quantified, objective evaluation of the environmental, and occupational health and safety management systems of the shipping and LNG transportation functions. The Environmental Audit measured the Shipping Department's performance against set criteria, including a



RasGas has adopted innovative practices to ensure the safe and reliable delivery of LNG to markets around the world. (Photo: RasGas)

number of key environmental management indicators, providing a worldwide benchmark of the department's environmental management performance, policies, processes and procedures; while the Occupational Health and Safety Audit measured performance against key safety management

indicators.

These audits have, since 2013, included two additional indicators, Leadership and Continuous Improvement, thereby placing greater emphasis on occupational health, employee wellbeing, the safety culture, allocation of resources to health and safety, and planning for

change. All of these are now considered best practice factors.

The British Safety Council is a government-regulated awarding organisation primarily concerned with ensuring 'no-one is injured or made ill in the workplace'. The British Safety Council's Five Star Environmental, and Occupational Health and Safety audits offer a structural path for continuous improvement, and RasGas' five-star grading in both is the highest possible rating that can be achieved.

With operations facilities based in Ras Laffan Industrial City, Qatar, RasGas' principal activities are to extract, process, liquefy, store and export LNG and its derivatives from Qatar's North Field. RasGas, on behalf of the Project Owners, exports to countries across Asia, Europe and the Americas with a total LNG production capacity of approximately 37mn tonnes per annum. RasGas' shipping fleet comprises long-term LNG charter vessels that meet the needs of a global customer base.

ILO introduces safe migration project for workers in Middle East

WORKER WELL-BEING

The ILO, with the support of the Swiss Agency for Development and Cooperation (SDC), has launched a new regional labour migration project to promote fair migration and address forced labour and trafficking for labour exploitation in the Middle East.

The project – Regional Fair Migration Project in the Middle East (Fairway) – will focus on the plight of vulnerable workers in domestic and construction work.

The project aims to promote policy change informed by evidence-based research; support

improved implementation of laws and policies; and address discriminatory attitudes towards migrant workers, an ILO report said.

The project operates at the regional level and offers country-specific assistance and support in selected countries in the Middle East. SDC has contributed over US\$2mn to the project that will be implemented until mid-2018.

"Addressing key concerns related to wages, occupational safety and health, labour inspection and access to justice can ensure that migration is a secure and positive

experience for millions of migrant workers in the Middle East," said SDC regional advisor for the Middle East Pascal Raess.

"Building on the momentum of the Abu Dhabi Dialogue and efforts of the ILO's Regional Office for Arab States (ROAS), the Fairway project offers solutions to build a migration regime that mutually benefits countries of origin and destination, and workers and their employers," said Ruba Jaradat, ILO regional director for Arab states.

The Middle East region hosts more than 32mn expats, most of them migrant workers.

■ FOUR GLOVE SOLUTIONS FOR ALL THE JOBS YOU DO



MaxiFlex
PRECISION HANDLING™

DRY
ENVIRONMENTS



MaxiCut
ASSURED PROTECTION™

CUT
ENVIRONMENTS



MaxiDry
CONTROLLED PERFORMANCE™

OILY AND WET
ENVIRONMENTS



MaxiChem
SECURE SAFETY™

CHEMICAL
ENVIRONMENTS



New fire-rated aluminum facility opens in Dubai

FIRE SAFETY

Danube Group has opened the first Aluminum Composite Panel (ACP) factory in the Middle East with Alucopanel USA.

The new facility is set to produce non-combustible ACPs and related materials. Spanning an area of more than 4,645 sq m, the US\$27.22mn facility claims to be the largest in the region, with an expected capacity of four million sq m annually.

“The opening is a strong testimonial that Danube is leading transformation in the building materials industry. We have been able to successfully set up this facility with the support of the UAE government, and I am extremely happy to be the first and only company to make available the non-combustible ACP,” says Rizwan Sajan, founder and chairman of Danube Group.

“Being an active participant in the real estate industry in the UAE, the introduction of the



According to reports, almost 90 per cent of buildings built in the GCC before the year 2012 were clad with non-fire retardant grade aluminum composite panels, which is the main reason for the recent fires witnessed at residential and commercial projects in the UAE.

(Photo: vladimirenezic/Fotolia)

new law by the UAE Civil Defence to use A2 materials will ensure customer safety,” Sajan adds.

The factory is located in Dubai’s Technopark, an IT park currently under construction.

The facility will make more than 15 metallic finishes and 15 solid and plane finishes in more than 10,000 colours, customised to suit the variety of demands from the region’s property developers.

“Panels produced by Alucopanel do not allow the diffusion of flames and restrict smoke, which discourages the spread of fire in an upward motion,” explains Zohaib Rahman, division head at Alucopanel Middle East.

“The application of the non-combustibles from Alucopanel in development projects in and around the region will definitely elevate fire safety, representing a new era in building materials,” Rahman adds.

Firetrace receives Kuwait Fire Department approval

FIRE SAFETY

Firetrace International has announced that it has achieved the Kuwait Fire Department’s approval for its engineered and pre-engineered systems using both 3M™ Novec™ 1230 Fire Protection Fluid and Chemours™ FM-200™.

This latest approval comes in addition to the many global, national and local approvals and listings already obtained by Firetrace International, including UL (USA), P-Mark (Sweden) and, most recently, FM (Factory Mutual), according to the company. With this listing Firetrace International will be able to continue its international growth and expansion, and provide customers in Kuwait with fire suppression systems that offer greater flexibility, improved value, speedier installation and a measurable competitive edge for system installers. It is specialised in hazard fire protection, providing both in cabinet and machine level fire suppression.

TAQNIA Cyber and Koenig Solutions to open cyber academy in KSA

CYBERSECURITY

A newly-formed strategic partnership between TAQNIYA Cyber, an information security company in Saudi Arabia, and Koenig Solutions, an IT training provider and offshore training company, will lead to the opening of a cyber academy in Riyadh. The academy will develop and offer advanced IT programmes and technical cybersecurity training programmes for IT professionals.

According to TAQNIYA Cyber senior officials, the academy will cater to the needs of

cybersecurity experts from leading banks, financial institutions, government entities, law firms, healthcare centres, utility and transportation providers. The programme will cover relevant training techniques in order to assess customer employees’ cyber maturity and/or to provide them the keys to understanding the latest cybersecurity challenges.

TAQNIYA Cyber is a government-owned company specialising in the fields of information security, communication security and signal intelligence that offers its services

and consultations to both public and private sectors. The modern training facility will also offer Koenig’s 30+ authorisations including that of Microsoft, EC Council, PMP, Adobe, Security Management, among others.

Abdulaziz Al Sabih, director of technology and business development, TAQNIYA Cyber, says, “This state-of-the-art academy will provide a strategic and essential platform and opportunity for the Kingdom’s cybersecurity professionals to learn the latest techniques for countering criminal IT fraud.”

Cubility improves transportation of drilling waste

WASTE MANAGEMENT

Norwegian-based Cubility AS, provider of solids control solutions, has launched an innovative new technology that improves the transportation of drilling waste, CubeLink.

Developed in close partnership with Norwegian operator Statoil, CubeLink safely and cost-effectively transports drilling waste directly from shale shakers or Cubility's own MudCube solids control system to a storage unit or final processing unit on a

drilling rig. The MudCube is the industry's first compact solids control system that eliminates the traditional process of shaking fluid and solids.

The improved separation capabilities of the MudCube leads to better quality mud, fewer chemicals required to maintain its properties, more mud recycled back to the mud tanks to be reused for drilling, and 'cleaner' and less waste.

To date, Cubility has secured contracts for the MudCube in the

Middle East, North Sea, Far East, South American and North American drilling sites offshore and onshore.

The system is targeted at offshore drilling contractors and oil companies who are looking to make their rigs more efficient in handling cuttings (particularly dry cuttings), facilitate the transportation of cuttings from their drilling facilities, improve HSE, and reduce waste handling and drilling fluid costs. CubeLink can also be used onshore.

Even Gjesdal, CEO of Cubility, said, "For many years, existing technologies have struggled to transport drilling waste, due to the variety in the consistency of the cuttings and challenges such as transporting dry cutting through a plugged screw conveyor and/or plugged blower. No longer. By bringing in the CubeLink, we aim to revolutionise the drilling waste management market through cleaner, safer and more cost-effective waste."

Schneider Electric gives summer kit to Dubai seafarers' community

OCCUPATIONAL HEALTH

Schneider Electric, global energy management and automation firm, has provided seafarers in Dubai with 'summer essentials' kits to help them cope with hot months. Each kit consists of eight basic but valued items including a reusable water-bottle, rehydration tablets, a towel, a T-shirt, a pair of flipflops, shower gel and a roll of garbage bags.

Benoit Dubarle, president - Gulf Countries, Pakistan and East Mediterranean for Schneider Electric, said, "As a proactive partner in supporting the UAE's sustainability efforts, it is our ongoing focus to engage with various communities in the country. We organised this outreach to recognise the contributions of seafarers to Dubai's trade and economy."



Schneider Electric's Benoit Dubarle meets seafarers in Dubai. (Photo: Schneider Electric)

FOUR GLOVES FOR ALL THE JOBS YOU DO

MaxiFlex
PRECISION HANDLING™



MaxiCut
ASSURED PROTECTION™



MaxiDry
CONTROLLED PERFORMANCE™



MaxiChem
SECURE SAFETY™



Find out more:
www.atg-glovesolutions.com



→ events calendar 2016

October 2016			
5	British Safety Council Annual Conference	LONDON	www.britsafe.org
5-7	Emergency M/ment & Business Contingency Conf.	DUBAI	www.emergencymanagementme.com
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			
6-9	Exhibition of SABIC Technical Conference 12	JUBAIL	www.exhibitionofstc12.com
7-9	ExpoProtection	PARIS	www.expoprotection.com
7-10	ADIPEC	ABU DHABI	www.adipec.com
16	OSCC 2016 Conference	KUALA LUMPUR	www.opito.com/oscc-conference
21-24	Big 5 Dubai	DUBAI	www.thebig5.ae
December 2016			
11-13	MEFSEC	CAIRO	www.mefsec.com

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

Driving common global standards in safety and competence

SAFETY AND COMPETENCE

The 2016 OPITO Safety & Competence Conference (OSCC 2016), will bring together industry leaders, governmental bodies, regulators and trainers from developed and growing oil and gas regions from around the world to share best practices and new, innovative ideas as part of its drive for common global standards in safety training and competence assessment. The event takes place on 16 November at The Royale Chulan, Kuala Lumpur, Malaysia.

OPITO group chief executive David Doig commented, "We have a strong relationship with PETRONAS, and with the organisation on board as OSCC 2016 event partner, we are very much looking forward to holding the event in the capital of Malaysia for the first time.

"We are pleased to have brought together this diverse group of speakers who we believe will bring new insights and perspective to the major issues facing our industry today. We hope the global oil and gas community will join us in sharing their knowledge and experience as we seek to re-set the skills and competence landscape to ensure the industry is fit for the future."

Raiha Azni Abd Rahman, PETRONAS senior vice-president of group human resource management, added, "PETRONAS is committed in meeting the world's growing energy needs in a responsible manner by balancing the economic, environmental and social needs of our stakeholders. In doing so, we have focused our efforts on the importance of technical training to improve our HSE competencies through our capability building efforts. We continue to

uphold high safety and health standards to ensure a competent and capable workforce for the industry.

"OSCC provides a platform for its participants to exchange knowledge and experiences on industry best practices that are recognised and benchmarked as a global standard. PETRONAS looks forward to our partnership with OPITO in making the first Malaysia-held OSCC 2016 a great success."

They will be joined at the event by Gordon Ballard, executive director of the International Association of Oil and Gas Producers (IOGP); John Christian, Asia Pacific corporate HSE lead for Technip Malaysia; Simon Durkin, managing director for Sarawak Shell Berhad and Sabah Shell Petroleum Company Limited.

OSCC 2016 is expected to attract over 450 international delegates and 30 exhibitors.

potlight on Egypt security

Now in its 17th edition, the Middle East Fire, Security & Safety Exhibition and Conference (MEFSEC) is one of Egypt's leading exhibitions dedicated to the innovation and growth of the security sector.

"I believe that our platform has never been in a stronger position to support the exponential growth the Egyptian security sector is currently witnessing."

**Anita Mathews, group director,
Informa Industrial Group**

Taking place from December 11 – 13 2016 in Cairo's International Exhibition and Conference Centre, the three day event allows industry professionals to source new technologies, equipment and services from local and international manufacturers, suppliers and regional distributors, creating a platform for some of the industry's biggest players to come together and discuss the latest trends and advancements.

"For the first time ever we have made MEFSEC a standalone event away from Electrix and Solartec. We felt the time was right as the show is going through a significant growth phase, and with the support of the Egyptian Fire Protection Association this year, I believe that our platform has never been in a stronger position to support the exponential growth the Egyptian security sector is currently witnessing," said Anita Mathews, group director, Informa Industrial Group, organisers of MEFSEC.

Based on data compiled from Securitas & Freedonia, when benchmarked against ratios from global regions, Egypt's addressable security market is estimated at around US\$1.6 bn, representing around 0.5 per cent of total GDP and equivalent to around 10 per cent of the MENA region's addressable security



market. Egypt's security market is anticipated to grow at rates nearing 10 per cent per annum.

The 2016 edition of MEFSEC will focus on airport security, with a dedicated arena for related products, technologies and services.

A new addition this year is a dedicated networking and knowledge-oriented conference for security professionals. Safety experts involved in protecting public spaces, corporate offices, and homes from acts of terrorism, accidental harm, and corporate espionage can learn how new technology developments will influence the security strategies of the future.

New surveillance, inter-departmental communication, and safety protocols will also be explored at the forum to assess how to bring confidence back to several Egyptian economic sectors disrupted by the attacks of recent years.

The key themes for this inaugural conference are airport and port security; counter terror and riot control; firefighting and

fire protection, and import rules and regulations in Egypt.

A number of leading security companies are taking part this year, including Promise Technology, Bavaria, SFFECO, Firex, Underwriters Laboratories, Rapidrop, Dahua and Hikvision.

"Egypt is one of the main high potential markets in the Arab region. We choose to participate in MEFSEC to successfully reach the Egyptian and North African markets. It is always an impressive and successful experience for us," said Youssef Abu Sall, general manager of SFFECO.

"We exhibit at MEFSEC because it is the only exhibition in Egypt that specialises in security solutions. To be part of MEFSEC shows that you are a serious player in the market, and it is a great opportunity to find out what the latest trends and advancements in the market are," commented Hatem Sabri Abou El Noor, chairman, Hi Tech Nour. ♦

For more information please visit <http://www.mefsec.com>.

ABOVE: MEFSEC 2015 attracted over 7316 visitors, and hosted 263 local and international exhibitors. (Photo: MEFSEC)



Strong local buy-in for 2nd Annual Health, Safety & Security Forum

A unique mock court trial and a mock evacuation fire drill will be amongst the highlights of the groundbreaking 2nd Annual Health, Safety & Security Forum 2016, to take place from 23-24 October in Dubai.

The innovative event enjoys the endorsement of Dubai Municipality, Abu Dhabi City Municipality and Abu Dhabi Civil Defence.

Above: With construction activity booming in the run-up to EXPO 2020, the spotlight is falling on worker safety. (Photo: Artem Artemenko/Shutterstock)

The innovative event, organised by *Health, Safety & Security Middle East* magazine, enjoys the endorsement of Dubai Municipality, Abu Dhabi City Municipality and Abu Dhabi Civil Defence, a testament to the growing focus on HSE in the UAE and the wider region.

Counted amongst the growing list of participants and supporters are Dubai Civil Defence, IOSH UAE, Emirates National Oil Company (ENOC), Dubai Police, the UAE International Chapter of the Society of Fire Protection Engineers, Dubai Corporation for Ambulance Services, and the UAE Ministry of Labour, amongst others.

Building on the success of the highly acclaimed inaugural HSE Forum in September 2015, the 2nd Annual Health, Safety & Security Forum 2016 will bring together HSE and security

professionals, policy makers, regulators and solutions providers to share knowledge and experiences on proven methodologies and best practices in the drive for better health and safety performance.

The event will provide a B2B platform for participants, with keynote presentations from leading government and industry experts, panel discussions and roundtable sessions, along with interactive drills and trials. It will showcase the latest developments and innovations, and will help to bridge the gap between the increasing demands for health and well-being and the reality of workplace conditions.

Timely event

Against the backdrop of the construction boom in the run-up to Expo 2020 Dubai, as well as recent high-rise building fires in the UAE, there has never been a

more important time to focus on the promotion of an effective health and safety culture.

Tania Jadhav, conference producer, highlighted the timeliness and relevance of the event, commenting, "With all eyes on Dubai, intense preparations are being made for EXPO 2020 in areas such as crowd management and security to ensure that the venue is safe for visitors."

The opening keynote presentation will be given by Eng Raed Mohammed Al-Marzouqi, head of Occupational Health & Safety at Dubai Municipality, who will speak on Dubai Municipality strategies and the control of unsafe conditions in industries in Dubai.

Dr Huda Khaleefa Alsalmi, head of EHS Office and Mapping & Imagery Section, Abu Dhabi City Municipality, will give a presentation on Abu Dhabi City



2nd ANNUAL **HEALTH, SAFETY & SECURITY** Forum 2016

23rd & 24th October 2016 - Dubai, UAE

Building a Middle East Safety Culture

Benefits of Attending:

- Learn and understand evacuation processes through an interactive mock fire drill
- Get valuable insights into the working of the justice systems after a serious accident at work
- Hear and gain from presentations of proven methodologies and HSE best practices
- Network and open dialogue with industry peers on the knowledge sharing platform
- Review the new UAE fire safety codes from Dubai Civil Defence

Confirmed Speakers



Raed Mohammed Al-Marzuqi
Head of Occupational Health and Safety
Dubai Municipality



Dr. Huda Khaleefa Alsalmi
Head of EHS Office and Mapping &
Imagery section
Abu Dhabi City Municipality



Mohamed Alkatherni
Fire Safety Manager &
Fire protection Branch Manager
Abu Dhabi Civil Defence



Ahmed Hasan Al Shehhi
Director of Occupational Health and Safety
Ministry Of Labour



Waddah S. Ghanem
Executive Director
EHSQ Compliance & Corporate Affairs
Emirates National Oil Company Limited (EMOC) LLC

Endorsed by



Organised by

**Health, Safety &
Security Review**
Middle East



Silver Sponsor



Strategic Partners

Official Fire Media Partner



Health Partner



Official Media Partners



Media Partners





The event will have a strong focus on fire safety in the aftermath of recent fire incidents. (Photo: wellphoto/Shutterstock)

Municipality's incident report statistics and regulation update.

Focus on fire safety

Fire safety features prominently on the agenda. A senior figure from Dubai Civil Defence will give an eagerly awaited presentation on the new UAE Fire & Life Safety Code, due to be unveiled 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, and puts a strong emphasis on accountability.

Eng Mohamed Alkatheeri, Fire Protection branch manager, Abu Dhabi Civil Defence, will address the challenges in making architecture design compliant with fire safety requirements in buildings.

The focus on fire safety continues with sessions on smarter protection solutions, construction solutions for fire-proofing buildings, and evacuation planning.

A unique and thought-provoking mock evacuation fire drill will provide a live set-up of a practice drill in case of a fire/evacuation emergency, in recognition of the importance of preparing employees in case of

emergency and calculating incident response time.

A mock court trial, the first of its kind in the Middle East, will offer valuable insights into the working of justice systems after a

“This great annual event adds value to HSE in the Middle East, providing a platform for the exchange of knowledge, and showcasing the latest HSE developments.”

**Ibrahim Fahmy,
Marine & HSE advisor to ZADCO**

serious workplace accident. Here the delegates will assume the role of the jury and see both witnesses and the accused undergo cross-examination. The ensuing panel session led by Dubai Municipality will facilitate discussion on the issues raised.

In recognition of the critical role played by leadership in promoting effective health and safety performance, a session chaired by Rob Cooling, vice

chair of IOSH UAE branch, will speak on defining health and safety leadership behaviour, followed by a debating session.

Dubai Corporation for Ambulance Services will be presenting ‘2016 New Year’s Eve in Dubai’, a case study of inter-agency collaboration.

Other topics covered include developing EHS practitioners into effective business executives with the skills to drive the EHS agenda; the safety culture for oil and gas; and air quality.

Positive changes

Ibrahim Fahmy, advisory chairman for the event and Marine & HSE advisor to ZADCO, highlights some of the positive changes that have occurred in the region’s safety culture to date.

“From my 15 years’ experience in the Middle East oil and gas in addition to the marine sector, I can confirm that many changes have taken place to promote a safety culture, from the basics of safety to advanced levels, i.e. HSE management systems. The gap between the Middle East and countries with a more developed safety culture has narrowed by strictly implementing safety regulations, procedures, codes of practice and guidelines, as well as providing the highest mandatory

safety training and inductions to all employees including contractors and subcontractors.

“Safety statistics reveal a major drop in LTIFR (‘Lost time injury frequency rate’) and TRIFR (Total Recordable Injury Frequency Rate) as well as a major drop in environment incidents, such as oil spills, and we are working towards achieving a significant increase in the annual safety budget across all companies and sectors.”

Through high quality presentations and the choice of relevant topics and panels, the Forum will play a valuable role in addressing issues of concern, he adds, which include continuous learning and advanced levels of training, compliance assurance, investing in people and promoting a safety culture.

“This great annual event adds value to HSE in the Middle East, providing a platform for the exchange of knowledge, showcasing the latest HSE technical and management developments, and highlighting important updates in HSE science and technology,” Fahmy concludes. ❖

For more information and to register, see the website at www.hse-forum.com, or email: register@hssreview.me.

Overcoming the challenges

Dr. Waddah S. Ghanem, executive director – EHSSQ & Corporate Affairs, Emirates National Oil Company (ENOC), discusses the knowledge and skills EHS practitioners need to deal with the challenges they face.

“EHS practitioners here come from different parts of the world, with different standards and mechanisms of implementation”

Dr. Waddah S. Ghanem



With more than 12 years' experience in senior roles with the largest diversified oil and gas company in Dubai, shaping policies and principles for health and safety, environment, quality, risk management and sustainability, Dr Ghanem is eminently qualified to comment on the level of awareness in the UAE of the importance of EHS, and the challenges faced by EHS practitioners.

“The awareness of the importance of EHS has been driven in most industries by the legal and regulatory requirements, and the global position of Dubai and the UAE means that compliance to EHS norms and regulations is very important,” Dr Ghanem says. “So there is generally a high degree of appreciation of the importance of EHS, although this varies greatly from industry to industry; the construction industry in my view

still lags behind, but still performs better than in many other places in the world. Standards are rising, and there is a good understanding and appreciation of the importance of meeting standards and best practice requirements.

“As for building an EHS culture, in certain industries such as aviation, Dubai airports, the big Dubai manufacturing companies, and oil and gas companies, there is an

ABOVE: Dr. Waddah S. Ghanem, executive director - EHSSQ & Corporate Affairs, ENOC Group

understanding and recognition of the role of an EHS culture in achieving good EHS practice and avoiding incidents, but in other industries the approach tends to be reactive or compliant.”

Expo 2020 has put Dubai and the UAE on the map again, and pushed aspects such as sustainability, security, transport and infrastructure development, he adds.

Issues and challenges

Turning to the main issues and challenges facing EHS practitioners in the Middle East today, Dr Ghanem comments, “Some challenges are common to EHS practitioners worldwide, but there are others that are specific to this part of the world. EHS practitioners here do not have the same recognition as other professionals such as engineers, lawyers, doctors, who have strong societies, professional bodies, practitioner communities and licensing requirements. OSHAD (Abu Dhabi Occupational Safety & Health Center) has started licensing consultants, which can be seen as a step towards licensing practitioners, although this represents a licence to operate as a consultant rather than recognition as a certified practitioner. Whereas in the UK, for example, it is possible to become a member of IOSH or a body of chartered safety professionals, we don’t have that sort of professional accreditation here. So one of the biggest challenges facing practitioners is

presenting themselves as a body of professionals, and there is a lack of clarity on what constitutes an EHS practitioner.

“Another issue is that EHS practitioners here come from all over the world, with different standards and mechanisms of implementation, so typically American practitioners like to work within a prescriptive environment, whereas the UK has a more risk-based approach.”

The legal environment and the basis of standards and regulations are not always clear and comprehensive, adds Dr Ghanem, and the legal system is such that in case of an incident, the question is asked which regulation or standard was not followed which led to the incident happening, and the HSE practitioner is held accountable.

“EHS is about prevention, and sometimes this can be perceived as increasing the project cost. Operators, owners and company managers may be reluctant to spend money on this if there is not a legal requirement, even though there might still be a risk.”

Reporting structures can also present a challenge, he adds. In some organisations, the HSE practitioner reports to the operations manager, project manager or operator rather than the CEO, managing director, project director or owner. The project manager in a construction company, for example, may be operating under time and cost pressures and might want to take some short cuts, or be reluctant to

apply risk assessment recommendations in full.

Focusing on the business

So what knowledge and skills does an EHS practitioner need to deal with these challenges? It is perhaps not surprising that Dr Ghanem, with his experience and qualifications in business processes and management in addition to his technical expertise, highlights the need for EHS practitioners to have a thorough understanding and grounding in all aspects of the business and how it operates, at a strategic as well as a cross-functional and operational level, and to be an effective business executive. In this way, EHS strategy can be aligned with the overall direction of the business. This is in fact the subject of a forthcoming book which he is co-authoring.

“An EHS practitioner is someone who adds value by protecting the business – but how can you protect the business if you don’t understand how it works?” he says. “If we don’t understand an ROI calculation or

“An EHS practitioner adds value by protecting the business - but how can you protect the business if you don’t understand how it works?”

Dr. Waddah S. Ghanem

what drives the decision-making process, for example, we cannot be effective EHS practitioners.”

He further points out that the forthcoming ISO 45001 safety systems management standard will increase the emphasis on OSH strategy and leadership.

There is also a need for EHS practitioners to develop all-round technical skills. “Generally people become HSE practitioners as a second career, and their technical skills depend on their background,” says Dr Ghanem, who is himself an environmental engineer by training. “So if they come from a process background, they may be good at process safety management but not so good at personal safety, whereas if they come from an environmental and health sciences background, they will be more focused on personal and occupational health and safety. So practitioners may have gaps in their technical knowledge of certain areas. After all, HSE encompasses many different aspects, such as fire prevention and safety, industrial hygiene, occupational health, process safety management, environment, sustainability.

“On the behavioural side, someone coming from an engineering background may have a very high IQ but a less developed EQ. They may be able to make a good technical case, but they also need to have the empathy and skills to sell safety to the CEO as a value proposition, for example.”

Ansell

when my gloves get oily

I JUST NEED GRIP



ACTIVARMR® 97-120 WITH ANSELL GRIP TECHNOLOGY™

Addresses workers top frustration by providing outstanding grip, seamless comfort and impact protection.

➤ For more information or to request a free sample
visit www.ansell.com/oilandgas

ACTIVARMR®

 **ANSELL GRIP™**
Ansell Grip Technology

*EHS practitioners need to have a thorough understanding of all aspects of the business and how it operates.
(Photo: Rehan Qureshi/Shutterstock)*



So how can EHS practitioners develop the requisite skills? “Read up, go on training courses, go to conferences, workshops, different groups, join communities such as the Emirates Safety Group and Emirates Environment Group, learn about yourself, focus on reflective learning and personal development; there are so many things practitioners can and need to do,” advises Dr Ghanem. “There is a big responsibility on practitioners to prove their net worth.”

ENOC Group measures

In his role as executive director – EHSSQ & Corporate Affairs at the ENOC Group, Dr Ghanem is responsible for overseeing the development and implementation of best practices and standards for EHS, business excellence and quality, sustainability, security and risk management as well as wellness and social affairs, and advocates the continued improvement of

the company’s EHSSQ culture through his leadership of the company’s EHSSQ regional team.

Speaking on the measures that ENOC Group has introduced to promote best practice, Dr Ghanem says, “We have embedded many tools, and developed our own standards, guidelines and approved codes of practice, based on best practice, working with peer organisations. In terms of our contribution to the best practice community we have run specialist conferences and best practice workshops focusing on particular areas, for example heat stress, emergency response and planning, permit to work systems.

“We share learning and experiences on systems with different companies from allied industries through presentations. We brought in a consultant to help us develop our own EHS leadership programme, and run best practice workshops for leadership. The ENOC leadership

guidebook has been developed, through several months of consultation with the leadership team.”

The company also has a strong focus on thought leadership, with guest speakers invited to make presentations to the leadership team to share their experience and knowledge. These have included Dame Judith Hackett, former president of IChemE, and the chairperson of the UK HSE, besides many others.

“We have created separate departments for sustainability, security and risk management,

“We have created a technical committee on operational business excellence, exploring different business excellence models.”

Dr Waddah S. Ghanem

and business excellence and quality, and have created a technical committee on operational business excellence, exploring different business excellence models,” he continues. The next step which the Group is working towards is the creation of an integrated business and operational excellence model for the whole group, which will encompass EHS as well as sustainability, security and risk management. ❖

Dr Waddah S. Ghanem will be speaking at the 2nd Annual Health, Safety & Security Forum on 23 October in Dubai on the subject of ‘Developing EHS practitioners into effective business executives with greater management skills to drive the EHS agenda and bring about real changes.’ His forthcoming book ‘The Ten-Step MBA for Health and Safety Practitioners’, co-authored with Rob Cooling, will be published by Routledge in 2017.

The new generation of AED

ZOLL

is finally here!



ABOUT US

Leader Healthcare, founded in the year 2009, is a super specialty health care organization that caters to the requirements of this ever changing medical sorority. Headquartered in Dubai, our presence is well rooted in the Middle East and India. We take complete care in understanding the latest market trends and providing our clients with new Surgical and Diagnostic equipment devices for usage in areas like Emergency Rooms/Operating Rooms, EMS, Tactical Medical Solutions, Ophthalmology, ENT, Aesthetic Dermatology, Plastic Surgery, Orthopedic, Physiotherapy, models for Simulation based medical education and general Home Healthcare department. Leader Healthcare aims at becoming the world's leading medical technology company and is driven to make healthcare better. We offer a diverse array of innovative products, transformational medical technologies, and services that are shaping a new age of medical care.

The launch of ZOLL AED 3 by Leader Healthcare and ZOLL Medicals took place on 31st August 2016 in Intercontinental Hotel in Dubai Festival City.



The next generation of AEDs (Automated External Defibrillator) begins with the launch of all-new ZOLL AED 3™ making the best even better. ZOLL AED 3™ is equipped with ZOLL's improved real-time CPR feedback technology, color-coded real-time bar gauge, dust protection, Wi-Fi capabilities, universal CPR UNI-PADZ for both adult and pediatric rescues with 5 year shelf life and much more to help lay rescuers perform high-quality CPR. The AED 3 is easy to use and maintain with its low-cost ownership and is extremely reliable because of its state of the art technology onboard. ZOLL AED 3 is among the few fastest AEDs at delivering a shock after chest compressions stop. It improves on the best support for rescuers, provided by the AED Plus® since 2002.

For professional rescuers, the AED 3 BLS model provides an ECG display and CPR Dashboard™ as well as a hardened case. The new ZOLL® AED 3 is all set to make an impact in the medical industry. Now available and distributed all over UAE by Leader Healthcare.

Please visit our website www.leaderhealthcare.co for contact and more information.



Preventing that fall

Capital Safety, a 3M company, speaks about what employers should do to protect workers, and offers advice on the correct use of fall protection equipment.



“A fall arrest system will be of no use if the deployment distance is greater than the available clearance, a factor that needs to be calculated based on the specific circumstances of the work environment.”

Romain Crouzet, Middle East sales manager, Capital Safety

ABOVE: More than 3,700 projects worth around US\$400bn are currently ongoing in Dubai, according to a new report. (Photo: Capital Safety)

The most common causes of fatal and serious injuries on construction sites are workers falling from height or being hit by falling objects. Fatal falls can be the result of lack of proper safety gear but even with fall protection equipment, a potential fatality cannot be prevented if it has been incorrectly specified or the worker does not properly understand its use.

The US Department of Labor’s Occupational Safety and Health Administration (OSHA) sets out safety regulations, which provide a standard for fall protection, dealing with both the human and equipment-related issues involved in protecting workers from fall hazards, which are detailed in fall protection in construction (OSHA 1926.500 through 1926.503).

Fall protection measures

Fall protection can be divided into three categories – Prevention, restraint and arrest.

Fall prevention methods are generally what are termed ‘collective’ measures, which prevent any worker from being exposed to a fall hazard through the use of correctly positioned guard rails and toeboards. Restraint and arrest systems

involve the use of specific personal fall protection systems for which the worker is individually fitted and trained to use.

Understanding what particular types of systems are designed to do is essential and these fit into four basic categories:

- **Restraint:** This involves a positioning system that holds the worker in place while keeping his or her hands free to work. While restraint or positioning equipment may be used to prevent a worker from reaching a fall hazard position, it is not specifically designed to arrest a fall, and should never allow the user to be in a fall arrest situation, unless protected using a back-up fall arrest system.
- **Suspension:** Equipment such as a boson’s chair lowers and supports the worker while providing a hands-free work environment. Again, a suspension system’s components are not designed to arrest a free fall, therefore using a back-up fall arrest system is critical.
- **Arrest:** Fall arrest systems activate only when the actual fall occurs and would typically consist of a full-body harness with a shock-absorbing lanyard or retractable lifeline,

an anchor point and a means of rescue.

- **Rescue/retrieval:** In the event of an arrested fall, retrieval equipment is needed to rescue or remove a worker so that he or she can be brought to a safe level. Devices include tripods, davit arms, winches and comprehensive rescue systems.

Judging the distance

A fall arrest system will be of no use if the deployment distance is greater than the available clearance, a factor that needs to be calculated based on the specific circumstances of the work environment. Fall clearance is the minimum distance a worker needs so that a fall is arrested before striking the ground or objects below the working area. This is more than a simple measurement from worker to the nearest obstruction and its correct calculation could mean the difference between a safely arrested fall and serious injury. This is not a case of ‘one size fits all’, and each situation needs to be individually assessed. ❖

– By Romain Crouzet, Middle East sales manager at Capital Safety

PPE market set to expand

Technological breakthroughs concentrating on low cost sustainable products will ensure a steady PPE market price trend and maintain industry expansion and penetration, according to a study by Research and Markets.

The global personal protective equipment (PPE) market is fragmented into various products such as fall protection, head protection, hand protection, respiratory protection, eye and face protection, hearing protection, protective clothing and protective footwear.

The hand protection segment contributed around US\$8.8bn in 2015 and is projected to accrue higher than US\$14.1bn revenue by 2023.

The fall protection application segment is projected to record 7.1 per cent CAGR during the forecast timeline.



The protective clothing segment is projected to exceed US\$15.1bn in revenues by 2023. (Photo: markim/fotolia)

Protective clothing

The protective clothing application segment is projected to exceed US\$15.1bn revenue by the end of the forecast timeline. Strong regulations on lessening risk of injury from fire, nuclear

risk or chemicals are predicted to play a vital part in segment expansion.

The protective footwear segment is projected to gain maximum global PPE market share and is projected to contribute more than 18.1 per

cent of total revenue by end of 2023.

The construction segment, which is expanding, is projected to record a CAGR of around 7.6 per cent by the end of the forecast timeline. Overhead expenses related to workplace contingencies will enhance the penetration of the product in the segment in the future.

The oil and gas segment size was greater than US\$6.1bn for 2015, and is projected to witness revenue higher than US\$11.1bn by 2023.

Regional trends

The USA PPE industry share was projected to surpass US\$12.1bn for 2015, while the Middle East & Africa and Latin America PPE industry size is anticipated to expand more than 7.1 per cent during the forecast timeline.

New PPE app by PK Safety

PK Safety is launching a new concept in the way to receive information for a wide range of personal protection equipment (PPE). The new PK Safety aPPE is available on mobile phones and tablets, providing users with access to PPE information at the touch of a screen.

PK Safety provides companies with total PPE support, helping and assisting during the assessment stage and then supplying the equipment.

The aPPE mobile App is a new concept in delivering information on PPE and the initial launch is specifically for the recycling sector.

Roy Wells, PK Safety's managing director, explained the thought process behind the new App. "Understanding and interpreting health and safety legislation can be challenging, especially when assessing PPE. The wide scope of designs, colours, and types of PPE can make even the simplest selection difficult. We wanted to simplify that process."

"Modern technology now means that most items we need or desire can be found with a couple of touches on the screen of our mobile device," explained Wells. "However, finding and then selecting the right PPE can

still be difficult."

PK Safety conducted extensive research in the recycling and manufacturing sectors and concluded that there was a need to develop a way to deliver PPE information quickly and 'at the touch of a screen'; a process that reflects how purchasers source products in the digital age.

The user, whether this is the purchasing manager, operations manager or health and safety manager, can also use the PPE App to consider potential changes in the workplace. Changes could involve relocating workers within a process, using new equipment or processing a new type of waste

material. The new working parameters can be inputted into the aPPE App and the user is presented with the potential PPE requirements. The PPE requirements may stay the same, or the assessment might highlight that the PPE needs to be changed to comply with the health and safety requirements of the new area, equipment or material.

The new aPPE App helps navigate the wide range of legislation, guidance documents, approved codes of practice, research papers and industry practices by providing health and safety solutions based on industry knowledge.

Effective air filtration

Access to clean air is a necessity and can only be achieved by making a conscious effort to put in place the right air filtration equipment and follow the necessary processes.

Sand and dust storms are common in the Middle East. (Photo: Caleb Holder/Shutterstock)

Air pollution constitutes a major challenge to the HVAC applications performance operating in abrasive heat, dusty and humid environments. In fact, air filter clogging is one of the most common phenomena in the Gulf nations. Therefore, appropriate air filter selection is of a paramount importance and starts with the chemical and physical characterisation of suspended contaminants to engineer their separation processes.

The Middle East has been a victim of the worst sand and dust storms. It is a meteorological phenomenon caused by strong winds that occur in arid and semi-arid regions causing a wide range of environmental and climate impacts. Suspended dust particles can alter the atmospheric radiation balance and contribute to climatic

variations. The Sahara Desert is considered a major source of sand storms in the Arabian Peninsula. Ultimately, the figure prints of sandstorms are all over our air conditioning equipment and gas turbine applications and impede nearly all our daily activities. Kuwait, in particular, sustains frequent sandstorms throughout the year with suspended dust existing throughout most of the summer.

Air filtration market

The Middle East indoor air filtration market size was estimated to be valued over US\$250mn in 2014. The region is closely followed by Africa, which accounted for around US\$169mn in the same year.

The escalating need for cabin comfort systems and health concerns are key factors driving the industry demand from 2016

to 2023. The UAE air filtration market size is expected to record a surge in demand growth owing to the rising real estate sector. Constituents of air pollution lead

towards loss of GNP in the Middle East and Africa region, with some key causes being greenhouse gas emissions, sandstorms or dust storms, and other gases emitted from various industries. In addition, urban growth, industrialisation, lack of awareness, shortage of institutional capabilities and transportation systems are also responsible for the pollution in the region, and are driving demand. Moreover, secretions of sulphur dioxide, nitrogen oxide and other harmful gases have been increasing with the mounting industrialisation.

The increasing need for energy effective and efficient products that also deliver high performance are anticipated to boost industry demand over the coming few years. In addition, resource scarcity coupled with changing demographics is also

“The industrial air filtration market is expected to grow to over US\$6bn by 2020 with high efficiency particle air (HEPA) filters accounting for a fair share of this growth.”

Dr. Iyad Al-Attar,
air filtration consultant

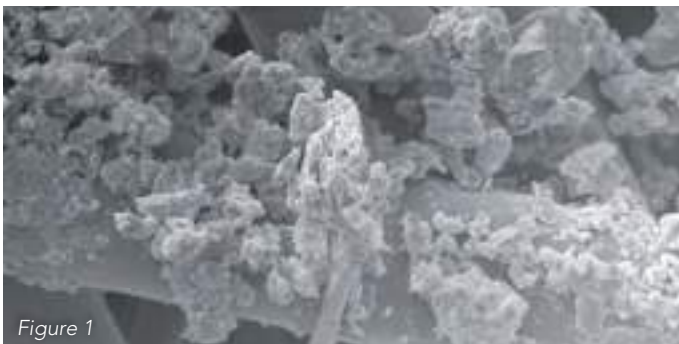


Figure 1

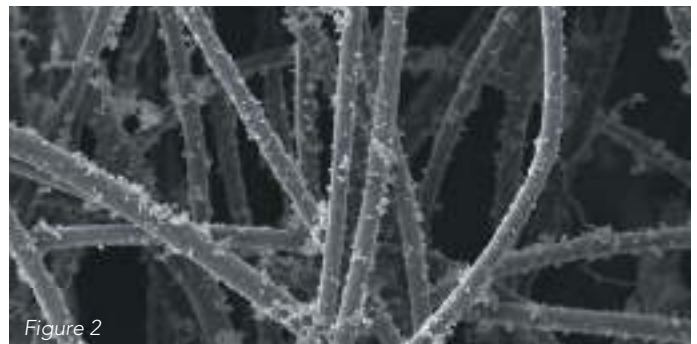


Figure 2



Figure 3 (Left)



Figure 3 (Right)

likely to favour the demand growth. Rising environmental awareness and rapid urbanisation are also expected to contribute to industry growth. Non-serviceable and nano-fibre along with the automotive air filters market represent potential growth opportunities for the industry.

The industrial air filtration market is expected to grow to over US\$6bn by 2020 with high efficiency particle air (HEPA) filters accounting for a fair share of this growth.

Several researchers around the global have reported the health effects of polluted urban and indoor air and highlighted below are some of the common findings

- PM (particulate matter) affects more people than any other pollutant.
- Reducing PM10 (particles < 10 µm) pollution from 70 to 20 µg/m³ decreases air quality related deaths by about 15 per cent
- 55 per cent of sandstorms consist of PM10
- Silicosis is the most hazardous occupational disease and cases are on the rise.

The ideal start

While abiding by international filtration standards seems like an ideal start, we cannot solely rely on them as a selection tool. Actual performance of air filters used in Sahara desert installations tends to deviate from the performance predicted by laboratory results. This is particularly true in regions sustaining frequent sandstorms and known to have dust with characteristics deviating from that of commercially available synthetic standard dusts. Therefore, existing air filter designs require further research to enhance gas turbine performance via efficient, economic and suitable filtration solutions to encounter the regional climate conditions particularly sand storms.

The filtration perspective

From a filtration perspective, sandstorms increase the dust concentrations challenging the filters in the air handling units. Consequently, the life span of the air filter is reduced, incurring additional maintenance costs in terms of additional filter

replacements. Evaluated dust concentration changes the dynamics of filter loading as particles may bridge to form dendrite (Figure 1), which is an example of dust cake agglomerates on the filter surface and, consequently, impair it from performing as depth filter (Figure 2). Surface deposition occurrence on a depth filter prior to the full utilisation of its thickness signifies that the depth filter is acting merely as a surface filter. In other words, the surface pores will strain particles larger than their diameter (Figure 3). The role of pre-filters proves invaluable in reducing the particle (dust) concentration and size distribution challenging the air filters. Thus, allowing each filtration stage to perform its textbook filtration function.

Air filtration is a preventative measure to help protect not only the human occupants, but also the equipment at hand, whether it a gas turbine compressor or an air conditioning unit. Therefore, as much as we demand the smartest filter design and outstanding performance, our selection ought to be appropriate. Figure 4 illustrated the deterioration of

pocket filter in an air-handling unit allowing the air pollutants (solid and gaseous) to settle on the cooling coil. Such pollutants form a layer (Figure 5) that impairs the intended heat transfer function of the coil putting the equipment, the human occupants and even the designers at precarious position.

The plan

The question here is quite simple; just by looking at Figures 4 and 5 would we still feel comfortable being in an indoor space protected by these filters? Would we not question the air filter selection and maintenance measures facility managers are undertaking for us to enable us to inhale clean air in shopping malls, schools, and hospitals, commercial and residential buildings? The ethical obligation to provide a genuine filtration line of defence is simply inescapable.

- **Figure 1:** Formation of dust cake layer on the surface of a depth filter.
- **Figure 2:** Illustration of depth deposition of particles on the filter medium.
- **Figure 3:** Dust deposition on filter media : non-stationary stage (left) and surface deposition (right)
- **Figure 4:** Ruptured pocket filter in operation in air handling unit.
- **Figure 5:** Contaminants/dust layer formation on the cooling coil of an air-handling unit. ❖



Figure 4



Figure 5 (a)



Figure 5 (b)

— By Dr Iyad Al-Attar, air


WORK'S NATURAL EVOLUTION



www.cat.com | www.caterpillar.com | © 2016 Wolverine World Wide. All Rights Reserved. CAT, CATERPILLAR, BUILT FOR IT™, their respective logos, Caterpillar Yellow, the Power Edge Trade Dress as well as corporate and product identity, symbols, designs, and trademarks of Caterpillar and may not be used without permission. Al Garawi Group, an authorized distributor of Cat Footwear by Wolverine World Wide, a global licensee of Caterpillar, Inc.



FLEX CT.

 Al Garawi Group

Al Garawi Galleria, Al Orouba-King Fahad Highway Junction Olaya
P.O. Box 41122, Riyadh 11521, Saudi Arabia
Tel. +966 11 4196096 / 4195058 Fax. +966 11 4196101 / 4196103
Email: Info@algarawigroup.sa / www.algarawigroup.com

Al Garawi Group an authorized distributor of the following licensee
for Saudi Arabia, U.A.E, Bahrain, Qatar, Oman, Jordan, Lebanon, Kuwait and Yemen.
Wolverine World Wide, the global footwear licensee for Caterpillar Inc.



CAT

BUILT FOR IT.

Medco

P.O. Box: 17301, Jebel Ali, Dubai, U.A.E. Tel.: +971 4 881 8821 Fax: +971 4 8818944,
Showroom: Al Kwaieb Building, (B-Block) Sheikh Zayed Road, P.O. Box: 2904, Dubai, U.A.E
Tel.: +971 4 343 7400 / 343 7500 Fax: +971 4 3437600
Email: medco@algarawigroup.sa



Reducing exposure to noise and dust

As ISO prepares to launch a new occupational health and safety standard, Jim Struthers, Casella's global sales manager, discusses how this could lead to measures to mitigate noise and dust exposure for construction workers in the Middle East.

“The key to improving any aspect of health and safety is collating data that helps employers to identify the issue and implement strategies for improvement.”

Jim Struthers,
global sales manager, Casella

ABOVE: Exposure can be monitored using remote devices with Bluetooth connectivity that can analyse and store data on exposure levels without impacting worker productivity. (Photo: Casella)

In the midst of preparations for the 2022 FIFA World Cup in Qatar, the large number of construction projects in the Middle East region and high profile developments such as the Hamad Port and the 2,200km rail network, are serving to strengthen the already thriving economy. However, they also raise concerns about the health and safety of both residents and workers. Increased construction leads to increased levels of noise and dust, so how can these impacts be mitigated?

In statistics released by the World Health Organization (WHO), the environment, including work settings, is a factor in 19 per cent of cancer cases and results in 1.3mn deaths every year, while globally 16 per cent of the disabling hearing loss in adults is attributed to occupational noise.

Regardless of the understanding of the impact of poor air or noise quality induced hearing loss, 25 per cent of the UAE companies do not provide personal protective equipment (PPE) to their employees, while just 18 per cent

of construction companies in the Dubai Municipality conduct regular health and safety training. It is, therefore, clear that the value of effective health and safety processes in the construction industry needs further communication.

With the new ISO 45001 Standard on the horizon, it is essential that the construction industry is prepared to meet the noise and dust exposure requirements. An ISO 45001 occupational health and safety management system has many elements and will bring many benefits for companies with it. Ultimately, implementation of the standard could help reduce the overall costs for incidents within an organisation, as will the implications of these accidents including downtime, insurance premiums, absenteeism and employee turnover rates.

A majority of Middle East countries are member bodies of the ISO, meaning they influence ISO standards' development and strategy by participating and voting in ISO technical and policy meetings. Member bodies

also adopt ISO international standards nationally. Egypt, Turkey, Iraq, Jordan and Qatar are either participating or observing countries in the development of the standard.

However, the key to ensuring that health and safety practices, such as noise and dust monitoring, are successful is to guarantee that the key messages of the ISO standard are filtered down accurately to the employees on site. To have employees actively embracing healthier and safer practices on a day-to-day basis, including wearing noise and dust monitoring equipment, will noticeably improve the Middle East's HSE record.

By equipping each construction worker on site with a noise and dust exposure monitoring device, health and safety managers can regularly analyse, review and compare the health and safety of their workers. This will, in turn, assist in the preparation for the new ISO45001 standard and support the economic strength of the Middle East's high profile construction projects. ♦

Save Lives

Starting with your own

EyeveX[®]
Our vision. Your safety

We are a company known for sharing our expertise to create solutions by providing a wide range of personal protective equipments in the Middle East, North Africa and CIS countries. Today our brands have recognised themselves in the market for its quality, standard, style and high comfort that exceeds expectations when compared to our competitors. Keep yourself protected and your work site safe.

We offer a wide variety of products to fulfill all of your personal protective equipment needs while on the job. Choose from an extensive line of Personal Protective Equipment including Hard Hats, Eye protection, Hand protection, Respirators, First Aid Kits, Hearing Protection and many other safety products designed with your personal safety in mind.



CE

ANSI



HELMET



DISPOSABLE MASK



HALF FACE MASK / CARTRIDGE



FULL FACE MASK / CARTRIDGE



SAFETY SPECTACLES



WORK WEAR / FIRE RETARDANT



GLOVES



EXPLOSION PROOF TORCH



SAFETY SHOES



SPILL KITS

Scheffer
German Technology

Tag (t)
Lock-out-tag-out solutions

EyeveX
Our vision. Your safety

hunk
Safety at every step

FireWarrior
No burns at all

DRYX
The Protector

SCHEFFERVILLE TRADING L.L.C

P.O. Box 63934, Sharjah, U.A.E. Tel: +971 6 5757860 Fax: +971 6 5757890

email: scheffer@emirates.net.ae

www.eyevexsafety.com

*Petrotechnics' new training centre in Aberdeen, Scotland.
(Photo: Petrotechnics)*

Aiming for excellence: better planning for shutdown turnarounds

Nothing can prevent a shutdown turnaround outage (STO) from taking place. But as Andy Bartlett of Petrotechnics explains, there are ways to improve planning, execution and outcomes of mandatory shutdowns, and minimise the threat to operational excellence.

“It’s not surprising, therefore, that activities such as STO often severely test an organisation’s ability to achieve operational excellence – even though such activity is mandated to be repeated on a regular, if not frequent, basis.”

Andy Bartlett, Petrotechnics

As oil prices remain low, tight margins have become even tighter, increasing the focus on operational excellence and the drive for an efficient, productive but safe work environment.

However, since operational excellence means many things to many people, it’s worth considering the five basic premises on which it is based. These are:

- Achieving a workplace that is free from incidents and injuries;
- Mitigating significant workplace health risks and promoting a healthy and safe workforce;
- Identifying and then mitigating environmental and process safety risks;

- Ensuring that asset integrity and reliability reach the highest standards;
- Ensuring that natural resources and assets are used efficiently.

Managing hazards and deadlines

As even the briefest glimpse through this list shows, achieving operational excellence is by no means a straightforward task – even during normal operational procedures. But achieving operational excellence during periods of change, when transient or abnormal operations create a greater number of process hazards and high-risk activities, is harder still.

It’s not surprising, therefore, that activities such as STO often

severely test an organisation’s ability to achieve operational excellence – even though such activity is mandated to be repeated on a regular, if not frequent, basis.

A behemoth of planning and a source of seemingly endless paperwork, the STO looms large on any operator’s calendar. Looking at the numbers involved shows just why this is: it is not unknown for an STO to involve more than 40,000 separate jobs; the average duration ranges from 20 to 60 days, depending on the type of work that is required. A 200,000 bpd refinery can see its on-site staff numbers triple or even quadruple during a turnaround project.

This tension between managing risks and delivering to

time is a constant challenge of the STO process in particular, and operational efficiency in general.

Sub-optimal outcomes

A recent poll conducted by Oil & Gas IQ into trends in the STO space showed just how much of a challenge it is to deliver a result in an efficient way. A quarter of shutdown professionals gave their shutdowns a ranking of less than five out of ten (in this scale, one is terrible and ten is flawless).

The same poll also showed that the principal source of over-runs for 45 per cent of survey participants was scope creep, while 36 per cent said that insufficient planning was the main threat to efficient management of the project. Given that most scope creep involves hot work, deviating from the lean scope also tends to increase risk.

Perfect planning

As the Oil & Gas IQ poll demonstrates, delivering an STO that is closer to the 'flawless' end of the scale starts in the eighteen-month planning stage.

STO planning should aim to:

- Simplify the complexity within the turnaround environment;
- Provide risk-based prioritisation for planning and work execution;
- Improve standardised risk awareness and risk assessment practices;
- Ensure policies, roles and safe working practices are embedded and systematised across the turnaround;
- Improve collaboration between functions across the

turnaround process;

- Ensure there are contingencies in place to handle the inevitable emergent work, which is often forgotten or overlooked.

Get this right and execution and outcomes will improve.

It is tempting to see planning as the creation of a detailed manual that every member of staff and every contractor can then follow. But the problem here is that, regardless of how detailed the manual is, it is little more than a static to-do list that struggles to support the above desirable outcomes.

It doesn't take into account the multitude of interconnections involved when 40,000 separate and often hazardous tasks have to be scheduled. By definition, it cannot predict all the unexpected outcomes, the unanticipated events, the unplanned delays, and so cannot provide guidance on how best to address the knock-on effects that will ripple out through the schedule.

It also doesn't take into account the simple human desire to avoid sitting down and memorising lengthy documents. In other words, it's not a planning tool that is designed for the dynamic, risky, multi-lingual environment of an STO. However carefully co-ordinated the procedures and policies are, the most dangerous point is when they start to interact with dangerous assets – and ordinarily flawed human beings.

Finally, the 'follow-the-manual' approach to planning makes it harder for operators to adjust to change over time. It is often dependent on information that is

stored in various online and offline formats that has to be gathered, updated and validated. Learnings from the previous shutdown process are hard to capture, as are changes to operational circumstances, new equipment and consequent new risks. Even where this information gathering is fully computerised, it can be prone to stasis – reflecting the events of five years ago, not the current facts on the ground.

The language of risk

The answer to effective planning lies less in a lengthy but unconnected list of tick boxes, and more in dynamic planning tools that support the development of a more manageable – and sharable – set of procedures. By taking into account the interrelated nature of the tasks, hazards and risks involved – and in particular the critical path items – they can detail not just the minutiae of how an individual task should be performed, but enable planners to take a step back and consider how the entire programme of work can be delivered safely.

This is key. The ability to visualise risk before an STO even begins gives operators the foresight to optimise plans both prior to and during the execution phase, by proactively adjusting schedules to reprioritise work as conditions and associated risks change. The result? A dynamic to do list that reduces risk and minimises the possibility of schedule overruns.

These types of tools also help overcome one of the biggest challenges that any multi-disciplinary project planning

faces: mediating between the loudest voices. During the 18-month lead-time there will inevitably be representatives of different departments coming together, all of whom feel that their area of maintenance is the priority.

Instead of giving precedence to the most insistent individual, all tasks can be ranked according to a common parameter – in this case, risk. By visualising and optimising total workload, conflicts, and all risks in one place, and showing how activities and conditions combine to impact process safety in real-world conditions, information sharing becomes easier and more relevant.

With this type of planning model, everyone from the ground up can see the bigger picture. Using a common language of risk, front-line engineers understand the causes and consequences of their particular tasks, while managers can make smart decisions about staffing and scheduling to facilitate the project at a risk level that is acceptable.

Digital support isn't going to transform STO procedures overnight. It's not going to replace experienced people in the field. But it can make their jobs easier. It's all about putting the right procedures in place and enabling the right people. Most of all, it's about regarding safety as an inherent enabler of productivity – and not the drag on operations and profits that it often seems. With a positive connection between safety and productivity in place, operational excellence becomes much more achievable. ♦

'Smart city is key to security'

French solutions provider Thales' V-P Thibaut Trancart gives an insight on the projects and plans the firm is working on to ensure the region is safe and secure.



Global security provider Thales this year launched two innovations – SpyRanger and 6-Watch For You – at leading security show ISNR in Abu Dhabi. *Health, Safety & Security Review Middle East* spoke with Thibaut Trancart, V-P, country director, UAE, about Thales' presence in the Middle East, especially the UAE, and being the market leader in security solutions.

Health, Safety & Security Review Middle East (HSSRME): Can you speak about Thales's presence in the Middle East?

Thibaut Trancart (TT): We see a lot of focus on smart cities, which for us means mobility and interconnectivity of agencies, from infrastructure to water and energy. We also see a big focus on transportation. In the UAE, we are working with the RTA in Dubai to implement a smart city vision. UAE is the deciding front on leading all smart cities. On that note, we have launched 6-Watch For You (6W4U) that connects public to law enforcement agencies. Connected via a secure link to the command centre, the 6W4U alerts officers to danger simply by vibrating

when an important notification comes in. Thales is also doing a couple of activities on cybersecurity. In this age of interconnectivity, there is an even greater danger of cyber crime. We are having a lot of discussions in the emirates to improve cybersecurity mechanisms. We are working with Mubadala Group and aim to set up a joint venture with them on cybersecurity. We take the best from our local partners as well.

HSSRME: How well is the UAE equipped in terms of security?

TT: Very well, I believe. Abu Dhabi has CCTVs everywhere for surveillance round the clock. What is good is we are in a country that is driving and promoting innovations.

There were many schemes announced by HH Sheikh Mohammed bin Rashid Al Maktoum, UAE Vice-President, Prime Minister and Ruler of Dubai, earlier this year, which is the key driver for smart cities. Not many nations have a Smart City Committee like the one in Dubai. Expo 2020 Dubai will be a strong driver too. Visitor safety is paramount to the country and a good safety system means efficiency in experience.

HSSRME: How do you view the security situation in the region today, and what does it require in terms of defence?

TT: The situation is changing every day for various reasons. The waiving of sanctions in Iran is game changing, and the ongoing war in Syria is concerning. Recent attacks all over the world bring forth the need to develop stronger defence mechanisms. Countries need to ensure that their borders are protected and secure.

That said, the region still has a good security system in place and it is driving a clear concept of operations. Thales' Spy Ranger caters to this need. It is the latest-generation surveillance and reconnaissance mini-drone specifically tailored to the needs of armed forces, security forces and essential operators.

HSSRME: In your opinion, what are the growing trends of security in the region?

TT: For me, one of the biggest growing trends is the evolution from safe city to smart city. That's driving a lot of things like cybersecurity. It is the new force in the armed forces, civil defence and infrastructure sectors such as water and energy.

"What is good is we are in a country (the UAE) that is driving and promoting innovations to tackle security concerns."

Thibaut Trancart, V-P, country director, UAE

Oil Review

Oil · Gas · Petrochemicals

Middle East



One success leads to another

Oil Review Middle East, the region's leading oil and gas publication, has been putting sellers in touch with buyers for almost two decades. The magazine makes sure that it strikes a balance between respected editorial and your advertising message, to maximise the return on investment for your business.



The magazine's circulation claims are independently verified by an ABC audit

Oilreview.me

Website-Monthly Statistics
1,022,151 Page Impressions
52,662 Unique Visitors

E-newsletters

Circulation: 20,500+
The Oil Review Middle East fortnightly e-newsletters can deliver your marketing message directly to decision makers.



Alain Charles
Publishing
Serving the world of business

MENA Tel: +971 4 448 9260
ASIA Tel: +91 80 6533 3362
USA Tel: +1 203 226 2882
EUROPE Tel: +44 20 7834 7676

E-mail: post@alaincharles.com
Web: www.alaincharles.com
www.oilreview.me

Protecting the oil and gas industry from security threats

Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC), one of the world's largest oil and gas shows, will host a new exhibition zone and conference dedicated to security across the oil and gas industry – Security in Energy 2016.

The ADIPEC 2016 Security in Energy Conference aims to bring together cyber and physical security leaders in the oil and gas sector to help address current issues and shape the future security plans of the oil and gas sector.

Security in the oil and gas industry is becoming increasingly important, given that sabotage, espionage and cyber attacks on oil companies have been reported globally. According to ADIPEC organisers, the energy sector is a strategic target for security breaches, and oil and gas companies need to protect themselves against security threats both malicious and as a result of natural disasters.

The ADIPEC 2016 Security in Energy Conference aims to bring together cyber and physical security leaders in the oil and gas sector to help address current issues and shape the future security plans of the oil and gas sector.

The event, which promises to deliver cutting edge products and services in the sector, will be supported by the Critical Infrastructure and Coastal Protection Authority (CICPA) and the UAE's Telecommunications Regularity Authority (TRA). It aims to bring together industry players in the sector with panel discussions, case studies and individual presentations addressing the importance of security within the industry.



The event includes a four-day exhibition showcasing the latest technologies in security in energy, a three-day conference focusing on energy security for oil and gas and more than 12 sessions and panel discussions covering strategic and technical security questions and concerns.

The conference is expected to bring together the world's leading security professionals, government officials, law makers, academic and protection agencies to share knowledge and ideas and help to create a blueprint for discussion on how best to tackle current and future security concerns.

Sessions, topics and discussions at the conference will focus on critical infrastructure. Disaster prevention, emergency readiness, response and recovery for physical assets including onshore refineries, petrochemical plants and oilfields and offshore rigs and platforms, safeguarding transportation of natural gas and refined products will be

addressed. The latest developments in plant perimeter surveillance and radar detection software and hardware, border and port security for the protection of patrol vessels and global shipping waterways will also be showcased.

Cyber security is another focus area at the conference, which will highlight the latest global developments in policies, practices and industry trends. The conference will look at identifying vulnerable IT software at high risk of hacking, innovative identification systems for oil and gas personnel, assets and vehicles, virtual security of the digital oilfield in remote locations from control processes, maintenance and data collection and security intelligence for mitigating the risk of managing complex big data.

Held under the patronage of the President of the United Arab Emirates, HH Sheikh Khalifa Bin Zayed Al Nahyan, and organised by dmg events, ADIPEC is the international meeting point for oil and gas professionals. One of the world's top energy events, it is a knowledge-sharing platform that enables industry experts to exchange ideas and information. ❖

ABOVE: The 19th edition of ADIPEC will take place from 7-10 November 2016 at the Abu Dhabi National Exhibition Centre (ADNEC). (Photo: ADIPEC)



Bringing together diverse industries to create a safer workplace

The Gulf Safety Forum, to be held in Doha, aims to bring together experts from across diverse industries to discuss strategies for the improvement of safety and security in the region.

The Gulf Safety Forum also includes the GSF Safety Award, which will celebrate innovations in health and safety.

ABOVE: A focus on safety is growing to be a top priority for companies. In a dynamic and fast paced business environment it is becoming a vital driver of financial value, the event organisers said. (Photo: Yuttana Contributor Studio/Shutterstock)

Organised by Euro Petroleum Consultants and the Gulf Organisation for Industrial Consulting (GOIC), the forum will be held under the patronage of HE Sheikh Abdullah bin Nasser bin Khalifa Al Thani, Prime Minister and Minister of Interior of the State of Qatar. According to the organisers, the high-level conference will bring together key industry players from across the region to discuss strategies for continuous improvement of safety procedures as well as share successful case studies and roadmaps towards achieving the goal of zero accidents. International safety experts and providers of safety tools and technologies will also present the latest developments in the sector.

Representatives from diverse industry sectors including oil, gas, petrochemicals, construction and manufacturing are expected at the event.

Qatar Rail, which was recently awarded the Gold Award for Health and Safety by the Royal Society for the Prevention of Accidents (RoSPA), will also participate in the event. Qatar Rail health and safety senior manager Paul Stanley Williams said, "Qatar Rail is pleased to be taking part in the Gulf Safety Forum as we have a strong culture of collaboration, which enables learning and sharing of positive health and safety practices".

Keynote speakers at the event will include Sam Mannanand, Regent professor and director of the

Mary Kay O'Connor Process Safety Centre at Texas A&M University, and Laurence Cusco, head of international unit at UK's Health and Safety Laboratory.

This year, the Gulf Safety forum also includes the GSF Safety Award, which will be presented to the company that has demonstrated the best overall achievement in safety during the last two years, and will celebrate the organisation that has found innovative ways of making lasting improvements to the safety and health of their workers, to the environment and to productivity. By sharing their examples and recognising their achievements, the GSF Safety Award hopes to drive change and promote best practice in safety.

The panel of judges for the GSF Safety Awards will include DuPont, Texas A&M University, Euro Petroleum Consultants and the Gulf Organisation for Industrial Consulting (GOIC).

Reiterating the importance of the health and safety industry, Colin Chapman, president of Euro Petroleum Consultants, the show organiser, 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."

The event will take place on 30 and 31 October at the Hilton Hotel in Doha. ❖

Fire safety in focus

The 7th Annual Middle East FireSafe, to be held at Shangri-La Hotel Dubai from 18-19 October 2016, promises to be a one of a kind event dedicated to fire safety equipment, personal protection equipment (PPE), accident and emergency equipment as well as training, education and research.

“Fire safety is a very important topic to be brought to the Middle East. Fleming Gulf did an impressive job with organising this event here and I can see it is improving with every passing year.”

**DUCAB senior marketing officer
Heba Al Dhahri**

ABOVE: The 2015 edition of the event saw participation from more than 180 delegates. (Photo: Middle East FireSafe)

One of the longest running fire safety events in the Middle East, the 7th edition of the Middle East Firesafe and Fire Fighting Summit will be held in Dubai with the support of the Directorate General of Civil Defence (DCD). This year’s conference is themed ‘Prerogative to Fire Safety Excellence’ and seeks to establish an industry standard for the best fire safety practices. According to the organisers, the collaboration with DCD and top industry leaders makes this a one-of-its-kind event across the region.

The fire safety market in the Middle East has been steadily growing over the last decade due to stringent building norms, the booming construction sector and increased infrastructure spending. The event organisers estimate the Middle East fire safety market at US\$1.4bn with a projected growth rate of 14-15 per cent until 2020. This offers a unique opportunity for stakeholders to capitalise on the unparalleled growth and opportunities in the market. The event organisers predict that innovation coupled with technology will become the biggest driver for the industry and hence Middle East Firesafe



and Fire Fighting Summit has been tailored around this central theme.

The inaugural keynote address at event will be delivered by Dubai Department of Civil Defence acting commander-in-chief HE Rashid Thani Al Matroushi and is entitled ‘Fire Safety National Campaign: UAE fire and life safety code – our commitment to the community for Dubai’s high rise safety.’

Organised by Fleming, the event will address a wide range of specialised topics in fire safety including a scenario study on industrial fire safety in the past five years, active and passive fire fighting ergonomics, smoke control to gas detection systems (codes and standards), new laws on building inspections and cladding systems, an exclusive overview of GCC unified building code, creating a smart solutions network in fire safety (automation and incident command system), fire

investigation and fire case scenario buildings.

This year, the exhibition has new segments including show the audience – live demo in the conference, case based session hubs, city beats – building fire safety excellence, live media interviews and broadcasts, live fire drills, technical workshops, and bring a topic session to share experience and discuss a topic with different stakeholders.

Speakers from organisations like Dubai airports, Emaar Malls Group, Saudi Aramco, Arabian Construction Company, ARUP, Dubai World Central, NFPA, Dubai Municipality, and London Fire Brigade Enterprises will present at the summit.

“Fire safety is a very important topic to be brought to the Middle East. Fleming Gulf did an impressive job with organising this event here,” said DUCAB senior marketing officer Heba Al Dhahri, who participated in an earlier edition of the event. ❖

تحت رعاية صاحب السمو الشيخ خليفة بن زايد آل نهيان رئيس دولة الإمارات العربية المتحدة
UNDER THE PATRONAGE OF H.H. SHEIKH KHALIFA BIN ZAYED AL NAHYAN, PRESIDENT OF THE UNITED ARAB EMIRATES

NEW AT ADIPEC



الأمن في مجال الطاقة

SECURITY IN ENERGY

7-10 November 2016

Host



Supported By



JOIN GLOBAL SECURITY EXPERTS AT THE SECURITY IN ENERGY CONFERENCE AT ADIPEC 2016

KEYNOTE SPEAKERS



AbdulRahman Essa Al Muagle
Chief Information
Security Officer National
Cyber Security Program
SAUDI ARAMCO



Sir Richard Shirreff
Deputy Supreme
Allied Commander
NATO Europe 2011-2014



**His Excellency
Hamad Obaid Al Mansoori**
Director General
Telecommunications
Regulatory Authority (TRA)



**His Excellency
Jamal Mohamed Al-Hosani**
Director General
National Emergency and Crisis
and Disasters Management
Authority (NCEMA)

SECURITY IN ENERGY AT A GLANCE

2 DAY CONFERENCE

12 SESSIONS & PANEL DISCUSSIONS

4 KEYNOTE SPEAKERS

30+ SECURITY EXPERTS SPEAKERS

REGISTER NOW

✉ adipec.sales@dmgeventsme.com | ☎ +971 2 4444 900

www.adipec.com/sie

Supported By



غرفة أبوظبي
ABU DHABI CHAMBER



هيئة أبوظبي للسياحة والثقافة
ABU DHABI TOURISM & CULTURE AUTHORITY



مجلس أبوظبي للتوظيف
The Abu Dhabi Labour Council

Sponsored By



Endorsed By



Host City



Official Media Partner



Venue



ADIPEC Organised By



Major HSE event to take place in Kuwait

Kuwait Petroleum Company (KPC) are pleased to announce the 2nd Kuwait International Health, Safety and Environment Conference & Exhibition (KIHSE) which will take place at the Regency Hotel Kuwait on 15 –16 February 2017 under the theme “Meeting the Challenges Ahead”. The 2nd KIHSE will bring together global and regional industry leaders and HSE experts, building on the success of the inaugural event which attracted over 700 attendees from over 180 companies across 27 countries.

Nizar M. Al Adsani, deputy chairman & chief executive director, KPC, explained, “At the inaugural KIHSE it was widely recognised by all key speakers that a company’s HSE strategy is of fundamental importance to the success and profitability

of that company. This is a journey that we are on together and it is by examining current practices and the world leading solutions that can be implemented that we will be able to move forward and our industry will be able to gain strength into the future. The KIHSE Conference & Exhibition provides an excellent opportunity for professionals from across all aspects of the oil and gas value chain to share experiences with their colleagues and build fruitful relationships with stakeholders.”

The conference programme will feature a series of plenary sessions examining themes such as maintaining HSE standards in a low oil price environment; the impact of COP21; and the benefit to profitability of HSE investment. On the second day the

conference will break into three streams, presenting the most important issues on health, on safety and on the environment. Throughout the event, a world-class exhibition will enable companies to showcase their products and services to the highly targeted audience.

KPC and the KIHSE steering committee welcome abstracts from oil, gas, petrochemical companies and HSE experts from around the world who would like to contribute to the success of this event. The call for papers is open. To view the topics and guidelines please see the website at www.kihse.com.

For details on participating as an exhibiting company or as a delegate, please email pagilbert@gep-events.com or call +44 (0)1737 784950.

Addressing the demands of fire safety and security

Oman Fire Safety and Security Exhibition (OFSEC), held from 5-7 September at the Oman International Exhibition Centre, Muscat, provided a platform for industry leaders to address the demands of the booming fire safety and security sector in Oman, share best practices and explore solutions to tackle industry challenges. It brought together local and international exhibitors who showcased their latest technologies, products and services to meet the requirements of governments, businesses, industrial and commercial entities, aviation, construction, infrastructure, transportation, manufacturing, oil and gas and utilities sectors.

Recent research by G4S has shown that the Middle East is the most vibrant safety and security market in the world, with a growth rate of over 10 per cent annually, since 2012. According to the event organisers, there is a diverse demand for fire, safety and security equipment, ranging from the smallest of businesses to large corporate and home-users.

The three day exhibition attracted participation from a large number of exhibitors,



Above: There is a diverse demand for fire, safety and security equipment in the region. (Photo: Prath/Shutterstock)

and representation from over 30 countries, with a slew of product and service launches.

The event had a dedicated SME pavilion, which allowed entrepreneurs and local start-up firms to share centre stage with international exhibitors and showcase their products and services – an ideal platform to expand their business and networking capacity. The show also included an outdoor demonstration area that gave exhibitors an opportunity to showcase and

captivate an audience of key decision makers.

OFSEC showcased a spectrum of products and services from the fields of commercial security, emergency rescue, homeland security, smart home/office/city, crisis and risk management, fire and protection, information security, training and consultation, unmanned aerial vehicles, critical infrastructure, hazard and disaster management, safety and health, and transport safety and security.

SAOGE to provide platform for industry discussions

OIL AND GAS

Held under the patronage of HRH Prince Saud Bin Naif Bin Abdulaziz, Governor of the Eastern Province, the Saudi Arabia International Oil and Gas Exhibition (SAOGE) 2016 will host some 100 companies from 25 countries, with more than 10,000 visitors set to attend the show. Participants from countries including China, Egypt, France, Germany, Italy, South Korea, Russia, the UAE the UK and the USA are expected at the event, which takes place from 17-19 October at the Dhahran International Exhibition Center.

As the foremost hydrocarbon producer in the world, with production reaching a record 10.62 mn bpd in July 2016, and with a number of midlife assets, the Saudi oil and gas sector plays a pivotal role in supplying global demand.



The event takes place in Dammam, the hub of the Saudi oil world

SAOGE, organised by International Exhibition Services (IES) and hosted as per tradition in Dammam, the hub of the Saudi oil world, will provide a platform for local and international industry leaders, technical experts and decision

makers to assess the key fundamentals and drivers forging the global markets, discuss the global and regional challenges facing Saudi Arabia's oil and gas industry and evaluate commercial and technological innovations.

One of the key goals of Saudi Vision 2030 is to identify and implement transformative projects that promote industrial diversification. SAOGE will provide a platform to explore opportunities for establishing joint ventures, which is central to this plan.

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

This year, SAOGE will run concurrently with Machine Tools Exhibition (MTE), which is expecting more than 100 companies from 20 countries, the organisers commented. MTE exhibitors enjoy many synergies with the oil and gas industry, many of their key customers coming from upstream operators.

Innovations, from smart to networked, feature at Security Essen

SECURITY

When Security Essen opened its doors from 27-30 September, a comprehensive framework programme awaited visitors to the international trade fair for civil security, including many new features. Some of the highlights included a mock-up building showcasing innovations from the smart security sector, the premiere of the 'Networked Security' trade conference, Fire Protection Day, training and development initiatives and the Action Center.

In collaboration with the German Federal Association for Security Technology (BHE – Bundesverband Sicherheitstechnik), Security Essen put the topic of smart security into focus – a specially-built mock-up building in

Hall 7 occupying over 200 sq m meant that trade visitors could actually experience the innovations being presented. There was also a particular emphasis on representing entire scenarios with the associated process chain here: if the house was broken into, a motion sensor was activated, shutters came down, the outside light was illuminated and video recordings were captured which were then transmitted to mobile devices.

'Networked Security' trade conference premieres

The first trade conference on networked security, which took place on 28 September, met with a strong international response. Trade visitors from 24 nations registered to

find out more about the increased security requirements in the Industry 4.0 era and a higher degree of networking. Speakers included experts from the Fraunhofer Institute for Applied and Integrated Security and the Professor of IT Security at the Institute of Information Technology at the University of Bonn.

For the third time, the world-leading trade fair for civil security held a training and development day, in co-operation with the Bundesverband der Sicherheitswirtschaft (BDSW). The workshop gave the next generation of trainees the opportunity to learn about the security industry at close quarters, and to make contacts with relevant companies.

Fit-for-purpose wear solutions

WEAR SOLUTIONS TECHNOLOGY

Pressure on maintenance budgets coupled with the need to increase productivity while reducing unplanned downtime in the mining, quarrying and power sectors of the market presents a unique set of challenges.

One of the most obvious ways to cut costs is to apply best practice wear solutions technology to address issues like excessive wear.

FLSmith global product line manager of wear solutions, Roland Da Silva says that excessive wear can be caused by a myriad of reasons and it is essential to identify the cause before applying a solution. “Rubber is capable of handling high energy and impact, while ceramic is best for sliding abrasion, however there are



Wear-Resist epoxy ceramic is ideal where a quick hard wearing solution is required. (Photo: FLSmith)

instances where both impact and sliding abrasion occur,” he says.

A solution available from FLSmith is its ‘wear-resist epoxy ceramic’, ideal for places where a quick hard wearing solution is required. The product is fabricated from a proprietary mixture of epoxy and wear resistant beads, and combines the hard wearing properties of

a ceramic with the flexible installation properties of epoxy.

FLSmith wear solutions product manager Wayne Martin says it is a proven solution in areas where sliding wear problems are common. Wear Resist Quick Set has a working time or pot life of approximately 15 minutes from being thoroughly mixed and will be hard cured in 4 hours, based on an ambient temperature of 23°C, while Wear-Resist Standard Set has a working time of approximately 30 minutes and is hard cured in eight hours.

“This makes it ideal for quick equipment maintenance turnaround with a minimum of downtime,” Martin concludes.

For more details, please check www.flsmith.com

Apollo launches new fire detection range

FIRE DETECTORS

Apollo Fire Detectors have introduced their new Soteria range, designed to improve detection, reduce false alarms and deliver improved reliability. Alongside Soteria is Apollo’s CoreProtocol, that provides greater control and loop power. The new protocol builds on the established capabilities of XP95 and Discovery, with forward and backwards compatibility and the ability to manage an increased number of devices.

Apollo sales and marketing director Ed Browning said, “The Soteria product range represents a significant innovation in the market place and is the result of close collaboration with our customers and partners.”

For more details, please check www.apollo-fire.co.uk

New peripheral devices for hazardous areas

Explosion-proof mobile devices provider ecom instruments is expanding its comprehensive mobile worker ecosystem with two new innovative peripherals – the hand-held scanner Ident-Ex 01 and the BLE Beacon Loc-Ex 01 for ATEX/IECEx Zone 1.

The Ident-Ex 01 is endorsed as being an ‘all-in-one’ barcode scanner and RFID reader for use in hazardous areas. With its modular design, the Bluetooth capable Ident Ex 01 comes with changeable head modules – RFID, 1D / 2D bar code.

BLE beacons are small radio beacons that use Bluetooth Low Energy signals at periodic intervals to provide proximity awareness. In combination with mobile devices (smartphone and tablet) they bring the ability to augment digital and physical data into a single, unified business intelligence unit to hazardous areas, thus providing a low cost, low maintenance way to roll out and connect



The new solutions can help improve operations, enforce security, provide safety and manage assets and workflows.

custom data to backend systems.

The Bluetooth standard promises full compatibility with ecom’s ‘mobile worker’ core products. The use of explosion-proof mobile hardware and peripherals enables new

levels of collaboration in hazardous areas – as found in the chemical, petrochemical, pharmaceutical, oil and gas, mining, power generation, and food and beverage industries. The device also boasts of readability of a wide range of RFID tags, 1D and 2D barcode types from every angle and different distances between 15 cm and 15 m.

In combination with GPS-enabled, connected devices such as the explosion-proof ecom smartphone ‘smart-ex 01’ and the tablet ‘tab-ex’ 01, operating material and plant components can be quickly located. Workers, who often have to spend hours to inspect plants, could potentially locate critical assets more quickly in emergency situations, in order to swiftly and efficiently identify or prevent damage.

For more details, please check www.ecom-ex.com



Shell launches robot for hazardous environments

Sensabot, the first resident mobile robot certified to work in difficult and hostile industrial facilities, has been launched by Shell.

“Sensabot represents the strong ambition of Shell to lead in safety-enhancing technology, especially in exceptional environmental and operational situations”

Alisa Choong, executive V-P for digital technologies, Shell

Offshore rigs could be inhabited by robots in the future. (Photo: Shell/Flickr)

Shell will send semiautonomous Rover vehicles to a desert island in Kazakhstan’s Kashagan development, which lies in the Caspian Sea, a site known for high levels of a poisonous gas called hydrogen sulfide (H₂S).

The Sensabot is equipped with sensors, cameras and wireless communications that enable the company to remotely control the infrastructure with an operator who handles the robot from a safe distance. These robots could be utilised in the future on offshore rigs that Shell operates.

According to the company, Sensabot is the culmination of seven years of work with leading robotics experts from across the world, including Carnegie Mellon University in the USA, the UK’s Soil Machine Dynamics (SMD) and Improvia in the Netherlands.

“Sensabot enables colleagues to do their jobs at a safe distance, while also lowering the costs of day-to-day operations,” said Alisa Choong, executive V-P responsible for digital technologies at Shell.

The robot will work in remote or unmanned oil and gas facilities and is designed to work for six months without requiring maintenance. Operators will be able to use Sensabot as their eyes and ears on

the ground to check equipment and respond to alerts faster, whilst gathering accurate real time data.

To enable a smooth integration of Sensabot into operating assets, the robot comes with an innovative rapid-deployment container and powerful private 4G-LTE system that could provide connectivity to up to 5,000 devices including industrial smartphones, tablets, people and material-tracking and condition monitoring equipment. In industrial locations, the 4G LTE is cheaper and provides greater reliable coverage than other types of industrial wireless networks.

While the Sensabot platform is currently equipped for surveillance of oil and gas facilities, different manipulator arms enable it to be adapted for use by emergency services, or for maintenance purposes. Shell is seeking commercial partners to adapt Sensabot for other specialist functionalities.

Adam Serblowski, head of Shell’s robotics programme, sees the robot as ‘an extension of the human worker’ rather than a substitute.

The increase in offshore drilling activity is one of the major drivers in the global inspection robots market in the oil and gas industry. ❖

Versatile, low maintenance floodlights unveiled

LEDS

R. Stahl, a manufacturer of safety equipment for hazardous areas, has launched a new generation of flexible, energy-efficient LED floodlights for hazardous areas.

The new 6125 series (for Zone 1) and 6525 series (for Zone 2) floodlights from R. Stahl achieve a high luminous flux (21,000 lm) in versions with 210 W power consumption and 12,000 lm in 120 W models. With a luminaire efficiency of 100 lm/W, the LED floodlights are not only far more efficient than conventional HID lights, but also require significantly less maintenance.

High quality TIR lenses minimise scattered light and glare effects and enable light distribution focussed on angles of 10°, 40° or 120°. The floodlights can be installed as pendant lights apart from being suitable for spot and wide-angle lighting. The lens panel modules are equipped with hinges for easy installation, maintenance and repair of the removable components.

The service life of the LED



Floodlights from R. Stahl provide highly efficient and long-lasting lighting solutions for zone 1, 21, 2 and 22 hazardous areas. (Photo: R. Stahl)

floodlights is specified at 50,000 hours of operation at maximum ambient temperatures. Their tolerance for ambient temperatures is spread across a very broad range from -40°C to +60°C. Featuring a corrosion-resistant body and relatively low weight, these floodlights are particularly suitable for onshore and offshore applications. Special designs with heat sinks made from seawater-resistant aluminium are also available.

For some applications such as

general lighting in production and storage facilities in the food industry, the LED floodlights can be ordered with a scatter protection for the glass front panel. The robust enclosures provide IP66/67 ingress protection and a very high shock and impact resistance (IK10). The floodlights are available in either powder-coated steel sheet or stainless steel.

For more details, please check www.stahl-explorers.com.

Car license plate recognition

SURVEILLANCE

FF Group, a leading provider of front edge, in-camera video analytics, has launched NumberOK Edge ACAP, an application for car license plate number recognition embedded directly in AXIS IP-cameras. The application is included in the Axis Gallery applications list and is recommended to the Axis partners as a stand-alone or integration solution to ensure traffic control, parking, safe/smart cities, network objects control and small business deployment.

According to the company, NumberOK Edge ACAP displays high and steady performance under difficult environment conditions like low lighting and ensuring 95 per cent accuracy of car license plate recognition at 80 km/h speed. The company also claims that the application displays an impressive performance and recognition rate even on slow processors of IP-cameras.

For more details, please check www.ff-group.org.

Taming the fire

FIREFIGHTING

Blazetamer380 has recently been introduced as an effective liquid that greatly improves the ability of water to douse a fire. Developed by BioCentral Laboratories, the product binds with water on a molecular level and supposedly increases the effectiveness of air drops by up to 44 per cent.

The BlazeTamer required to mix a standard 3000 litre would cost about US\$305.

BioCentral Laboratories managing director John Stepanic says, "We're about a third of

the cost of the most commonly used fire retardants, which are about 1,300-1,500 AUD (US\$980 – US\$1,131) per 3,000 litre load. It's also cheaper because aircraft are in the air for less time, because they can eliminate more of the fire with a single drop."

Stepanic adds that the efficiency of BlazeTamer mixed water made the liquid more effective not just at containing fires, but eliminating them in initial attack water drops.

"As a result, pilots and ground firefighters

(who have used the product so far) were able to more easily control fires before they began to burn out of control," he added.

There's another problem with managing a fire – its unpredictable nature. Issues like wind shift constantly pose difficulties for firefighters.

"The idea is to stop the fire with those initial attack drops rather than it getting out of control and then looking at how you can manage it best, when there are property and lives at stake," Stepanic concludes.

Managing uncertainty in risk assessment

RISK MANAGEMENT

Increasing emphasis from regulators on addressing uncertainty in risk assessments to improve safety has led to DNV GL's new paper, *Enabling confidence – addressing uncertainty in risk assessments*. This describes an improved risk management approach to achieve adequate safety levels while keeping costs under control. The new approach has been developed in collaboration with the University of Stavanger, Norway.

DNV GL – Oil & Gas safety risk management head of section Marianne Hauso says, "The way we conduct risk assessments must be adapted to the needs of decision makers and the challenges they face at any given time. The purpose of the paper is to explain that uncertainty is an instrumental part of risk, and that assessing and communicating the impact of uncertainty can help clients tackle safety-critical decisions with more confidence. It goes beyond what can be quantified in terms of probabilities and exposes risks hidden in assumptions, giving a fuller risk picture."

The paper discusses the overall



The paper is aligned with the thinking of the PSA in Norway, ISO 31000 and the Society for Risk Analysis. (Photo: Laborant/Shutterstock)

challenge of understanding, interpreting and disseminating risk results. It explores the meaning of uncertainty in relation to risk and how to incorporate uncertainty as a means to assert appropriate actions. The research advocates an iterative, top-down approach to risk assessment, where the focus is placed on the decision-making situation.

"Some uncertainty is incorporated in the probabilities we assign and risk measures we calculate," adds Hauso. "But some is hidden in assumptions we make during the risk assessment. This is inevitable – and there is nothing wrong with making assumptions – as long as uncertainties associated with

those assumptions are acknowledged and their implications on decisions are understood. Through this approach, together with proper risk communication, uncertainty can be translated into confident decisions and improved safety."

DNV GL – Oil & Gas Norway regional manager Kjell Eriksson concludes, "Risk assessments are more than a way to verify compliance with defined risk acceptance criteria. Addressing uncertainty in difficult decision-making processes can support, fact-based knowledge and scientific reasoning to keep our industry safe".

For more details, please check www.dnvgl.com.

Illuminar for the win

CAMERA

Illuminar, the specialist manufacturer and supplier of infrared (IR) and white light illuminators, has won the Security Products 2016 New Product of the Year Award in the Analog Camera category for its license plate recognition camera.

The Security Products 2016, hosted by Security Products magazine and securitytoday.com, honors the outstanding product development achievements of security equipment industry. The awards are presented to manufacturers whose products are considered to be particularly noteworthy in their ability to improve security.

This year saw the eighth edition of the the independently juried award, which according to the organisers, received a record-high number of entries.

"We are delighted to have won this highly prestigious award," said Illuminar president and CEO Eddie Reynolds. "The all-in-one illuminar LPRS-32-24 camera is a very popular choice for license plate recognition applications. Its ability to capture plates at a distance of 10m, at speeds up to 35 mph and to be used with any VMS software, make it the ideal choice LPR applications."

Thermal imaging goes hands free

FIRE SAFETY

Scott Safety has launched Scott Sight, the UK's first ever in-mask thermal imaging intelligence system. Scott Sight utilises hands-free thermal imaging technology to provide firefighters with a clear view of their surroundings thus improving

their situational intelligence and eradicating the need to stop searching or put the hose down to deploy a hand-held camera. Scott Sight weighs 240 g and provides a 160x120 resolution at nine fps through an infinity lens, which ensures a clear picture with no eyestrain.

Global product manager at Growth Initiatives from Scott Safety, Longin Kloc said, "We are extremely proud to launch such an innovative product for the firefighting industry. Scott Sight really is a sophisticated imaging tool - it supplements existing hand-held technology by offering

configurable hands-free visibility to the wearer."

Unlike many traditional decontamination systems which use liquids, the system utilises atomisation technology that forces powders to behave like gas, ensuring that sensitive electronic equipment is not damaged.

من التقنيات الأحدث التي سوف تحسّن من السلامة. ويكشف المقدم إبراهيم النقب عن الدفاع المدني بدبي قد أطلق مشروع التعريف عن طريق ترددات الراديو (RFID) والذي سيساعد في معالجة مخالفات الإنشاءات، مثل استخدام منتجات مقلدة وغير مسجلة. ومع استخدام تقنية التعريف عن طريق ترددات الراديو، يمكن للدفاع المدني بدبي مراقبة حركة جميع المعدات المسجلة لدى الهيئة والتحكم بها. وبهذه الطريقة، سيكون من الأسهل تتبع ومراقبة ملكية بيانات مواد البناء. كذلك لن يتم السماح باستخدام سوى المواد المسجلة في المباني الجديدة في الإمارات العربية المتحدة. ولدى الدفاع المدني بدبي لوائح مناسبة وصارمة بالفعل بخصوص استخدام مواد مكافحة الحرائق وسلامة الأرواح. ومع وجود تقنية مناسبة للتعريف عن طريق ترددات الراديو، سوف تصبح ممارسات السلامة أكثر صرامة وخضوعاً للمراقبة. وأثناء وضع اللمسات النهائية على قانون السلامة من الحرائق وسلامة الأرواح الإماراتي لعام ٢٠١٦، سوف يتيح التحديث للدولة الحافز لإنجاز رؤية وزارة الداخلية الإماراتية المتمثلة في «بلد أكثر أمناً وأماناً».

في الإمارة. وقال: «إن وقت الاستجابة للوصول إلى مواقع الحوادث في السابق كان يبلغ من ست إلى ثماني دقائق، والآن نهدف إلى تقليل وقت الاستجابة إلى النصف ليصل إلى أربع دقائق. إننا نعيد تصميم وإنشاء خمسة مراكز إطفاء جديدة تقع في نقاط استراتيجية بحيث تكون المسافات التي تغطيها أقصر ويمكن الوصول إليها بصورة أسهل. كما يخطط الدفاع المدني لإنشاء مراكز إطفاء داخل المشروعات البارزة في دبي. وتجري حالياً مباحثات مع كبار المطورين في هذا الشأن حيث يؤكد ذلك قائلاً: «ستكون هناك مراكز إطفاء بالموقع في منتزهات ومنتجعات دبي ومتحف دبي ومجمع دبي للاستثمار ومول العالم وستاد الشيخ محمد بن راشد. حيث ستضمن هذه المراكز أوقات استجابة أقل». «في موقع إقامة فعالية إكسبو ٢٠٢٠ بدبي، سيكون هناك مركزاً إطفاء - أحدهما دائم والآخر مؤقت».

تقنية جديدة في المدينة

في الوقت الذي تسعى فيه دولة الإمارات العربية المتحدة حثيثاً إلى تطبيق دليل قواعد السلامة من الحرائق، يستفيد الدفاع المدني بدبي أيضاً

مكافحة حرائق، معتمداً من الرابطة الوطنية للوقاية من الحرائق، سوف يحصل على الموافقات على التصميم على أساس الأولوية. حيث سيمنح كل مهندس مكافحة حرائق اسم مستخدم على نظام الدفاع الوطني بدبي والذي سيساعده على تلقي الموافقات المباشرة. ومع ذلك، سيقوم الدفاع المدني بدبي بإجراء عمليات التفتيش على المباني، وستكون له السلطة النهائية. وفي حالة وجود ثغرات بالتصميمات، سيكون المستشارون مسؤولين».

ويؤكد المقدم إبراهيم مجدداً أن القانون سيكون مناسباً جداً وسيأخذ المستشارون على عاتقهم مسؤولية تنفيذه على نحو صحيح. ويلاحظ المقدم إبراهيم أن الدفاع المدني تعامل حتى الآن مع المستشارين والمقاولين الرئيسيين والمقاولين الفرعيين والوكلاء وجهات التصنيع، وقد ثبتت صعوبة تحميل سلطة معينة المسؤولية.

أوقات استجابة أسرع

في محاولة للمضي قدماً نحو تنفيذ عمليات إنقاذ فعالة من الحرائق في أقل وقت في دبي، يكشف المقدم إبراهيم النقب عن أن الدفاع المدني بدبي يقوم بإنشاء خمسة مراكز إطفاء إضافية

استعداداً دائماً لمكافحة الحرائق



المستقبل. وهذا يعني أن المالكين وعمال البناء وحتى شاغلي المبنى سيكونون مسؤولين أمام الدفاع المدني بدبي.

ويحذر المقدم إبراهيم قائلاً: «في أغلب الأوقات، نرى أن المخالفات تحدث في المنازل؛ مثل لعب الأطفال في الشرفات، وإساءة استخدام الأجهزة الكهربائية، وارتفاع درجة حرارة المقابس. ومن ثم، يجب السيطرة على هذه المخالفات وسوف يتم تحميل المستأجرين المسؤولية». وأضاف أنه مع ذلك فإن المسؤولية الأكبر سوف تقع على عاتق المستشارين الذين يوافقون على هذه المباني المعيبة.

المسؤولية

يقول المقدم إبراهيم إنه بمجرد وضع القانون الجديد موضع التنفيذ، سيكون المستشارون متحملين للمسؤولية الكاملة إذا كان المبنى غير آمن من حيث السلامة من الحرائق وسلامة الأرواح. «المستشارون يعتمدون التصميم المعماري للمبنى وبعد ذلك يسلمونه لنا. وإذا لم يلتزم المستشار بأدق تفاصيل السلامة، فستكون العاقبة وخيمة. وأفاد المقدم إبراهيم «ولهذا السبب فهم من يتحملون المسؤولية».

وسوف يبيّن القانون الجديد الممارسات التي يجب على المستشارين اتباعها، والتي من بينها، مطلب توظيف مهندسي مكافحة حرائق سيقومون بالتواصل مع مستشاري المباني. وبالتركيز بصفة خاصة على مهندسي مكافحة الحرائق، يكشف المقدم إبراهيم النقاب عن أن الدفاع المدني بدبي، بالشراكة مع مدربين محترفين، سوف يتولى تدريب المهندسين لكي يصبحوا متخصصين في لوائح السلامة من الحرائق.

ويشير المقدم إبراهيم إلى أن «هذا التدريب إلزامي ويجب على كل مستشار في الإمارات العربية المتحدة توظيف مهندسي مكافحة حرائق معتمدين من الدفاع المدني بدبي». ويضيف أيضاً أن المزايا التي يجنيها المستشارون العاملون مع مهندسي مكافحة الحرائق عديدة ومرجحة. وأكد المقدم إبراهيم على «أن كل مستشار يوظف مهندس



المقدم جمال أحمد إبراهيم، مدير إدار السلامة الوقائية في الدفاع المدني بدبي

قانون جديد للسلامة من الحرائق يحيل إلى المساءلة

من المقرر أن يطلق الدفاع المدني بدبي قانون السلامة من الحرائق وسلامة الأرواح الإماراتي لعام ٢٠١٦ في غضون الأسابيع المقبلة، حيث تسعى دولة الإمارات العربية المتحدة - حثيثاً - إلى الحد من حوادث الحرائق في الدولة. وتأسيساً على إصدار ٢٠١١، فإن القانون المحدث قد فرض توجيهات لعمال البناء والمستشارين لضمان بيئة آمنة من الحرائق. وقد تم إعداد هذا القانون بالتعاون مع المقاولين والجهات المصنعة لمعدات الإنشاءات وخبراء البناء. وستفرض إجراءات صارمة تشمل فرض غرامات على أولئك الذين لا يمتثلون لمعايير السلامة من الحرائق.

وفي حديثه عن سر الأهمية البالغة للسلامة في دولة الإمارات العربية المتحدة، وبصفة خاصة في دبي، يقول مدير إدارة السلامة الوقائية في الدفاع المدني، المقدم جمال أحمد إبراهيم: «إن دبي ليست مجرد مدينة، بل هي علامة تجارية تعني القيمة للمستثمرين والمقيمين على حد سواء. ولهذا السبب فتحن بحاجة إلى خلق إمارة آمنة. ليس فقط من حيث الحفاظ على الأرواح، ولكن أيضاً تأمين الممتلكات».

وعند سؤاله عن حادث حريق نشب في موقع فندق تحت الإنشاء، أفاد المدير أنه حتى مع اتباع القواعد المحددة للسلامة المناسبة، لم يفهم المقاولون ركائز عدم التوافق مع لوائح السلامة. «لقد افتقر المبنى الذي نتحدث عنه إلى إجراءات السلامة مثل الوصول إلى الطوابق العلوية، ومضخة مياه قريبة». وأوضح أنه «عند إجراء مزيد من التحقيقات، أدرك الدفاع المدني بدبي أن المقاولين لم يتبعوا معايير السلامة المحددة».

ومع تخصيص فصل جديد للمسؤولية في قانون السلامة من الحرائق وسلامة الأرواح الإماراتي لعام ٢٠١٦، يهدف الدفاع المدني الآن إلى تحميل الأشخاص المسؤولية عن حوادث الحرائق في

مثلاً يحتذى به للمنتجات الأخرى في صناعة التكبسية وبناء عصر جديد من منتجات التكبسية المقاومة للحريق والخالية من الحوادث. وإنما نأمل أن يتخذ اللاعبون الرئيسيون في مجال الصناعة هذا الاتجاه واتتهاج نفس المسار. وفي الواقع تمتلك ألبوند خط إنتاج حديثاً بطاقة إنتاجية تبلغ مليوني متر مربع في تركيا لإنتاج الألواح المقاومة للحريق A2 وسوف تضيف ثلاثة خطوط أخرى بطاقة إنتاجية تبلغ مليوني متر مربع في مرفق إنتاج الشارقة، مما يرفع إجمالي طاقتها الإنتاجية من الألواح المقاومة للحريق A2 إلى ثمانية ملايين متر مربع سنوياً.

ABS تصدر دليل اعتماد جديداً لنقل أطقم العمل البحرية



الدليل يوفر المتطلبات اللازمة للحصول على شهادة اعتماد نظام ممر الوصول البحري

النشر - مؤخرًا - شركة ABS، مزود خدمات التصنيف للصناعة البحرية العالمية، دليل اعتماد ممرات الوصول البحرية لمنح الاعتماد لأنظمة السلامة المستخدمة من أجل عمليات نقل أطقم العمل «المشي إلى العمل» (W2W). وقال مدير التكنولوجيا التنفيذي لشركة ABS، هاوارد فايرمان: «حيث إن خيارات نقل أطقم العمل المتقدمة أصبحت العرف في مجال صناعة النفط والغاز البحرية، يرغب المزيد من الشركات الاستفادة من حاويات W2W، وتتطلع إلى شركة ABS بشأن توجيهات السلامة. إن دليلنا الجديد يوفر المعلومات التي يحتاجها قطاع الصناعة لتنفيذ عمليات نقل آمنة للعمال».

ويتم نشر ممرات الوصول البحرية مع أنظمة تعويض الحركة وتوصيلها بمنصات ثابتة وعائمة، مما يحافظ على الربط عبر أجزاء متداخلة توفر سطح مشي مسطحاً مائلاً بين سفينة الدعم البحري ونقطة التسليم. وحينما تصبح ظروف البحر صعبة، تتضمن أنظمة تعويض الحركة المستخدمة أجهزة استشعار تقوم بالتعويض عن

الهيجان والتموج وحركات التآرجح، وهذا يمكن من بقاء نهاية الممر ثابتة بالنسبة للأرض مقارنة بالرصيف بحيث تشكل ممرًا آمنًا ومستقرًا. وهذا الدليل يوفر المتطلبات اللازمة للحصول على شهادة اعتماد نظام ممر الوصول البحري، بما في ذلك الطول الهيكلي وأنظمة الآلات وإدارة

الطوارئ واستعادة النظام والوفرة والسلامة والاتصالات والمتطلبات التنظيمية. وتطبق هذه المتطلبات على كل من أنظمة تعويض الحركة النشطة والسلبية. وبالإضافة إلى هذا الدليل، تقدم شركة ABS فقرة شرطية لتأهل نظام ممر الوصول البحري كمنتجات معتمدة من نوع ABS.

مفكرة اجال الاعمال ٢٠١٦

سبتمبر/أيلول

الكويت	٢٥ - ٢٧	معرض بيج فايف الكويت
دبي	٢٦ - ٢٨	المعرض والمؤتمر التقني السنوي لجمعية مهندسي البترول
ألمانيا	٢٧ - ٣٠	معرض إسن لمعدات الأمن

أكتوبر/تشرين الأول

دبي	٢٣ - ٢٤	الملتقى السنوي الثاني للصحة والسلامة والبيئة
الدوحة	٣٠ - ٣١	الملتقى الخليجي للأمن

نوفمبر/تشرين الثاني

أبوظبي	٧ - ١٠	معرض أبوظبي الدولي للنفط - أدبيك
--------	--------	----------------------------------

عُمان تعيّن «تصنيف» لتصنيف السفن



وقع الاتفاقية كل من سعيد بن حمدون بن سيف الحارثي، عن الحكومة العمانية، وراشد الحبسي، عن «تصنيف»

والمواصلات، على أن توقيع هذه الاتفاقية مع هيئات التصنيف الدولية يستوعب متطلبات القوانين البحرية العمانية والاتفاقيات الدولية للسلامة البحرية.

وقعت - مؤخرًا - وزارة النقل والمواصلات بعمان اتفاقية مع هيئة الإمارات للتصنيف «تصنيف» تخول لها فحص السفن الصغيرة التي لا تلتزم بالاتفاقيات الدولية في دول مجلس التعاون الخليجي. وقد تم تعيين «تصنيف» إلى جانب هيئتي التصنيف البريطانية والإيطالية، وهما شركة لويدز ريجيستر وهيئة التصنيف الإيطالية «رينا». وسيتم تفويضها بإجراء فحوص فنية للسفن التي تحمل العلم العماني، وإصدار شهادات دولية، واعتماد لسلامة السفن والامتثال لمكافحة التلوث والوقاية من التصادم، وحدود الشحن وغيرها المزيد. وتهدف الاتفاقية إلى المساعدة في ضمان امتثال جميع السفن والحاويات لمتطلبات السلامة لمجلس التعاون الخليجي. وفي تعليقه على أهمية هذه الاتفاقية، صرح الرئيس التنفيذي لهيئة «تصنيف»، راشد الحبسي قائلاً: «نحن فخورون بكسب ثقة سلطنة عمان، وننتهز هذه الفرصة للعمل على السفن التي تقع ضمن الاتفاقية. وتتوقع «تصنيف» افتتاح فرعها في عمان بنهاية هذا العام، ومن ثم ستقوم بعمليات الفحص ومنح الشهادات المطلوبة». كذلك أكد سعيد بن حمدون بن سيف الحارثي، وكيل الوزارة للموانئ والشؤون البحرية بوزارة النقل

ألوبوند الأمريكية تفتتح في الإمارات مرفق إنتاج الألواح A2 المقاومة للحريق

الأمريكية الشركة الأولى التي تتقدم وتعلن سياسة عدم التساهل مطلقاً في إنتاج ألواح غير مقاومة للحريق. هذا وتعد ألوبوند الأمريكية أول علامة تجارية في الشرق الأوسط تُعتمد بنجاح للألواح التكسية A2 المصنفة ضد الحريق. فهي أول شركة ألواح ألومينيوم مركبة في السوق الإماراتي قامت باختبار أنظمة الجدران المركبة من الألومينيوم بنجاح وفقاً لمعايير الاختبار الأمريكية. وقد أدى ذلك إلى امتثال ألوبوند الأمريكية تماماً لقانون السلامة من الحرائق وسلامة الأرواح كما وضعه الدفاع المدني بدبي.

وقد صرح شاجي يو أي مولك، مؤسس ورئيس مجلس إدارة شركة المولك القابضة، ومالك العلامة التجارية لشركة ألوبوند الأمريكية قائلاً: «تمثل ألوبوند الأمريكية منتجات التكسية المركبة من الألومينيوم المقاومة للحريق عالية الجودة. ونود أن نكون

قامت ألوبوند الأمريكية بإنشاء مرفق إنتاج الألواح A2 المقاومة للحريق إنتاجية تبلغ ستة ملايين متر مربع في الإمارات، وذلك لزيادة إنتاج ألواح الألومينيوم A2 المقاومة للحريق. ويعد المصنع الجديد، الذي تأسس في الشارقة باستثمار بلغ 13.61 مليون دولار، الأول في الإمارات والثاني في الشرق الأوسط بعد تركيا. ووفقاً للشركة، تعد ألوبوند الأمريكية العلامة التجارية A2 الوحيدة في الإمارات والشرق الأوسط التي حصلت على شهادة اعتماد الدفاع المدني بدبي. وتضاف خطوط الإنتاج الجديدة إلى مرفق إنتاج الألواح A2 الحالي الموجود في تركيا، والأول في المنطقة. وهذا من شأنه أن يجعل ألوبوند الأمريكية أكبر منتج للألواح المقاومة للحريق A2 في الشرق الأوسط.

وفي أعقاب اندلاع حوادث الحرائق في دولة الإمارات العربية المتحدة، كانت ألوبوند



أنشأت ألوبوند الأمريكية في الإمارات مرفق إنتاج الألواح A2 المقاومة للحريق

فني هذا العدد ...

أخبار:

- ٤ عُمان تعين «تصنيف» لتصنيف السفن
 ٤ ألبوند الأمريكية تفتتح في الإمارات مرفق إنتاج الألواح A2 المقاومة للحريق
 ٥ ABS تصدر دليل اعتماد جديداً لتقلل أطقم العمل البحرية



تحليلات:

قانون جديد للسلامة من الحرائق يحيل إلى المساءلة

ما ضمن محتويات القسم الإنجليزي:

التطورات، تطورات السوق.

تحليلات ومقالات: المنتدى السنوي الثاني حول الصحة والسلامة والبيئة، لوائح معدات السلامة الشخصية، التدفئة والتهوية وأجهزة التكييف.

فعاليات، معرض أدبيك، مؤتمر النفط الأوروبي، منتدى الشرق الأوسط السنوي السابع حول السلامة من الحرائق، المعرض العماني للسلامة من الحرائق والأمن.

المحررة: لويز ووترز - بريد إلكتروني: louise.waters@alaincharles.com

فريق التحرير والتصميم: براشانت إيه بي - هيريتي بايرو - سيندوجا بالاجي - أندرو كروفيت - توماس ديفيز - رانجانان جي إس - هيمانشو جوينكا - توم مايكل - رونيتا باتنيك - براسات شانكاريا - زا تيب - نكي فالساماكيس - لويز ووترز.

مدير مبيعات المجلة: تاممي ميشرا هاتف: ٩٢٦٧٦٣٤٧٨٣ (٠) ٤٤٤ - فاكس: ٧٦٠٧٩٧٣٠٠٢ (٠) ٤٤٤

بريد إلكتروني: tanmay.mishra@alaincharles.com

مدير مبيعات الشرق الأوسط: راكيش بوتوفات

هاتف: ٩٢٦٠٤٤٨ (٤) ٩٢٦١ - فاكس: ٩٢٦١٤٤٨ (٤) ٩٢٦١ +9٧١ بريد إلكتروني: rakesh.r@alaincharles.com

المكتب الرئيسي:

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

Tel: +44 (0) 207 834 7676, Fax: +44 (0) 207 973 0076

مكتب الشرق الأوسط الإقليمي:

Alain Charles Middle East FZ-LLC, Office 215, Loft No. 2/A

صندوق بريد: ٥٠٢٠٧ - مدينة دبي للإعلام - الإمارات العربية المتحدة.

هاتف: ٩٢٦٠٤٤٨ (٤) ٩٢٦١ - فاكس: ٩٢٦١٤٤٨ (٤) ٩٢٦١

الإنتاج: بريانكا شاكاربورتني - نيكتا جين - ناتانيل كومار - دوناتيللا مورانيللي - صوفيا هوابت

بريد إلكتروني: production@alaincharles.com

الإشتراكات: بريد إلكتروني: circulation@alaincharles.com

الناشر: نك فوردهام

مديرة النشر: بيلافي باندي

رئيس مجلس الإدارة: دريك فوردهام

الوكيل البريدي بالولايات المتحدة:

نشرة الصحة والسلامة والأمن - الشرق الأوسط Health, Safety & Security Middle East تنشرها أربع مرات في السنة لقاء ٩٩ دولاراً في العام. دار ألان تشارلز للنشر
 Alain Charles Publishing, University House, 1113- Lower Grosvenor Place, London SW1W 0EX, UK.

الطباعة: مطبعة الإمارات - دبي

المتبرع: عزالدین م. علي - بريد إلكتروني: ezzeddin@movistar.es

التصميم والإخراج الفني: محمد مسلم النجار - بريد إلكتروني: alnajjar722@gmail.com

كافة المعلومات في هذه المطبوعة كانت صحيحة عند وقت الطبع.

4837-Health, Safety & Security Review Middle East. ISSN: 2059

لشركة الصحة
والسلامة والأمن
الشرق الأوسط

Alain
Charles
Publishing

Advertiser Index

Company	Page	Company	Page
Al Garawi Group	24	Evac+Chair International Limited	47
Al Majdal Trading Co. LLC	2	IIR Exhibitions (MEFSEC 2016)	4
Ansell Healthcare Europe NV	17	Karam Safety DMCC	3
ATG Glove Solutions	7, 9	Leader Healthcare FZCO	19
DMG World Media Abu Dhabi Ltd (ADIPEC 2016)	35	Schefferville Trading LLC	27

If your building has
one of these...



Many buildings will have provisions and a plan for emergency situations such as a fire, which could include installing fire extinguishers. However in the event of an emergency you may also need to be able to evacuate mobility impaired visitors and staff safely, which is why an Evac+Chair is just as necessary.

...chances are you
need one of these!



In the event of an emergency, can you evacuate safely?

Evac+Chair provide a universal solution for smooth stairway descent in an emergency evacuation, suitable for dual and multiple level buildings of any height.



Evac+Chair International are the world's
No.1 supplier of evacuation chairs.

www.evacchair.ae

Tel: 04 383 5558



Unit 5432, Level 54,
Almas Tower JLT Dubai,
PO Box 112911 - UAE

نشرة المراجعة بالسلامة والأمن

العدد الخامس، 2016

الشرق الأوسط

قانون جديد للسلامة من الحرائق يحيل إلى المساءلة

المقدم جمال أحمد إبراهيم، مدير إدارة السلامة الوقائية في الدفاع المدني بدبي، يتحدث عن الفقرات والتعديلات الجديدة الواردة في قانون ٢٠١٦ للسلامة من الحرائق وسلامة الأرواح.

موضوعات ثابتة : السلامة - الأمن - التدريب - المعدات - فعاليات - ابتكارات