

# TECHNICAL REVIEW

النشرة التقنية - الشرق الأوسط

MIDDLE EAST

USA: \$16.50, United Kingdom: £10

Annual Power Review 2016

## ANNUAL POWER REVIEW 2016

### Overcoming **adversity**

Tackling the region's growing energy demands through investment and diversification

### Adopting **sustainability**

'Green building' comes of age throughout the MENA region

## INSIDE

Solar Power  
Gensets  
UPS  
Process Control  
Intersolar Middle East

## STABLISING THE GRID

GCC STATES INCREASE INVESTMENT TO MEET GROWING DEMAND FOR POWER

INCLUDES ELECTRICAL EQUIPMENT  
AND MATERIALS BUYERS' GUIDE 2016

[www.technicalreview.me](http://www.technicalreview.me)

**32 Years**

1984 - 2016  
Serving Middle East  
Business

# LG Chiller



## PROVEN TOP EFFICIENCY RATINGS



**Two Stage, Single Compressor**  
up to 3,000RT



**Optimized Impeller &  
Automatic Expansion Device**



**COP  
6.7**



\* LG's Centrifugal Chillers (efficiency types: Standard/High/Extra-Ordinary) have been certified by the latest edition of AHRI Standard 550/590 (I-P) for Water-Chilling Packages using the Vapor Compression Cycle (Water-Cooled). COP 6.7 is subject to the High Efficiency type.

### • Half a Century of Chiller Experience

LG Electronics has produced chillers since 1967, with global reference sites in various building applications

### • World Class Quality Control

Quality is perfected with a world-class testing capacity (Max 3,000RT 13.8kV) and complete process coverage from manufacturing to assembly

### • Eco-Friendly HFC-134a Refrigerant

LG Chiller uses the HFC-134a refrigerant without chlorine to help reduce the depletion of the ozone layer



Centrifugal



Water cooled Screw



Air cooled Screw



Absorption



# POWER YOUR FUTURE

"AKSA began its journey as a manufacturer in Turkey in 1984, with the development of its first generating set. To satisfy the needs of today's customers worldwide, AKSA continues to manufacture a comprehensive range of generating sets from 1 kVA to 3.000 kVA at facilities in Turkey, China and the USA."



aksa@aksa.com.tr  
www.aksa.com.tr

Follow us on:   

 KAZANCI HOLDING

## EDITOR'S NOTE

RISING POPULATIONS AND huge infrastructure projects have, in recent years, placed much strain on the region's power industry, as demand for adequate power supplies continues to increase. Add to the mix the need to diversify power resources and lower carbon emissions, and you would be forgiven for thinking that utilities throughout the region are at breaking point. As we demonstrate in our Annual Power Review (p10), however, efforts are well underway to solve the potential crisis and, in spite of lower oil prices, Middle East nations continue to invest in securing the future of the power sector. In this issue of *Technical Review Middle East* we also look at the latest developments in the HVAC market (p18 and p28) and 'green building' (p24), while our annual Electrical Equipment and Materials Buyers' Guide (p48), offers a comprehensive guide to the region's power industry manufacturers and suppliers.

*At Technical Review Middle East we always welcome any readers' comments to [trme@alaincharles.com](mailto:trme@alaincharles.com)*

## IN THIS ISSUE...

### BUSINESS & MANAGEMENT

**Market News 6**  
Investment boost to Saudi Arabian manufacturing industry; Dubai to build world's largest CSP plant; Clarke Energy wins Algerian on-site power deal

### ANALYSIS

**Diversifying the Mix 10**  
GCC governments look to diversify their energy mix to secure long-term power generation demands

### HVACR

**Cool Solutions 18**  
Industrial refrigeration event highlights how the HVACR sector is overcoming its latest set of challenges

### CONSTRUCTION

**Building Sustainably 24**  
How innovative designs and eco-friendly solutions are transforming the way we think about construction

### PROCESS CONTROL

**Clever Instrumentation 30**  
The latest range of products from Yokogawa aims to reduce costs while increasing operation efficiency

### UPS

**Safeguarding Supplies 34**  
Eaton Middle East's Frank Ackland talks about the latest UPS solutions and safeguarding power supplies

### EVENTS

**Saudi Power 36**  
**Intersolar Middle East 38**

### INNOVATIONS

**Industrial Solutions 40**  
Featuring SDMO, FG Wilson, HIMOINSA, Megger, Chicago Pneumatic, Baur, Jeremias and ICAR

### ANNUAL BUYERS' GUIDE

**Electrical Equipment and Materials 48**  
The region's leading guide to manufacturers and suppliers from across the power sector

### ARABIC

**News 4**  
**Analysis 7**



8



26



46

## TECHNICAL REVIEW MIDDLE EAST

المنشور التقني - الشرق الأوسط

Managing Editor: Ben Watts - Email: [trme@alaincharles.com](mailto:trme@alaincharles.com)

Editorial and Design team: Prashanth AP, Hiriyyi Bairu, Sejal Bhat, Miriam Brtkova, Andrew Croft, Ranganath GS, Georgia Lewis, Rhonita Patnaik, Rahul Puthenveedu, Zsa Tebbit, Nicky Valsamakias, Vani Venugopal and Louise Waters

Publisher: Nick Fordham

Publishing Director: Pallavi Pandey

Magazine Sales Manager: Graham Brown - Email: [graham.brown@alaincharles.com](mailto:graham.brown@alaincharles.com)  
Tel: +971 4 448 9260, Fax: +971 4 448 9261

Special Projects Manager: Jane Wellman - Email: [jane.wellman@alaincharles.com](mailto:jane.wellman@alaincharles.com)

Production: Kavya J, Nathanielle Kumar, Nelly Mendes and Sophia Pinto Email: [production@alaincharles.com](mailto:production@alaincharles.com)

Subscriptions: [circulation@alaincharles.com](mailto:circulation@alaincharles.com)

Chairman: Derek Fordham

Country	Representative	Telephone	Fax	Email
India	Tanmay Mishra	+91 80 65684483	+91 80 67710791	<a href="mailto:tanmay.mishra@alaincharles.com">tanmay.mishra@alaincharles.com</a>
Nigeria	Bola Olowo	+234 8034349299		<a href="mailto:bola.olowo@alaincharles.com">bola.olowo@alaincharles.com</a>
UK	Steve Thomas	+44 20 7834 7676	+44 20 79730076	<a href="mailto:stephen.thomas@alaincharles.com">stephen.thomas@alaincharles.com</a>
USA	Michael Tomashefsky	+1 203 226 2882	+1 203 226 7447	<a href="mailto:michael.tomashefsky@alaincharles.com">michael.tomashefsky@alaincharles.com</a>

US MAILING AGENT: Technical Review Middle East ISSN 0267 5307 is published eight times a year for US\$99 per year by Alain Charles Publishing, University House, 11-13 Lower Grosvenor Place, London, SW1W 0EX, UK. Periodicals postage paid at Rahway, NJ.

POSTMASTER: Send corrections to Alain Charles Publishing Ltd, c/o Mercury Airfreight International Ltd, 365 Blair Road, Avenel, NJ 07001. US Agent: Pronto Mailers International, 200 Wood Avenue, Middlesex, NJ 08846.

Printed by: Emirates Printing Press

Printed in: June 2016

Arabic Translation: Ezzeddin M. Ali - Email: [ezzeddin@movistar.es](mailto:ezzeddin@movistar.es)

Arabic Typesetting: Lunad Publicity, Dubai

© Technical Review Middle East ISSN: 0267-5307

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 2a, Dubai Media City, Dubai, UAE  
Tel: +971 4 448 9260, Fax: +971 4 448 9261

Alain Charles Publishing  
Serving the world of business

abc Audit Bureau of Circulations - Business Magazines

# THE POWER OF INDEPENDENCE



Volvo Penta is one of the world's biggest independent suppliers of engines for power generation. It is our business to build and support engines that make the most of any OEM's genset design – a range of reliable, fuel-efficient diesel engines that meet a wide span of specific demands. Mobile or stationary. 24/7 or standby. In any climate: freezing or scorching, dry or wet, in deep shafts or at high altitudes. Tell us your needs and we'll show you the engine. [www.volvopenta.com/industrial](http://www.volvopenta.com/industrial)

**85-782 KVA**

**VOLVO  
PENTA**

## Briefly

### MAN Diesel & Turbo to build Rabigh power plant

MAN DIESEL & Turbo has received an EPC contract to build a power plant for the Arabian Cement Company (ACC) in Saudi Arabia.

The 40MW plant will be equipped with two type 18V48/60 TS engines and will provide power to a cement factory in Rabigh, around 120 km north of Jeddah, on the Red Sea coast. The plant will be operated by heavy fuel oil and diesel oil. The MAN 48/60 TS engine offers two-stage turbocharging, delivering extra power, greater power density and increased turbocharging efficiency when compared to an engine with a single turbocharger.

Climatic conditions will also have to be overcome during delivery of the project according to MAN Diesel & Turbo senior project manager Ralf Göppel, who said, "Ambient temperatures up to 50°C, ambient air full of dust and sand, and occasional heavy rainfall are the kinds of conditions we have to deal with here."

Construction of the agreed first phase of the power plant has been scheduled for 2016/17. The plant's capacity will be increased to a total of 120MW through two additional phases of construction which will see a further four engines installed.

### Clarke Energy wins Algerian engines deal

UK-BASED CLARKE Energy, GE's authorised distributor of Jenbacher gas engines in Algeria, has been selected by Algerian industrial conglomerate Cevital Group to supply a 39.6MW on-site power plants for the group's Brandt household electronic appliances factory in Setif and its Laminor factory in Oran.

The natural gas-fuelled stations will utilise nine of GE's 4.4MW, J624 Jenbacher gas engines to support expansion at the two factories.

The order is Clarke Energy's largest to date in North Africa, with the Jenbacher gas engines scheduled to be commissioned in summer 2016.

Ali Hjaiej, business development director for Clarke Energy, said, "With Algeria's continued industrial expansion, the deployment of high-efficiency distributed generation capacity will play a key role in meeting the country's increased energy demands."

## SAIIC and GE deal set to boost manufacturing sector in Saudi Arabia

SAUDI ARABIAN INDUSTRIAL Investments Company (SAIIC) has signed a Memorandum of Understanding (MoU) with GE that will see both entities co-invest in strategic sectors, which will aim to develop and localise industrial value chains in Saudi Arabia.

Joint investments totalling US\$1bn will be rolled out by 2017 that will drive projects in the water, energy, aviation and digital sectors, with further potential investments totalling US\$2bn set to follow.

The investments will attempt to aid in the transformation of the Saudi Arabian economy through industrial diversification, value chain localisation and strengthening of the private sector. Investments will also be made in SMEs as the MoU attempts to create more job opportunities for Saudi Arabian nationals.

H.E. Eng. Abdullatif Al-Othman, chairman of the board at SAIIC, remarked, "This agreement with GE to form joint ventures and co-invest in strategic, high-growth industrial and digital sectors, is at the core of SAIIC's mission and supports the Saudi Vision 2030 to strengthen the Kingdom's economic diversification."

"SAIIC's mandate is to invest in and establish strategic industrial value chains in Saudi Arabia that promote the development of local manufacturing capabilities, quality jobs and attract new technologies and investments."

Jeffrey Immelt, chairman and CEO of GE, said, "We will work together to build the manufacturing capabilities of GE in Saudi Arabia and develop



H.E. Eng. Abdullatif Al-Othman, SAIIC chairman of the board (back left), said that the agreement with GE was at the core of SAIIC's mission and would support the Saudi Vision 2030 initiative.

more 'Made in Saudi' high-tech technology, creating a robust local supply chain.

"The agreement will also lead to strengthening the culture of digital innovation in the Kingdom," he added. "The joint investment and collaboration will be a game changer for the Kingdom's industrial and digital sectors."

SAIIC, a joint venture of Saudi Arabian Public Investment Fund (PIF), Saudi Aramco and Saudi Arabia Basic Industries Corporation (SABIC), has a mandate to invest in and develop globally competitive industrial sectors within the Kingdom, in order to help drive inward investments in non-hydrocarbon industries.

## Dubai power authority launches world's largest CSP project

DUBAI ELECTRICITY AND Water Authority (DEWA) has announced that it is building the world's largest concentrated solar power project (CSP), which will generate 200MW next year and will reach 1,000MW by 2030.

Three months after Morocco launched a 160MW CSP plant, said to currently be the largest facility of its kind, DEWA said that the Dubai project, which marks phase two of Mohammed bin Rashid Al Maktoum Solar Park, will be operational in April 2017. The 13MW phase one has already been operational since 2013. The park is the largest single-site solar park in the world that uses the independent power producer (IPP) model.

The CSP project is expected to reduce approximately 6.5mn tonnes of carbon



DEWA CEO Saeed Mohammed Al Tayer.

emissions annually and will provide seven per cent of Dubai's total output from clean energy sources by 2020, 25 per cent by 2030 and 75 per cent by 2050.

DEWA CEO Saeed Mohammed Al Tayer said, "The advantage with CSP is that thermal heat can be stored, which makes it possible to produce electricity in the evening."

"The plant will have thousands of heliostats located around a tower to receive radiation from the sun. The heat-transfer fluid will then be used to power the steam turbine to generate electricity."

"DEWA is working to diversify Dubai's energy mix to include 61 per cent from natural gas, 25 per cent from solar energy, and seven per cent from both clean coal and nuclear energy respectively by 2030," he added.

I AM THE POWER



AFRICA ENERGY FORUM  
22-24 JUNE LONDON

STAND  
081



**HIMOINSA**  
THE ENERGY

# ON THE WEB

A round-up of the leading developments and innovations recently featured on *Technical Review Middle East's* online portal. To read more or to stay up to date with the latest industry news, visit [www.technicalreview.me](http://www.technicalreview.me)

## ENEC announces formation of Nawah Energy Company

THE EMIRATES NUCLEAR Energy Corporation (ENEC) has announced the formation of its operating subsidiary, Nawah Energy Company, which has been mandated to operate and maintain Units 1 to 4 at Barakah Nuclear Power Plant in Abu Dhabi.

"This is a significant milestone for the UAE peaceful nuclear energy programme," said HE Khaldoon Khalifa Al Mubarak, chairman of the board of directors of ENEC.

[www.technicalreview.me/power-a-water](http://www.technicalreview.me/power-a-water)



*Nawah Energy Company will oversee operations at all four units of Barakah Nuclear Power Plant.*

## Limak wins US\$4.4bn airport contract

KUWAIT HAS SIGNED a US\$4.4bn contract with Turkish firm Limak Construction for a new terminal at Kuwait International Airport that will more than triple passenger capacity.

Announced by Kuwait's public works minister Ali al-Omair, the new terminal, due to be completed in six years, will raise capacity at Kuwait's only airport to 25mn passengers annually from around seven million now.

It will accommodate all aircraft types at 51 gates, an addition of 30 new gates, and will be able to serve 21 Airbus 380 superjumbos simultaneously, al-Omair said.

[www.technicalreview.me/logistics](http://www.technicalreview.me/logistics)

## New Dubai tower to be taller than the Burj Khalifa

EMAAR PROPERTIES HAS revealed that a new tower to be built at Dubai Creek Harbour will be 100 metres taller than the Burj Khalifa.

The new tower will reach a height of 928 metres, usurping the title of the tallest building in the world from the Burj Khalifa, which stands at 828 metres tall.

Emaar Properties chairman Mohamed Alabbar said that work on the project would begin in July 2016, with the US\$1bn tower designed by the Spanish-Swiss architect Santiago Calatrava.

[www.technicalreview.me/construction](http://www.technicalreview.me/construction)



*Upon completion, the new tower will take the title of world's tallest building from the Burj Khalifa. (Photo: Funny Studio)*

## 'World's first' 3D printed office unveiled in Dubai

A 3D PRINTER was used to print a 250 sqm building in Dubai, which took 17 days to print and two days to install on site.

The arc-shaped office cost approximately US\$140,000 to build and was constructed using a mixture of cement and a set of building materials designed and made in the UAE and the USA.

"This is the first 3D-printed [office] building in the world," claimed UAE minister of cabinet affairs Mohamed Al Gergawi, who suggested that studies have estimated the building technique could cut building time by 50-70 per cent and labour costs by 50-80 per cent.

[www.technicalreview.me/it](http://www.technicalreview.me/it)

## Haulotte scissor lifts help to facilitate covering of holy Kaaba

HAULOTTE ELECTRIC SCISSOR lifts facilitated the annual covering ceremony of the holy Kaaba in Mecca, Saudi Arabia.

The annual ceremony where the holy Kaaba is covered with new kiswa (cover), which occurs every year on the tenth Dhul Hijjah coinciding with Hajj, the annual Islamic pilgrimage to the Holy City, is an important ritual in the holy calendar.

This year the ritual was facilitated by Haulotte Compact 14 model electrical scissor lifts.

[www.technicalreview.me/construction](http://www.technicalreview.me/construction)



*The scissor lift's non-marking tires that do not damage floors was one of the reasons Haulotte said it was chosen for the task. (Photo: Haulotte Group)*

## Turkish firm to build natural gas power plants in Iran

TURKISH ENERGY COMPANY Unit International has reached a US\$4.2bn deal with Iran's energy ministry to build seven natural gas power plants in the country.

Construction of the seven plants, which will have a combined installed capacity of 6,020MW, has been planned to begin in Q1 2017 and will be built in seven separate regions of Iran.

Unal Aysal, head of Unit International, said that the company had signed a 20-year contract with the Iran Energy Ministry.

[www.technicalreview.me/power-a-water](http://www.technicalreview.me/power-a-water)





**This Ramadan, we wish you progress, prosperity & peace!**

### **Kirloskar Green Gensets: from 5 to 625 kVA**

Powerful and reliable, Kirloskar Green Generating Sets have always been the first choice of customers in the Arabian peninsula. Today, our gensets are quietly and efficiently fulfilling the need for backup power whenever and wherever required. Kirloskar Oil Engines, part of the US\$ 1.6 billion Kirloskar Group, is one of world's largest producer of generating sets.

Powered by state-of-the-art manufacturing setups, and backed by extensive in-house R&D facilities, we offer both air-cooled and water-cooled engines and diesel generating sets. Available for power outputs ranging from 5 to 625 kVA, Kirloskar Green customized power solutions are ideal for any application - standby or prime, open or sound proofed. What's more, our operations are supported by a global network of offices and affiliates that ensure prompt sales, service and spares support wherever you are.



#### **We offer solutions for:**

- **Service Sector:** Telecom, IT, Retail, Hotels, Hospitals, Banks, Educational Institutions
- **Industries:** Engineering, Manufacturing, Automobiles, Textiles, Pharmaceuticals, Dairy & Food Processing, FMCG
- **Entertainment Segment:** Multiplexes, Amusement Parks
- **Urban Infrastructure:** Shopping Malls, Residential and Commercial Complexes, Townships

#### **DISTRIBUTORS**

- |  |   |
|--|---|
| <b>Bahrain</b> : M. H. Al Mahross BSC, ajit@almahross.com            | <b>Saudi Arabia</b> : Abdullah Hashim Company Ltd., azizr@ahcl.co.sa      |
| <b>Egypt</b> : Egyptian Engineering & Trading Co., eetco@link.net    | <b>Sudan</b> : Central Advanced Digitech Company ahmed.mohmed@digitech.sd |
| <b>Kuwait</b> : Boodai Trading Company Ltd., psharma@boodai.com      | <b>UAE</b> : AL Shirwi Enterprises, charan@ase.ae                         |
| <b>Oman</b> : Kala International LLC., kalainternational@kalabiz.com |   |
| <b>Qatar</b> : Boodai Trading Company Ltd., boodai@btcqtr.com        |   |

**Head Office:** Laxmanrao Kirloskar Road, Khadki, Pune - 411 003, India, Tel: +91 (20) 25810341/5341 Fax: +91 (20) 25813208, E-mail: milind.Panadare@kirloskar.com  
**Middle East Office:** Kirloskar DMCC, P. O. Box 37745, Unit No. 504, Jumeirah Business Centre 5, Jumeirah Lake Towers, Dubai, UAE, Tel: +971 4 441 4532, E-mail: enquiry@kirloskar.ae  
**For enquiries please visit [www.koel.co.in](http://www.koel.co.in) or email: [milind.panadare@kirloskar.com](mailto:milind.panadare@kirloskar.com)**  
'Kirloskar', 'Kirloskar Enriching Lives', 'Kirloskar Green Chilli' Power Ideas are trademarks owned by Kirloskar Proprietary Limited.



**KIRLOSKAR**  
**GREEN**  
POWER IDEAS

*As solar energy prices continue to fall, GCC countries look set to capitalise on their solar resources for power generation. (Photo: gui yong nian/Fotolia)*

# Energy mix to enhance power generation in GCC

As the region diversifies its energy production and moves towards the further utilisation of solar power, there is an increasing need for GCC governments to be robust in their spending over the next couple of years – be it in conventional or renewable power – in order to become self-sufficient.

**While nuclear power and renewable energy are set to become part of the GCC's energy mix, natural gas will continue to play an important role over the next 20 years.**

**T**HE TOTAL SPEND for new power projects in the GCC in the next five years is estimated to reach an additional US\$150bn, on top of the current value of US\$247bn, with almost US\$100bn for power generation projects, US\$20bn for transmission and the remaining for distribution, reveals Powertech Switchgear's executive director Yousuf Sait.

According to investment bank Apicorp, the region alone will add 76.8GW of capacity for power generation between 2016 and 2020. The International Renewable Energy Agency (IRENA) reports that electricity consumption in the region is expected to reach 856 terawatt-hours by 2020, requiring 100GW of additional power over the next 10 years to meet the increasing electricity demand.

The total value of GCC power projects is currently estimated at US\$247bn, Apicorp

reveals. Saudi Arabia has, until now, registered the highest project value worth US\$118bn and has plans to invest US\$133bn in the next 10 years to cope with the Kingdom's rising power demands. Sait added that Saudi Arabia will almost double its capacity from 50GW to 90GW by 2020. The UAE and Kuwait have made investments worth US\$54.1bn and US\$39bn respectively until now, according to Apicorp.

Iraq and Iran will also aim to catch up and are showing determination to push their ambitious oil and gas plans forward.

Analysts say that strong economic and demographic growth, driven in part by the GCC economies' highly energy-intensive industrialisation programmes, is leading to a dramatic surge in power consumption in the region.

Noaman Amjad, lead division manager, power grids – ME and Africa at ABB, says

# 50

YEARS OF  
POWER  
GENERATION



[www.FGWilson.com](http://www.FGWilson.com)

When you buy an FG Wilson generator set, you are buying into 50 years of engineering experience.

Since 1990, we have installed over 600,000 generator sets from 6.8 – 2,500 kVA and today our products are hard at work in over 150 countries in hospitals, banks, airports, data centres, factories, construction sites, hotels, offices and telecommunication networks.

And all are supported by a network of 370 Dealers and a Parts Distribution Centre which delivers 3 million parts each year. Whatever your power needs, FG Wilson has the answer.

For more details, please visit:

[www.FGWilson.com/trme\\_4](http://www.FGWilson.com/trme_4)



that electricity demand in the GCC countries is growing at a rapid rate, where reliable power infrastructure is required to secure the supply of electricity.

### Sunny days ahead for renewables

Renewable energy – primarily solar and wind – seems to have become an unstoppable power in the GCC. The region plans to pump up to US\$100bn into renewable energy projects over the next two decades, Apicorp suggests. Solar adoption in the region is projected to grow with as much as 4,000MW of new projects lined up for tendering in 2016, according to Middle East Solar Industry Association (MESIA). “Claims that the growth of solar energy will slow down in 2016 because of low oil prices appear to be unfounded,” says Raed Bkayrat, director of research at MESIA.

“On the contrary, as countries in the region start to adjust their hydrocarbon subsidies, correct their electricity pricing strategies and seek to reduce domestic consumption of oil and gas, we expect solar to stand out as the single most attractive option for power generation,” he adds.

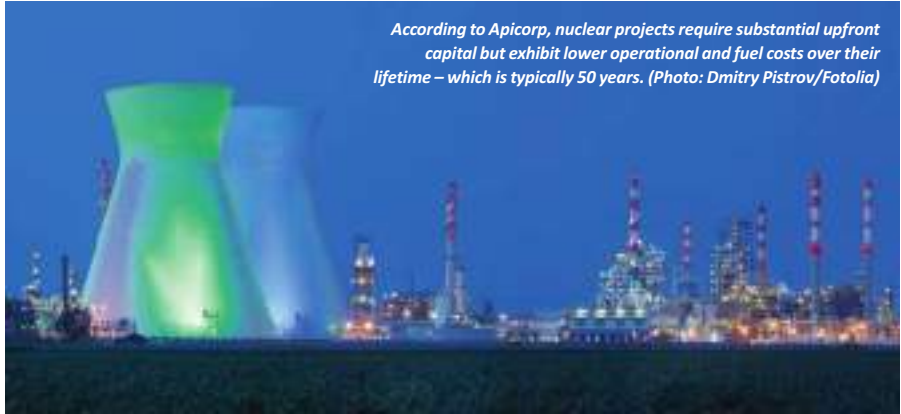
### The UAE

According to IRENA, renewable energy has become economically attractive in the UAE, the leader of solar power projects in the GCC. “Increasing renewable energy to 10 per cent of the country’s total energy mix, and 25 per cent of total power generation, could generate annual savings of US\$1.9bn by 2030 by reducing fossil-fuel consumption,” IRENA reveals.

Dubai Electricity and Water Authority (DEWA) is building the world’s largest concentrated solar power project (CSP), which will generate 200MW next year and will reach 1,000MW by 2030. Three months after Morocco launched its 160MW CSP plant, currently the largest in the world, DEWA said that the project, which is the phase two of Mohammed bin Rashid Al Maktoum Solar Park, will be operational in April 2017. The 13MW Phase 1 has already been operational since 2013. It will provide for seven per cent of Dubai’s total output from clean energy sources by 2020, 25 per cent by 2030 and 75 per cent by 2050.

Shams 1 CSP plant in Abu Dhabi is another epitome of clean energy. Since its inception in 2013, the 100MW generates enough electricity to power 20,000 homes and saves around 175,000 metric tonnes of carbon emissions per year.

The UAE’s National Bank of Abu Dhabi (NBAD) has also committed to lend



According to Apicorp, nuclear projects require substantial upfront capital but exhibit lower operational and fuel costs over their lifetime – which is typically 50 years. (Photo: Dmitry Pistrov/Fotolia)

US\$10bn over the next 10 years on sustainable projects in the country as banks in the region open up financing for clean energy initiatives, a significant part of which will be channeled into solar projects.

Speaking at MENASol 2016 in Dubai, Yousuf Al Ali, associate director – business development at Masdar, told *Technical Review Middle East*, “Solar is a natural resource in the GCC and it is only normal to tap this resource. As the technology is advancing, more energy can be extracted from PV panels. The UAE’s regulatory and financial system is becoming more supportive of renewable energy projects.”

However, Keith Webb, HIMOINSA’s general manager – Middle East, has a different view on the adoption of solar strategy in the region. “The solar sector hasn’t really taken off as expected in the GCC and, contrary to popular belief, countries with hot climates do not necessarily equate to the more traditional solar PV. A CSP plant, however, is operational in Abu Dhabi and is the largest outside of the USA at a cost of US\$600mn for a 100MW plant. This is quite pricey.”

### Saudi Arabia

Saudi Arabia announced its plan to develop 3.5GW of renewable energy by 2020, as part of its Vision 2030. It has set an overall plan for 9.5GW of renewables schemes to assist with meeting future energy demand, with no timelines set for achieving this target.

Ibrahim Babelli, deputy minister at the Ministry of Economy and Planning, said that the Kingdom can meet its growing power needs only through the deployment of solar projects. Speaking at MENASol 2016, he added that the rising need for baseload power to fuel industrial growth should be met by the targeted deployment of PV power and CSP.

Saudi Arabia-based ACWA Power chief technology officer Thomas Altmann asserts

there is stimulation in private sectors and the government is more than willing to support renewables. “There is a consensus between the utilities and the providers to switch to renewable energy. Even though fossils fuels may be able to cater to the power needs now, with the population growth in 10 years, it will be impossible to sustain on conventional energy alone.”

### Kuwait

Kuwait plans to reach its target of generating 15 per cent of its energy from solar power by 2030. The government has earmarked US\$9.9bn for infrastructure projects, including power, and progress is being made on greenfield thermal and renewable projects. Kuwaiti authorities are eyeing 9,000MW in additional new capacity by 2020 to meet power demand. The Ministry of Electricity and Water is seeking to generate a total of 2,000MW of renewable energy by 2030 by launching three projects. The first project will be a 70MW energy park scheduled to be completed by 2016. Construction is also underway at the US\$399mn Al-Shagaya renewable energy park. Managed by Kuwait Institute for Scientific Research (KISR), the 100 sq km complex, with a compound capacity of 200GW, is expected to be completed by 2017.

### Qatar

The FIFA World Cup 2022 host has set a benchmark with its implementation of programmes in deploying large solar power plants. The country’s first solar power station is set to be operational later this year.

Two national companies – Qatar Electricity and Water Company (QEWC) and Qatar Petroleum (QP) – are planning to join forces to set up a US\$500mn joint venture company with the purpose of investing in renewable energy projects within the country. Qatar has also announced plans to



# CONFIDENCE IS BUILT IN

Put the value of John Deere generator drive engines to work for you

When you build standby or prime power generators, you need THE POWER OF CONFIDENCE built in to every John Deere generator drive engine. Our 35 years of experience in power generation provides you and your customers the assurance of heavy-duty engine components for long-lasting performance. Warranty and service support that is unmatched in the gen-set market. And extensive engineering and application integration support to save you time and money.

**John Deere. The power behind your power generation.**



**JOHN DEERE**



UNBIASED  
COLLABORATION



LOW  
OPERATING COSTS



COMPLETE  
SERVICE AND SUPPORT

John Deere Power Systems  
[jdengine@JohnDeere.com](mailto:jdengine@JohnDeere.com)  
[JohnDeere.com](http://JohnDeere.com)

set up 1,800MW solar power capacity by 2020, which is expected to contribute up to 16 per cent of total power generation. Qatar also plans to set up 10GW of solar power capacity by 2030.

Meanwhile, while Qatar has exceptional solar energy potential, price competitiveness and lack of a renewable energy policy framework pose challenges to the growth of the sector in the country.

### Jordan

Jordan will also see renewable sources contribute 20 per cent of its energy mix by 2020, and has attracted solar and wind energy projects worth US\$1.6bn at a total capacity of 1,000MW, of which 500MW will be connected to the grid by the end of 2016, according to Prime Minister Abdullah Ensour. The mix currently ranges from three to four per cent, according to official figures.

### Increased support for nuclear power

Nuclear power would 'free up' more oil and gas for export in the GCC region, Apicorp announced in a recent report.

In the face of rising electricity demand, the research agency says nuclear power should enable GCC states to 'diversify their sources of energy and reduce their carbon footprint'. Apicorp reveals, "But the outlook is mixed. While six countries have nuclear projects under way, planned or proposed, raising power generation capacity by 39 GW, three Gulf countries have cancelled proposed nuclear projects in the wake of the Fukushima disaster.

"Fiscal constraints are one of the major barriers to progress, and the expectation is that nuclear power will account for only three per cent of the region's electricity generating capacity by 2040."

Factors that make the nuclear option attractive include: Nuclear plants emit considerably fewer greenhouse gases compared with fossil fuel-fired capacity; cost competitiveness has improved in recent decades, allowing nuclear technology to become a serious component of energy diversification strategies; and nuclear also attracts human capital in the new energy sector. Nuclear projects require substantial upfront capital but exhibit lower operational and fuel costs over their lifetime – typically 50 years.

### The UAE

The UAE's first nuclear plant in Barakah, about 53km from Ruwais in the Western Region, is due to come online in 2017 and by 2020. The nuclear power plant will supply around a quarter of the country's electricity needs. The UAE started construction on four units of 1,400MW each to generate 5,600MW in April 2010.

### Saudi Arabia

The OPEC heavyweight announced a three-year feasibility study in February 2016 to construct nuclear reactors at a cost of US\$7.5bn in partnership with South Korea. This was initiated after the country's nuclear plant was back in focus after the COP21 agreement in Paris to produce clean energy.

The Kingdom plans to construct 16 nuclear power reactors over the next 20 years at a cost of more than US\$80bn, with the first reactor online in 2022. In June 2015, Russia and Saudi Arabia had signed an agreement to cooperate on nuclear energy development, where Russia will build 16 nuclear reactors in the country.

### Jordan

Jordan has made strides in its efforts to implement a programme to build two nuclear reactors with 1,000MW capacity each. "The first reactor is slated to be ready by 2023 and the second by 2025. We have legal and technical agreements necessary to go ahead with the project," Prime Minister Abdullah Ensour said. According to Ensour, Jordan will produce 48 per cent of its electricity using nuclear power by 2025 once the project is implemented.

Meanwhile, Kuwait, Oman and Qatar have cancelled their proposed nuclear plans in the wake of dwindling funds and the Fukushima disaster in Japan.

### Fossil fuels here to stay, for now

Traditional sources of electricity, fossil fuels like coal and natural gas, are still a large part of the energy mix in the Middle East region and account for more than 80 per cent of electricity generation. Even with lower oil prices, but renewables still being competent, the region is not letting go of its traditional sources of power generation in coal and natural gas.

Powertech Switchgear's Sait notes that energy prices are getting higher. The utilities can no longer afford to offer high subsidies. The demand for supply is ever rising. Also, sources of coal and domestic gas are dwindling. Solar power, with all its initial challenges, is certainly becoming a multibillion dollar opportunity, Sait says.

However, HIMOINSA's Webb takes the opposite stand. "Until energy storage solutions are truly economical, the fossil fuel sector will always be needed because it operates 24/7," he states.

### The UAE

This year, DEWA announced a US\$1.8bn project to meet the emirate's growing power demands. Over the next three years, 64 more power stations will be built and connected to Dubai's electrical grid. Each of the 132/11kV substations will have a capacity of 150 megavolt amperes (MVA).

DEWA currently has 48 132kV substations under construction, in addition to ongoing work to upgrade existing substations. DEWA

### Conventional Energy Projects

Project Name	Country	Start date	End date	Estimated value (US\$m)
Nuclear Power Plant in Abu Dhabi	UAE	Q2 2013	Q4 2020	20,000
Al Zour North IWPP	Kuwait	Q2 2013	Q4 2022	4,700
Facility D IWPP	Qatar	Q3 2015	Q3 2018	3,150
Yanbu Power and Desalination Plant – Phase 3	Saudi Arabia	Q4 2012	Q2 2017	3,000
Al Zour North IWPP – Phase 1	Kuwait	Q2 2014	Q2 2016	2,700

Source: Apicorp

### Renewable Energy Projects

Project Name	Country	Start date	End date	Estimated value (US\$m)
KA-CARE – Alternative Energy Projects – Nuclear Power Plant	Saudi Arabia	Yet to be announced	Yet to be announced	7,000
KA-CARE – Alternative Energy Projects – PV+CSP	Saudi Arabia	Yet to be announced	Yet to be announced	6,000
Mohammed bin Rashid Al Maktoum Solar Park – Phase 3	UAE	Q3 2016	Q4 2018	1,200
Al Shagaya Renewable Energy Complex – CSP plant – Phase 3	Kuwait	Q4 2020	Q4 2024	1,000
Al Abdaliya Integrated Solar Combined Cycle (ISCC) plant	Kuwait	Q4 2016	Q1 2019	750

Source: Apicorp

is also looking to expand the existing K Station power plant at Jebel Ali to increase capacity by about 500MW.

With regards to natural gas for electricity production, it is seen that transport and infrastructure costs are massive. Even then, natural gas is still the leading form of producing electricity as it is less carbon-intensive than other fossil fuel alternatives.

### Saudi Arabia

Saudi Arabia, in June 2016, announced that it is planning to scale back solar projects and double its natural gas production. Energy minister Khaled Al-Falih said, "Gas makes up 50 per cent of our energy mix now and we aspire to raise this to 70 per cent from all sources, be it from local sources or imported at a competitive price."

The Kingdom is already eyeing Iranian gas field Farzan-B and has drilled wells on the area falling in its territory, which it has named Hasbah field, to begin production. The Saudi Arabian side of the field contains around three trillion cubic feet of gas. Production of dry gas or fuel for use in power plants will rise to 17.8bn cubic feet

per day from 12bn cubic feet, according to the plan.

### Kuwait

Kuwait's first gas-fired combined cycle power and water desalination plant — Azzour North One — is due for completion by Q4 2016. Once completed, the plant will boast a capacity of more than 1,500MW of electricity, which represents 10 per cent of the country's power capacity.

Eaton general manager Frank Ackland says that, even though there are increasing solar investments in the GCC. "We are seeing continual investment across the region in conventional power projects, with consultants currently bidding to work on Kuwait's Ministry of Electricity & Water (MEW) plan for the country's electrical networks up until 2035."

### Qatar

The Apicorp report outlines, "Our estimates suggest that Qatar will need to invest around US\$9bn to add 5.2GW to meet rising demand in the medium term — US\$6bn in generation and US\$3bn in

transmission and distribution (T&D)." State-owned Kahramaa has recently launched a mega project to monitor its electricity distribution network in a bid to prevent outages. The monitoring for asset management of 11kV Electricity Distribution Network, which serves households, would have the capability to sense the conditions that could cause large-scale power supply disruptions. The scale of the above project is being considered as first-of-its-kind in the GCC region as a whole covering the entire electricity distribution network, according to Kahramaa.

### Jordan

The construction of Jordan's first oil shale-fuelled power plant was set to mid-2016. The Attarat Power Company (APCO), however, is in the process of securing the remaining finance needed for starting construction on the US\$2.2bn facility, Jordan's minister of energy and mineral resources Ibrahim Saif reveals, adding, "This project is part of the government's efforts to diversify its energy resources through utilising the country's reserves of oil shale."

One product.  
One software.  
One world.  
Multi-functional  
like no other.

## TRAX

### Transformer and Substation Test System

TRAX is a multi-functional transformer and substation testing solution that replaces numerous individual testing devices. It's a time-saving and cost-effective alternative to conventional measurements with separate instruments.

- One product. For a variety of different tests
- One software. Different apps for different applications
- One world. Any standard, any destination, any language, any user

**Megger**

## The rise of the utilities market

Saudi Arabia is the biggest power market of all the GCC countries, and analysts forecast increased investment in utilities over the next 10 years and beyond, to meet rising demand from a growing population.

“The integration of diversified generation capacity, primarily gas capacity over our 10-year forecast period – will reduce reliance on oil-fired power generation and enhance the Kingdom’s ability to absorb economic shocks to its oil-dependent economy,” says a recent BMI report.

ABB’s Amjad says that electricity demand in the GCC countries is growing at a rapid rate, where reliable power infrastructure is required to secure the supply of electricity. However, the power balance is tipping irreversibly towards renewables, driven by policy and disruptive technology cost reduction. Although conventional generation will continue, variable renewables such as wind and solar will see rampant growth.

Eaton’s Ackland reveals that there are two major factors impacting utilities in the GCC at present — the increasing demand for energy and use of desalination to provide clean water, a process that is extremely energy intensive. “This, and the need to provide much more efficient power, will see ongoing investment in energy efficiency, smart grid and automation technologies. The move towards the unbundling of power generation, transmission and distribution (T&D) segment is also allowing for a more innovative and competitive market place.”

Activity in the utilities sector is also seeing an intensive drive in the solar industry. Ackland reiterates that apart from Saudi Arabia and the UAE, Qatar is likely to be a strong market for power in the coming years, with all three countries having continuing plans for investment in infrastructure and construction.

According to Powertech Switchgear’s Sait, “With low oil prices, the growth in GCC for new infrastructure is slow, but in my opinion the demand for energy will continue to rise and investment in all GCC countries is going to be high with the rise in population and growth of industry, transport and infrastructure.”

Meanwhile, Megger’s general manager Nick Parton says that these are testing times. “The utilities market in the GCC right now is not easy,” he notes. “We are coping with much lower government revenues because of very low oil prices for the last two years. We are increasingly seeing projects delayed and a reduction in the number and value of new projects in the region.”

*Demand for fresh water from growing population centres throughout the region has resulted in the commissioning of energy-intensive desalination plants. (Photo: Shao Weiwei)*



Is solar the answer? Parton notes, “We see a lot of growth opportunity on the renewable energy front, and some significant new projects being agreed, although there is still some work to do getting the legal frameworks put in place. Because of the low oil price, the utilities or governments are looking to maximise the revenues they are getting from the barrels they produce, rather than giving it to the local energy companies at very low prices to produce cheap local electricity. So we will surely see an increased drive towards renewable energy.” He also adds that Iran is a market to look out for.

Webb reiterates that in terms of power utilities’ demand and growth, one does not have to look far but to Dubai, where there has been gradual growth in the construction market ahead of Expo 2020. “Saudi Arabia is, for sure, also one of the largest markets in the entire region and most of it untapped by outside companies. Being a vast country, it needs a lot of distribution,” he adds.

### Upcoming trends in the power sector

Ackland believes that the most prominent trends for the region will ultimately come from the feed mix, increased automation and energy efficiency goals. An increasingly large portion of the grid in the Middle East is now reaching the 40-50-year-old mark – there is a need for investment in retrofitting and upgrading these facilities as well as the construction of new ones, as can be seen from the recent projects being announced in the sector. He adds that energy storage too is becoming a much more carefully considered solution for the power sector – batteries in particular. This can also include DC switching and protection, bi-directional storage inverters, AC switching and protection, customised packaging, metering and monitoring.

Amjad notes that there is also a heightened sense of meeting the increasing

demand for power in a sustainable way. In several countries, legislation and regulatory drivers following the COP21 Paris Agreement on low carbon emissions will continue to drive the growth of renewables in the energy mix. “With the growing influence of renewables, the world needs power grids that can integrate renewables and allow smarter energy choices. We see the need for interconnections also growing in the region.”

According to Sait, all of the utilities in the GCC are presently trying to implement smart grids to achieve a high level of efficiency and reduce losses. Going forward, the countries will need to introduce feed-in tariffs (FITs) and other incentive schemes to accelerate the implementation of renewable energy.

### Securing the future

Solar power can drive the future of GCC countries, as the region’s 60 per cent surface area has excellent suitability for solar-photovoltaic deployment. But the lack of a clear policy framework is one of the main reasons for limited solar activity in the GCC. Therefore, re-energising the renewable energy programmes will give a boost to the solar power sector in the GCC.

Crude oil is seen as an inefficient energy source for power generation, and most economies have moved away from oil and focused on natural gas, hydro, nuclear or renewables to generate electricity. However, countries like Saudi Arabia still depend on crude oil for power, a trend that is to continue in the absence of alternatives.

The key is for the GCC to monetise its natural gas reserves to displace crude oil for domestic power consumption. While nuclear power and renewable energy are set to become a part of the GCC’s energy mix, fossil fuels will continue to play an important role, at least over the next 20 years. ■



EXPECT MORE  
FROM YOUR MACHINE.



**D1150PVHCA**  
DUAL PRESSURE \ DUAL CAPACITY

RELIABILITY ON THE ROAD.  
TOUGH ON THE JOB.

Engineered for superior performance, Sullivan-Palatek offers the industry's widest range of portable air compressors up to 1800 cfm, 500 psi. CAT engines for all our range. Designed and built in the USA, we make sure to provide you the power and reliability needed to get any job done on time.

Discover More



[www.sullivan-palatek.com](http://www.sullivan-palatek.com)





GCC countries rely largely on imports to meet most of their food requirement. (Photo: dred210/Fotolia)

# Industrial refrigeration driven by food sustainability

There is an increasing need to innovate eco-friendly refrigerants to save the Middle East from rising energy costs and soaring emissions.

**“The Kingdom is big into energy saving now and 60 per cent of state investment is going into HVAC.”**

Ziad Al-Bawaliz, director, sales and marketing – Middle East and Africa at Danfoss

**T**HE GLOBAL INDUSTRIAL refrigeration systems market is expected to grow moderately at a compound annual growth rate (CAGR) close to seven per cent by 2021, according to research firm Technavio, and the demand for industrial refrigeration equipment market worldwide is set to generate revenues worth US\$36.25bn within five years, the report added.

Although industrial refrigeration is very similar to commercial and residential refrigeration systems, certain parameters like size, refrigerant, system types and load temperature qualifies it for industrial purposes. Typical refrigerants, namely ammonia, HFC (R404A) and carbon dioxide (CO<sub>2</sub>), are used in cold storages, the food

and beverage (F&B) industry, dairy plants, meat and seafood processing, pharmaceutical and chemical centres.

Saudi Arabia is one of the world’s largest markets in the volume of refrigeration products imports. However, many imports are not subject to quality checks and some of those manufactured locally are being sold directly into the market without satisfying any standard.

To give an insight on sustainable industrial refrigeration solutions and how to select the right product, Danfoss and *Technical Review Middle East* conducted two one-day seminar titled ‘Engineering Tomorrow’s Industrial Refrigeration Solutions in Saudi Arabia’ at Jeddah and Riyadh on 11 and 13 April 2016, respectively.

# مجموعة محمد العجيمي Al-Ojaimi Group



**Mohammed Al-Ojaimi Contracting Est.**

**Electrical Works  
Mechanical Works  
Civil and Site development works  
Telecommunication Works**

## **Al-Ojaimi Energy Services**

**Testing and Commissioning Services  
Automation and Control Services  
Engineering Services  
Trading Services**



## **Mohammed Al-Ojaimi Industrial Group**

**Distribution Transformers  
Transformer Substations  
Distribution Panel Boards  
Package and Unit Sub-Stations  
LV Current Transformers  
Cable Lugs & Connectors  
Link Boxes  
Insulated Wires  
Copper Conductor**



According to Ziad Al-Bawaliz, director, sales and marketing – Middle East and Africa at Danfoss, who gave a presentation on drive applications in refrigeration, “The primary reason as to why we did the event in Saudi Arabia was to showcase what energy efficient solutions Danfoss can provide. The Kingdom is big into energy saving now and 60 per cent of state investment is going into heating, ventilation, air conditioning and refrigeration (HVACR). Therefore, if somebody can provide the Kingdom with solutions, that is going to be Danfoss.

“The trend today is sustainability. Saudi Arabia recently launched its Vision 2030 where one of the key points of the agenda is energy conservation. This was our main interest to communicate with the market via the event. In this way, technically we are not selling to end-users. It is more about educating them.”

He added that efficient drives can help save energy and more power saved means better business. Putting it simply, Al-Bawaliz revealed that 50 per cent of the world’s consumption of energy is electrical energy, with 40 per cent of this energy used by electrical motors, and it is the AC/frequency drive that controls the motors. “Danfoss drive solutions can help save 15-40 per cent of the energy consumption in motors. With this event, we want to bring to Saudi Arabia that we have the ideal solution to save costs and energy that companies are looking for.”

Talking about refrigeration for the food industry at the event, Ghaleb Abusaa, engineer-arbitrator, focussed on sustainable food production. During his session, he spoke about how, due to the scarcity of arable land and absolutely dry climate, agricultural food production in the GCC region has been minimal. According to the United Nation’s Food and Agriculture Organization (FAO), of the total world area, the land suitable for cultivation is just 1.7 per



*Ziad Al-Bawaliz, director, sales and marketing – Middle East and Africa at Danfoss, speaking about industrial refrigeration in Riyadh. (Photo: Danfoss)*

cent in Saudi Arabia and three per cent in the UAE, compared to 18.4 per cent in the USA, 23.7 per cent in the UK, 16.3 per cent in China and 51.6 per cent in India.

Abusaa also mentioned that GCC countries largely rely on imports to meet most of their food requirement. In 2007, the region imported as much as 37.2mn metric tonnes of food, more than three times the amount of food produced locally. Therefore, Abusaa noted that it is important that for food safety and extended shelf life of food items, refrigeration is a must from ‘farm to fork’, which refers to the stages of the production of food — harvesting, storage, processing, packaging, sales and consumption.

Ziad added that in the Middle East, for refrigeration, Saudi Arabia has always been attractive because it has the highest potential as a market compared to other countries in the region. “The population is

also one of the highest while Mecca and Madina attract 20mn visitors per year. This makes the market ever more lucrative. There is a huge demand for hotels and food services, and it is an important economy for everybody who wants to do business.”

Meanwhile, there is also an urgent need to look into eco-friendly refrigerants. Ammonia (NH<sub>3</sub>) is a natural choice for a refrigerant as it is environmentally friendly, highly efficient, cost-effective and widely available. CO<sub>2</sub> is now becoming attractive as a refrigerant for its high operating pressures that is suitable for efficient operation. During standstill, the ambient temperature can reach and exceed the critical temperature and the pressure can exceed the critical pressure. Hence, systems are typically designed to withstand pressures up to 90 bar, or sometimes even equipped with a small standstill condensing unit to keep pressures low. At the same time, CO<sub>2</sub>



# KNOWLEDGE IS POWER



**Puts the power in your hands.**

**JCB LiveLink gives you complete control of your generators to keep the power on!** Livelink improves productivity, maximises uptime and make it easy to manage the health of your generators by providing essential operational data. The most up-to-date information about how your generators are performing or where they are located becomes even more critical when it comes to making the right decisions. The more knowledge you have to generate uptime, the better value for money your generators deliver.

To find out more visit our website.

[www.jcb.co.uk/livlinkgenerators](http://www.jcb.co.uk/livlinkgenerators)

**JCB**  
**POWER PRODUCTS**

has a low compression pressure ratio (20 to 50 per cent less than HFCs and ammonia), which improves volumetric efficiency.

For plant owners looking at greener and more efficient secondary refrigerants, a CO<sub>2</sub>/NH<sub>3</sub> cascade system is a viable option. In addition to providing 0 ozone depletion potential (ODP) and 1 global warming potential (GWP), CO<sub>2</sub>/NH<sub>3</sub> cascade systems offer several benefits for food processing and low temperature distribution facilities. While CO<sub>2</sub> or NH<sub>3</sub> have been proven to be better for the environment, synthetic refrigerants continue to be used in many industrial refrigeration systems because companies need to invest in new equipment to switch to natural refrigerants. This is where retrofitting comes into play, which means that the components of a specific piece of refrigeration equipment has to be engineered specifically around the properties of the refrigerant used.

“We take global changes very seriously and so we continuously develop those products that are in sync with the new refrigerants, keeping in mind to have the best possible results with minimum power consumption,” Al-Bawaliz noted.

From a Danfoss point of view, the five drivers for industrial refrigeration are safety, reliability, energy efficiency, global warming and cost. Other factors include:

- Increased precision process control demands – accurate temperature, humidity and air quality that enhance product quality and improve shelf life of perishable goods;
- Stricter environmental legislation for organisations to focus on greener solutions that helps bring down the cost of environmental compliance;
- Food safety regulations;
- The need for energy efficient, reliable and low maintenance solutions that drive down total cost of ownership (TCO);
- Growing international food trade;
- Demand for higher operational safety, reliability and minimal service efforts.

Technavio has also defined a few emerging trends that have the potential to significantly affect the market and contribute to industrial refrigeration growth. The growth has been mainly attributed to the increasing demand from end-users such as the food processing industry and the oil and gas industry. Consolidation of market vendors as well as increased focus on total cost of ownership by the operators, will also positively impact the growth of the market, the research body noted.



*The growth in industrial refrigeration is mainly due to the increasing demand from end-users such as the food processing industry and the oil and gas industry. (Photo: Panitanjohn/Fotolia)*

Hugh Brenchley, senior researcher, World Intelligence Market (WMI) at Building Services Research and Information Association (BSRIA), said, “Key findings are that while the efficiency of a lot of household refrigerators currently on the market in Saudi Arabia compare favourably with the rest of the world, there is still room for improvement – especially for low-

cost products at the lower end of the efficiency scale.

“The picture for commercial refrigeration products is more complex due to the variety of configurations and bespoke products, some of which are manufactured in the Kingdom. Nevertheless, it is very likely that major efficiency gains can be achieved.” ■

**Danfoss, in association with Alain Charles Managed Events, held two one-day seminars to touch base with its clients and educate stakeholders on the HVACR energy efficient solutions for the Saudi Arabian market.**

With presentations on industrial refrigerants by Anatolii Mikhailov, product director – industrial refrigeration valves at Danfoss, Ziad Al-Bawaliz and Abusaa Ghaleb, the focus of the event was on how Danfoss solutions could help Saudi Arabia realise some of the goals of its Vision 2030 initiative and help the Kingdom save energy.

More than 100 delegates attended the events in Jeddah and Riyadh, consisting mainly of contractors, consultants and end-users. According to Al-Bawaliz, the feedback on the event was positive because it offered plenty of information on the extent of Danfoss’ HVACR ranges beyond heating and ventilation, which many were not aware of.

*For more information, please visit [www.danfoss.com](http://www.danfoss.com)*



# What Turns The World On?

Transforming off-grid areas into megacities.

## 1904

MAN built the first engine driven power plant. We have been successfully in business ever since

## 90%

total efficiency in heat utilization with MAN gas engines

## 34,000+

megawatts of power and heat are generated at MAN Diesel & Turbo plants

Power Technology IPP Utility Industry Mining Oil & Gas After Sales

With decades of proven success in even the harshest environments, MAN Diesel & Turbo engines and turbines for decentralized power plants have become a synonym for reliability, efficiency and cost-effective operation. We offer a comprehensive range of solutions for applications up to 400 MW, using liquid fuel, gaseous fuel or a dual-fuel combination. From the remotest off-grid sites to the largest industrial complexes, our longstanding international customers trust our engines and our expertise in the power industry to keep the wheels of global business turning. Find out more at [www.mandieselturbo.com](http://www.mandieselturbo.com)

Engineering the Future – since 1758.

## MAN Diesel & Turbo



*Developers and city planners throughout the MENA region are becoming more aware of the need for a focus on intelligent urbanism. (Image: BillionPhotos.com)*

# GCC 'green building' surging on climate change accord

From innovative architectural designs to eco-friendly air condition systems, the shift towards intelligent urbanism is evident in the GCC region as it embraces 'green building'. Nnamdi Anyadike reports.

**B**LESSED WITH SEVERAL consecutive months of unbroken and scorching sunshine during most of the year, the countries of the Gulf region are uniquely placed to take advantage of solar energy and achieve some of the highest eco-building standards in the world. Yet, until recently, they have lagged behind other sunlit regions like Australia and the US state of California. Now – and led by initiatives such as the GCC's various Green Building Councils – the region is racing to catch up.

The task ahead, if the Gulf is to achieve the aim of reducing carbon emissions in accordance with last December's UN Climate Change targets, is enormous. World Green Building Council CEO, Terri Willis estimates that buildings alone comprise 30 per cent of global greenhouse gas emissions. The UAE's Green Building Council (Emirates GBC) is looking to achieve near 'zero-energy' buildings in the UAE by 2021.

In May, Emirates GBC chairman Saeed Al Abbar announced that the platform has now been set for concrete action to achieve this within the required timeframe. He will have been heartened by the conclusions of a report released by the Middle East Facility Management Association (MEFMA) at May's International Design Exhibition (INDEX) and Outdoor Design Build Expo, which claimed that GCC countries could save up to US\$3.5bn with energy efficient buildings. Facilities management is essential for the maintenance of green buildings as energy and facilities management together can account for 90 per cent of a building's costs. Santhosh Vallil, sales manager at Hunter Douglas Middle East, the Dutch architecture consultancy, said at the event the abundance of glass in the Middle East's modern architecture could save on energy costs, and deliver an aesthetically-pleasing design for buildings in the region.

Hunter Douglas launched what it describes as "the next generation" Flat Bar sliding shutter. It claims that its green characteristics can decrease energy consumption and keep houses cool. Because of its overlapping fins and sliding shutter of only five mm thickness – half the thickness of comparable shutter systems – in a nearly-invisible aluminium frame the minimalist shutter is said to reduce the amount of solar heat indoors by "up to 90 per cent". The shutter system was recently trialled in a housing complex in Brescia, Italy.

One of the biggest challenges in the Gulf, particularly if climate change proceeds as predicted, will be the provision of eco-friendly air conditioning. Recently, heating, ventilation and air conditioning (HVAC) product manufacturers have begun to embed more energy efficient and eco-friendly features. These are fast gaining traction in response to the increased regulations for energy efficient products locally and globally. Industry forecasts point to a substantial rise in the HVAC products and equipment market in the Middle East and Africa. The market as a whole is expected to generate more than US\$16.23bn value by 2022.

The report notes, "The governments, emerging green/smart building criterion and growing consumer concerns are pushing HVAC manufacturers, developers and system integrators to build and provide energy efficient, technologically advanced HVAC units."

LG Electronics, one of the major suppliers of air conditioning units to the Middle East region, is positioning itself to take advantage of this growth.

Kevin Cha, president – Middle East and Africa at LG Electronics, said, "The company recently made large investments for research and development, and constructed a new chiller manufacturing facility set to open in 2017." In the residential space, LG's latest Titan Split air conditioners have been tested to withstand extreme high temperature degrees of up to 60°C.

A number of the new projects, which are about to get underway in the UAE, are expected to feature new cooling technology such as that being marketed by LG Electronics. These include the green construction projects that were given the go-ahead by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, in April. These are namely:

- The Vertical Industrial City, a 280 hectare mixed-use site that will be designed by Italian architects;
- Gulf Safari, a 100 hectare golf complex with a training academy;
- A new 10,000 people capacity convention centre that will be home to two hotels, offices and the new Mohammed Bin Rashid Library;
- Dubai Steps, a cultural and sports project;
- And, The Hardware, Bicycles and 'Green Building' market that will include 100 shops and 53 bicycle showrooms.



# ZOOMLION

## Introducing OUR BRAND NEW RT CRANE

SALES • RENTAL • SERVICE

Special  
Offers on  
Cash Deals



**RT 60**  
ROUGH TERRAIN CRANE  
60 Ton / 66 US Ton hook block

- 5 boom section
- 43 Mtr. working height
- U-shaped Forged Booms.
- US Cummins Engine
- US Dana Axle
- De Harishmen LMI System.
- 60% Imported World Class Components.
- Best In Class Maximum Loading Capacity.
- Unlimited One Year Warranty.
- ANSI Certified.
- ARAMCO Registered

we serve you from our established branches  
in Eastern, Western and Central Region



الربيعية والنصار للتجارة  
RABIAH & NASSAR COMMERCIAL

Khobar: +966 13 8991566 - E: sales.eq@rancogroup.com  
Riyadh: +966 11 4910590 - E: trading@rancogroup.com  
For Inquiries Contact: Mr. Faisal Al Mobayedh: +966 56 7777383

@ranco.group @rancogroup

www.rancogroup.com

Leadership in Energy and Environmental Design (LEED) is the internationally recognised green building third party certification system. And LEED-certified projects in the Middle East now include:

- DEWA's Sustainable Building in Dubai, which is the world's largest government building to achieve the certification;
- The Middle East region's first single-family home to earn LEED Platinum in Saudi Arabia;
- And, Bee'ah, Sharjah's integrated environmental services company, which at the end of May held a contract awards ceremony at its new headquarters in Al Saj'ah. The design has achieved a Platinum LEED rating.

Meanwhile, Qatar and the rest of the Gulf are forging links with companies and countries from across the globe in order to deepen their eco-building knowledge base.

One partner country, which appears to be moving ahead of the pack, is Taiwan. The Far East country, whose Bureau of Energy (BOE) of the Ministry of Economic Affairs (MOEA) is promoting the success of its 'Million Solar Rooftop PVs' across the Gulf, exhibited at the recent Project Qatar event. It is also expected to be present at Qatar Green Building Council's (QGBC) 2nd Green Building annual conference, scheduled for 13-14 November 2016 at the Qatar National Convention Centre (QNCC). Taiwan's target is to expand domestic PV installation from 420MW in 2015 to 2,100MW by 2030.

Speaking in Qatar, George Hu, marketing director at Taiwan's Ministry of Economic Affairs Green Trade Project Office (GTPO) – a government-sponsored office that aims to bridge the gap between Taiwanese manufacturers and the international market – said that his country was keen to pass on its experience to Qatar. He said sustainable development was vital to transforming Qatar into a knowledge-based economy and enabling it to play a key role in building smart cities. The GTPO is offering Qatar a spectrum of solutions, mostly eco-friendly products in water management, 'green' construction materials, and also heat-proof products such as insulation coatings and insulation films. Throughout the Gulf and the wider Middle East and North Africa (MENA) region, developers and city planners are becoming more and more aware of the need for a focus on intelligent urbanism. Projects like Abu Dhabi's Al Bahar Towers are held up as international examples of eco-friendly design and sustainability, as are the UAE's Al Meydan City and ideas like Jordan's Hanna Salameh Design for Amman's Jordan Gate Towers.

In addition to eco-friendly air conditioning, another key solution to developing sustainable cities is the implementation and integration

A number of projects throughout the GCC, such as Masdar City in Abu Dhabi, have helped raise the profile of 'green building' techniques. (Photo: Masdar)



of 'smart technology', which can help residents monitor the safety and security of homes in their absence. This technology is also increasingly finding its way into offices and on the streets.

'Green' urban development, however, has not advanced across the region in lockstep. The GCC's largest economy Saudi Arabia, while being in overall terms the region's largest by GDP, still lags behind the UAE in the per capita delivery of green buildings. But now the Kingdom could be on the cusp of making huge strides. The *World Green Building Trends Study* from Dodge Data & Analytics predicts a fourfold growth in the share of green buildings in overall new construction by 2018 in Saudi Arabia, from the current eight per cent to 32 per cent.

MEFMA concurs, "There is a huge amount of new infrastructure due to be completed [in Saudi Arabia] in the next three to five years, much of it highly sophisticated and containing green buildings."

These include the King Abdullah Financial District with more than three million sqm of space; new offices and high-quality infrastructure in Jizan Industrial City; the King Abdullah Economic City, which will contain a sea port and industrial districts; and Kingdom City, covering more than five million sqm in Jeddah and which will be home to Kingdom Tower.

"Many Saudis have experienced Dubai and have seen the level of customer satisfaction...they want to have the same in Saudi Arabia," it continues.

The future for green buildings in the GCC over the coming years is indeed bright. However, as many observers point out, in a drier and harsher world there will be no alternative other than to strike a balance between urban growth and increasingly limited resources. It is already abundantly clear that cities across the MENA region are now testing the current limits of urban sustainability. ■

## Gardner Denver

Your **Ultimate** Source  
For Pressure and Vacuum

**Technological excellence**  
- choice comes as standard

CompAir BellissMorcom Elmo Retschle WITTIG Reavell  
hydrovane TAMROTOR BOTTARINI Gardner Denver ROBUSCHI  
TRANSPORT SOLUTIONS

ROTARY SCREW | SIDE CHANNEL | CLAW | ROTARY VANE | LIQUID RING | ROTARY LOBE | RADIAL | RECIPROCATING | CENTRIFUGAL



Gardner Denver FZE, Office No. 18202,  
JAFZA View 18, P.O. Box 61146, JAFZA, Dubai, UAE

Tel: + 971 (0) 4 881 17 44 Web: [www.gardnerdenver.com](http://www.gardnerdenver.com)  
Email: [enquiries.fze@gardnerdenver.com](mailto:enquiries.fze@gardnerdenver.com)

# COELMO®

## FROM GENERATORS TO ENGINEERING PROJECTS, EXCELLENCE THROUGH GENERATIONS.



Follow us on



Coelmo espositore 2017

### Coelmo, know how and experience for world-class Applications.

For 70 years, Coelmo has meant innovation, reliability, security and sustainability. Coelmo designs, manufactures and provides assistance for Industrial and Marine Generating Sets from 3 up to 3000 kVA supplying worldwide Power Engineered Solutions for different applications.

Coelmo is able to provide all the energy you need, ensuring safety, comfort and maximum performance. An international network of technical support ensures customers immediate technical support and rapid delivery of spare parts.

### APPLICATIONS



Designed and Manufactured in Italy. Since 1946.

[www.coelmo.it](http://www.coelmo.it) | [sales@coelmo.it](mailto:sales@coelmo.it)

## Global HVAC equipment demand set to hit US\$122bn by 2020

THE GLOBAL DEMAND for HVAC equipment has been forecast to increase at an annual rate of 4.1 per cent through 2020 to US\$122bn, according to the latest HVAC industry update from US-based industry research firm The Freedonia Group.

In its *World HVAC Equipment* study, The Freedonia Group said the fastest increases in HVAC equipment demand would be registered in Saudi Arabia, India and Indonesia between 2015 and 2020, with analyst Kyle Peters remarking, "Investment in HVAC installations will continue to be strong in these countries as they seek to expand their base of HVAC equipment, and there will be ample new sales opportunities in both new building construction and in retrofit applications."

The report added that growth within the global market would slow from the pace experienced between 2010-2015, due primarily to an anticipated moderation in building construction spending in China. The world's largest market for HVAC equipment, however, would continue to post the largest gains of any nation in value terms, accounting for 31 per cent of the total increase in world HVAC equipment sales between 2015-2020.

Demand for HVAC equipment in Western Europe looks set to recover during the 2015-2020 period, the report revealed, as a number of countries in the region that have experienced economic



*Saudi Arabia will be among the fastest growing markets for HVAC equipment between 2015-2020, according to The Freedonia Group. (Photo: Gena Fotografo)*

weakness, which has affected building construction spending and HVAC equipment demand, begin to rebound.

Within the HVAC industry, heat pumps – utilised to provide more efficient cooling compared to traditional room air conditioners – will record the fastest increase in sales in both unit and value terms through to 2020. Demand for heat pumps will continue as consumer acceptance increases, while governments throughout the world offer financial incentives on implementing them.

The Freedonia Group report, which is available at [www.freedoniagroup.com](http://www.freedoniagroup.com), also revealed that the largest market gains in both unit and value terms through to 2020 would be posted by room air conditioners, which currently account for the largest share of global HVAC equipment sales of any product.

### World HVAC Market: 2010-2020

	Equipment Demand (US\$bn)			Annual Growth (per cent)	
	2010	2015	2020	2010 - 2015	2015 - 2020
Global Market	77.2	100.0	122.0	5.3	4.1
Middle East and Africa	4.1	5.9	7.8	7.4	5.7

## LG chief says HVAC industry set for a buoyant growth throughout Middle East

THE MIDDLE EAST market for HVAC products and equipment is set to experience growth across a range of residential, commercial and industrial applications, according to a leading industry expert, due to growing trends such as smart cities and 'green buildings'.

LG Electronics president – Middle East and Africa, Kevin Cha, said that the HVAC industry across both the Middle East and Africa was witnessing "a prominent presence of products" in a number of industrial segments as ongoing development takes place in residential, commercial industrial and institutional projects.



*LG Electronics has invested heavily in R&D activities in recent years. (Photo: LG Electronics)*

"Companies are investing in R&D and designing new products that have better energy ratings and result in lower emissions and utility bills," said Cha. "With such a proactive approach by industry players including us, the HVAC industry looks set to experience robust growth in the coming years in response to increasing demand."

Cha cited investment plans already underway by large real estate groups and government agencies towards infrastructure development among the reasons for the increasing demand for HVAC products and equipment, noting that new shopping centres, hotels, hospitals and airports were adding to the demand for air-conditioned environments.

"LG's air conditioning business is already an integral part of the company's business and LG has invested in producing a wide range of solutions across both residential and commercial sectors for several decades now," Cha added.

"The company recently made large investments in its R&D department and constructed a new chiller manufacturing facility set to open in 2017."

Green Technology embedded products have also been gaining traction in response to the increased regulations for energy efficient products locally and globally.

Major HVAC regulations prevalent throughout the MEA region, such as LEED certification, Arab Energy Efficiency Building Regulations and the GCC Standardization Council, have all played a role in leading HVAC manufacturers to ensure their products comply with the latest conventions in energy efficiency.



Remote/Isolated Power Generation  
 Embedded Power Generation  
 Customized Energy Solutions  
 MV/LV Distributions-Solutions  
 Load Sharing and Power Management

## Quality, Availability & Reliability

SES SMART Energy Solutions FZCO  
 T: +971 4 886 2066 F: +971 4 886 2067 E: sales@sesrent.com  
 P.O. Box 18089, Jebel Ali Free Zone, Dubai, United Arab Emirates

[www.sesrent.com](http://www.sesrent.com)

Rental of 5 to 100 MW Diesel, Gas & Hybrid Power Plants

Kenya Nigeria Rwanda UAE Saudi Arabia Qatar Oman Iraq

Energy on Demand



“ Our commitment to providing only the highest quality, sustainable and reliable low voltage switchgear solutions has ensured our strong partnerships with leading MEP contractors and consultants across the government, commercial and residential sectors. ”



Channel Partner for  
 ArTu K Series LV Systems

[powertechswitchgear.com](http://powertechswitchgear.com)  
[info@ptswitch.ae](mailto:info@ptswitch.ae)



## Yokogawa's latest product range aims to optimise operations

YOKOGAWA ELECTRIC CORPORATION has announced the global release of ROTAMASS Total Insight (TI), a new portfolio of four-wire Coriolis mass flowmeters and transmitters.

The new Coriolis mass flowmeter product platform has been developed based on a 'Total Insight' concept that aims to optimise operations and reduce maintenance costs throughout all phases of the product lifecycle.

According to Yokogawa, these new instruments will aid in demanding process control applications involving liquids with high viscosity, entrained gas and two-phase flows, offering accurate instruments whose utility extends beyond mass flow, inline density and temperature measurement.

The company said that these instruments have, over time, evolved into multi-functional devices that can measure concentrations and function as net oil computers (NOC), as well as measure heat transport.

Consisting of six new sensor product lines and two new transmitters that can be configured to suit the specific requirements of an application, the ROTAMASS TI product portfolio features a design concept that Yokogawa said would provide the user with a 'Total Insight' into a plant's operations.

Targeting a range of industrial processes throughout a selection of varying business sectors, including oil and natural gas, chemicals, pharmaceuticals and foods, each new sensor product line has each been designed for specific application requirements and process conditions, whether they are high pressure or high temperature applications, or highly challenging processes involving hygienic or cryogenic conditions.

The new general-purpose (Essential) and high-end (Ultimate) transmitters come with an AC/DC universal power supply and can be configured to handle a range of functions.

ROTAMASS series mass flowmeters have been produced and supplied by Yokogawa's German subsidiary Rota Yokogawa since 1993 and its managing director Andreas Dobratz commented, "Yokogawa's new Coriolis mass flowmeter portfolio, ROTAMASS TI, sets a new standard in the industry. ROTAMASS TI offers improved specifications under real conditions, supporting an increased number of applications. The holistic approach of the 'Total Insight' philosophy supports the customer throughout all of the stages of the product lifecycle, significantly improving operations and plant maintenance."

To assist customers using the new products, Yokogawa has developed a tool that helps them to select the optimal sensor and transmitter combination for specific applications, as well as offering an online expert guide and a built-in configuration wizard to ensure quick and error-free commissioning.

The manufacturer has also added a Process Guard function that can be used to select event patterns for the issuance of alarms, configure the triggering of data logging based on alarms or manually set points, and specify whether data is to be backed up to a microSD card for use in root cause analysis, while a post-implementation phase solution will facilitate preventive maintenance and advanced flexibility.

A Maintenance Manager function, which includes Yokogawa's Tube Health Check technology, monitors all key sensing elements while the flowmeter is in use, yielding data that can be used to minimise disruptions and reduce maintenance costs. All data can be stored on a microSD card and a new Feature On Demand (FOD) option is available that allows users to upgrade already installed flowmeters by adding new product functions such as the Tube Health Check and a concentration measurement function.



Yokogawa's ROTAMASS Total Insight range consists of four-wire Coriolis mass flowmeters and transmitters.

### World's First.....



### Gasketing....



INMARCO FZC.,

W/H No. P6-50, P.O. Box 120284

SAIF Zone, Sharjah, UAE

Tel: +971 6 557 8378 • Fax: +971 6 557 8948

Email: info@inmarco.ae • Web: www.inmarco.ae

- ✓ Solvent Free Green Technology Processing.
- ✓ Certified UMPS AND UMCS by NET.
- ✓ Excellent Physical Properties
- ✓ High Reliability & Excellent Sealability
- ✓ Easy Cutting, Handling and Storage.
- ✓ Unique feature of strong durability
- ✓ Safe From VOC.
- ✓ Tested to Longer Life Cycle.
- ✓ Low Creep and Cold Flow.
- ✓ Can be used in Low stress applications.
- ✓ Low leakage >50%
- ✓ Superior Flexibility.



# اجريكو aggreko



## Your Partner for Power

No matter what industry you work in, you can rely on Aggreko to provide reliable power, quickly and affordably. From 30 kVA up to multi-megawatt packages, we provide turn-key service and flexible power tailored to your needs.

With over 50 years' experience and the world's largest fleet of rental generators, our service team are on call 24/7 to ensure that you have the power, whenever and wherever you need it.

### Aggreko, **Power Specialists** in the Middle East

#### Aggreko Middle East Ltd.

PO Box 16875, Dubai, UAE

T: +9714 808 6100 F: +9714 883 1825



**Abu Dhabi**  
+971 2 551 9494

**Sharjah**  
+971 6 534 5999

**Dammam**  
+966 3 858 0301

**Jeddah**  
+966 2 272 7640

**Doha**  
+974 4 460 6178

**Manama**  
+973 1 772 3381

**Muscat**  
+968 2 450 1873

**Safat**  
+965 398 3648

Aggreko operates from over 190 locations throughout the world.  
For the location nearest you, please go to: [www.aggreko.com/contact](http://www.aggreko.com/contact)

[me.aggreko.com](http://me.aggreko.com)



# MIDDLE EAST ELECTRICITY

ENERGISING THE INDUSTRY

14 - 16 FEBRUARY 2017 | DUBAI, UAE

Middle East Electricity and its industry leading portfolio of partner events facilitate business for the power generation, transmission, distribution, lighting, renewable and solar sectors across the Middle East and Africa through four key markets: Egypt, Saudi Arabia, the U.A.E. and Nigeria.



**SOLAR MIDDLE EAST**

14 - 16 FEB 2017 | DUBAI



**POWER NIGERIA**

27 - 29 SEPT 2016 | NIGERIA



**ELECTRICX**

4 - 6 DEC 2016 | EGYPT



**SOLAR - TEC**

4 - 6 DEC 2016 | EGYPT



**SAUDI POWER**

14 - 16 MAY 2017 | SAUDI ARABIA



**SAUDI AIRCON**

14 - 16 MAY 2017 | SAUDI ARABIA

**Contact us now to find out how these events can transform  
your business.**





**ORTEA**  
ahead of time



Italian excellence

- DIGITAL VOLTAGE STABILISERS**
- POWER TRANSFORMERS**
- POWER FACTOR CORRECTION SYSTEMS**



[www.ortea.com](http://www.ortea.com)

ORTEA SpA | Via dei Chiosi, 21 | 20873 Cavenago di Brianza MB - Italy | Phone: +39.02.95.917.800 | Fax: +39.02.95.917.801 | Mail: [sales@ortea.com](mailto:sales@ortea.com)

**HELUKABEL**  
The Worry-Free Cable Experience



#### Cables, Wires & Accessories

- Power & Infrastructure Cables
- Flexible Control & Data Cables
- High Flex Cables for Drag Chains
- Instrumentation Cables
- Rubber & Mining Cables
- Cable Glands & Conduits

#### Cable Expertise

- 30,000+ Products in Stock
- 35+ Years in the Industry
- 50 Global Warehouse Locations
- 6 Manufacturing Sites
- Custom & Specialty Cables
- Dedicated Customer Support

#### HELUKABEL Middle East, Dubai

PH: +971 48 87 95 94 · FX: +971 48 87 92 66  
[info@helukabel.ae](mailto:info@helukabel.ae)

#### HELUKABEL® Headquarters, Germany

PH: +49 7150 92 09-0 · FX: +49 7150 81 78 6  
[info@helukabel.de](mailto:info@helukabel.de)

# Powering through unreliable supply

Eaton Middle East general manager Frank Ackland discusses the role of uninterruptible power supply (UPS) in safeguarding access to electricity.

**T**HE IMPORTANCE OF safeguarding power supplies in the digital era cannot be overstated. In almost every aspect of industry and commerce, as well as day-to-day life, there is a critical dependency on having continuous access to information and communication technology (ICT) resources. This uninterrupted access can only be assured if those resources receive electrical power that is reliable and free from disturbances.

Originally, the supply network was designed to receive power from a relatively small number of large generating plants that had very predictable outputs. Now, the network is being asked to receive power from a large number of smaller energy sources with much less predictable outputs. Supply quality, therefore, is likely to be compromised, with voltage and frequency variations much more common than they were in the past.

This means that there is a greater need than ever for means of safeguarding the supply of power to key assets in order to ensure business continuity. In critical applications, this most often takes the

form of a UPS, a device that makes power available to loads even if the mains supply fails.

The UPS must ensure that, at any given time, the load receives clean and reliable power regardless of the condition of the mains power, and protect the load against problems in power quality, including long- and short-term supply interruptions, frequency and voltage variations, transient voltages and harmonic distortion.

With the growing dependence on critical IT applications on the one hand, and heightened environmental concerns and the increasing cost of power on the other, UPS manufacturers have been trying to achieve the right balance between resiliency and efficiency.

Recent innovations in technology allow UPS



Eaton Middle East general manager Frank Ackland. (Photo: Eaton)

manufacturers to combine the lowest total cost of ownership (TCO), achieved by providing market leading efficiency and excellent scalability features, with exceptional resiliency supported by innovative technology and design.

Two recent technological advances have led to a big leap in UPS devices. The first of these is the development of novel high-efficiency power converters based on the latest insulated-gate bipolar transistor (IGBT) technologies. This has enabled the overall efficiency of the latest UPSs to be raised to an exceptional 97 per cent when operating in double-conversion mode. The second development is a new energy saving technology based on powerful algorithms that allow the UPS to operate on a “double conversion on-demand” basis determined by the quality of incoming mains. In the best examples, the transition between energy saving mode and double conversion mode is seamless and extremely fast (less than two minutes), and is therefore invisible for the load.

**Two recent technological advances have led to a big leap in UPS devices.**

As a result of these developments, users can benefit from the unmatched security and quality of supply that only double-conversion UPSs can provide, while also enjoying reduced energy bills, which will ultimately provide big savings in TCO. A further benefit is that the high efficiency of such UPSs means that they generate less heat, so users also save on cooling costs. ■



Recent innovations in technology allow UPS manufacturers to deliver efficiency while providing savings on the TCO. (Photo:Eaton)

# ADAPTED TO THE UNPREDICTABLE

**SB** STAND-BY  
RANGE

The INMESOL Stand-By Range provides power in case of mains failure contributing to the **SAFETY** and **CONFORT** facilities.



[www.inmesol.com](http://www.inmesol.com)

INMESOL, S.L. / HEAD OFFICE

Carretera de Fuente Álamo, 2 / 30153 CORVERA - Murcia / SPAIN  
Phone: +34 968 390 300 | +34 968 390 879 | Fax: +34 968 390 400

[inmesol@inmesol.com](mailto:inmesol@inmesol.com)

Follow us on:    



POWER SOLUTIONS  
**INMESOL**

# Spotlight shines on Riyadh for Saudi Power

Energy industry showcase brings together exhibitors and visitors from around the region to promote power sector opportunities in Saudi Arabia.



*The show welcomed 5,051 trade visitors from the Kingdom, which is an increase of 43 per cent over last year's event.*



*International companies meet with local business leaders to discuss opportunities within the Kingdom's power sector.*

**T**HIS YEAR'S SAUDI Power, held in Riyadh in May, attempted to raise the awareness levels of the Kingdom's energy users through the introduction of the latest power and energy products and services available to them. Saudi Power 2016 used its platform at Riyadh International Convention & Exhibition Center to highlight the Kingdom's electricity sector and saw discussions take place on potential solutions and strategic projects. A host of local and international companies were on hand to showcase their latest power solutions, services and supplies.

Taking place from 9-11 May 2016, the event was inaugurated by Dr. Saleh Bin Hussein Al Awaji, deputy minister for electricity, Ministry of Water and Electricity (MOWE), Saudi Arabia, and organised by Riyadh Exhibitions Company in collaboration with Informa. The show brought together more than 150 exhibitors from 22 countries and witnessed an increase of 43 per cent in visitor numbers, with more than 5,000 visitors in attendance.

Humoud Al-Ghubaini, senior vice president – communications and public relations, from event sponsors Saudi Electricity Company (SEC), remarked, "Sponsoring Saudi Power 2016 fell in line with SEC's efforts

**"This show was the ideal platform to showcase the development of the local energy sector...and support the growth of local companies."**

**Humoud Al-Ghubaini, senior vice-president – communications and public relations, Saudi Electricity Company**

to nationalise the electrical industries in the Kingdom. This show was the ideal platform to showcase the development of the local energy sector, explore the latest related techniques, study the projects within the power sector, and support the growth of local companies by reducing the consumption and waste of energy."

Held alongside Saudi Power was partner event Saudi Aircon, which is among the leading exhibitions in the Middle East for the HVACR industry. Showcasing the latest equipment, technology and innovative solutions for the heating, ventilation, air-conditioning and refrigeration industries, the co-located event aimed to provide solutions and services for the Kingdom's air conditioning market, believed to be the largest in the world and which is expected to surpass US\$2.5bn by 2019. The event was held at a time when Saudi Arabia has been experiencing rapidly growing demands for indoor cooling due to high population growth, rising affluence, a developing tourism industry and numerous mega projects currently under construction.

At Saudi Power, exhibitors and event organisers were keen to express their thoughts on the event, including Abdullah Alkhorayef, CEO of Alkhorayef Commercial Company, who remarked, "We have been participating in this exhibition to announce for the first time in Saudi Arabia that a medium-voltage Gulfpower diesel generator set has been assembled locally in cooperation with Cummins. We also showcased our most prominent services offered in the field of energy solutions for an audience of specialised professionals."

Meanwhile, Prince Saud Al-Abdullah Al-Faisal bin Abdulaziz, Chairman, said, "The Saudi Power exhibition is a dedicated platform for all specialised companies operating in this sector, attracting hundreds of local and international companies seeking to further position themselves in the Saudi Arabian market and showcase their latest products, services and technologies. The exhibition also provides an opportunity to close business deals, thus supporting the development of the power and HVAC sector in the Kingdom." ■

# Improving service quality through network automation

Lucy Electric are experts in secondary distribution network automation with an extensive range of products and services designed to deliver enhanced network intelligence, the highest levels of operational efficiency and easy flexible upgrades to meet our customers' changing needs.

From retrofit solutions, to the latest generation, automation-ready ring main units, remote terminal units, SCADA, distribution management and LV monitoring systems, for both underground and overhead networks, we provide everything operators need to efficiently and cost effectively automate their distribution network.



Aegis Plus



Gemini 3 RTU



Rapier GX

For more information on our solutions contact us on:

+971 4 8129999  
salesme@lucyelectric.com

*engineering intelligent solutions*



[www.lucyelectric.com](http://www.lucyelectric.com)

# Competition to highlight future energy leaders

Solar energy students get set to battle at Dubai solar power trade event as the region's nations aim to build on commitments made at COP21.

**D**UBAI SOLAR POWER event Intersolar Middle East has launched the 'Young Leaders' Innovation Challenge', which will take place at the event in September 2016. The contest will aim to encourage students throughout the Middle East and North Africa (MENA) region to contribute towards commitments made during the Paris Agreement at COP21 in December 2015.

Teams entering the competition, which will be held under the patronage of UAE Minister of Energy HE Eng. Suhail Mohamed Faraj Al Mazrouei, will attempt to demonstrate how a 25 per cent reduction in energy consumption can be achieved by retrofitting renewable energy technologies to a government building of their choice.

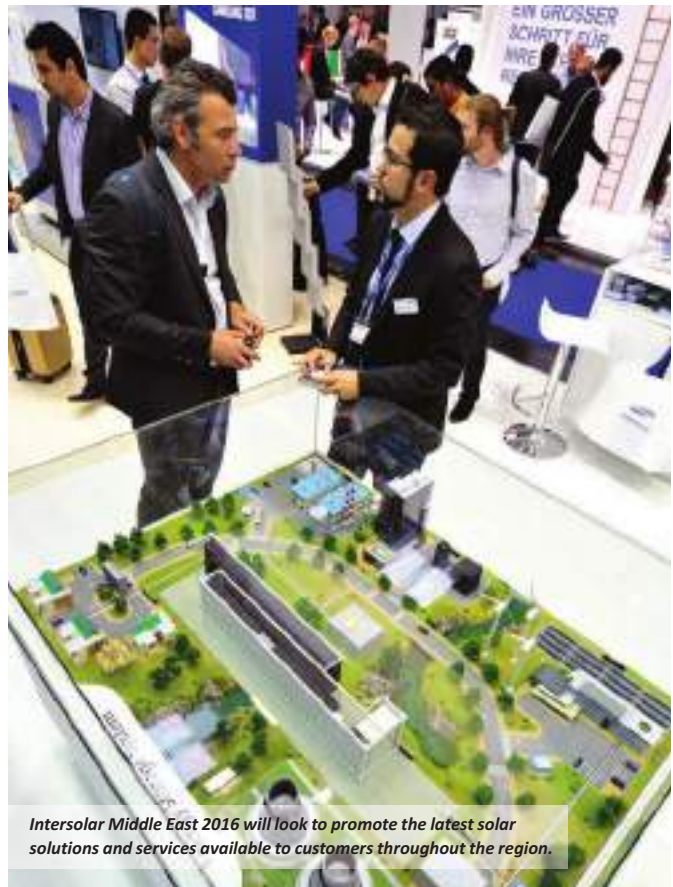
Triumphant competitors will win a trip to the German city of Munich with cash prizes await winning teams.

"The Young Leaders' Innovation Challenge is intended to create links between academic research and applied science at a time when the UAE seeks to make good on its goal of increasing its share of renewable energy to 24 per cent by 2021," said Middle East Solar Industry Association (MESIA) vice-president Hadi Tahboub.

"The physical environment and attitudes toward sustainability in the UAE make it an ideal hotbed for creating a world-class renewable energy sector, and we see great value in taking that message to the world through the Young Leaders' Innovation Challenge."

More than 13 universities have already signed up to the competition, including Masdar Institute, Khalifa University and Petroleum Institute from the UAE, Sultan Qaboos University from Oman and Saudi Arabia's King Abdullah University of Science and Technology, with teams being given a deadline of 31 July 2016 to submit their entries.

A panel of jury members, which will include representatives from MESIA, DWTC, Dubai Municipality, First Solar, Green Technologies, Masdar and the Clean Energy Business Council, will select the winning entries, with the winners presented with an opportunity to



*Intersolar Middle East 2016 will look to promote the latest solar solutions and services available to customers throughout the region.*

exhibit their projects and represent the Middle East at Intersolar Europe 2017 in Munich.

## Solar sector showcase

Intersolar Middle East, which will take place from 19-21 September 2016 at Dubai World Trade Centre, is part of a world series of exhibitions that have been promoting innovation and opportunities within the solar industry for more than quarter of a century.

The 2016 Middle East edition will take place for the first time at Dubai World Trade Centre in conjunction with GulfSol, with the aim of increasing the share of solar power in global and local energy supplies.

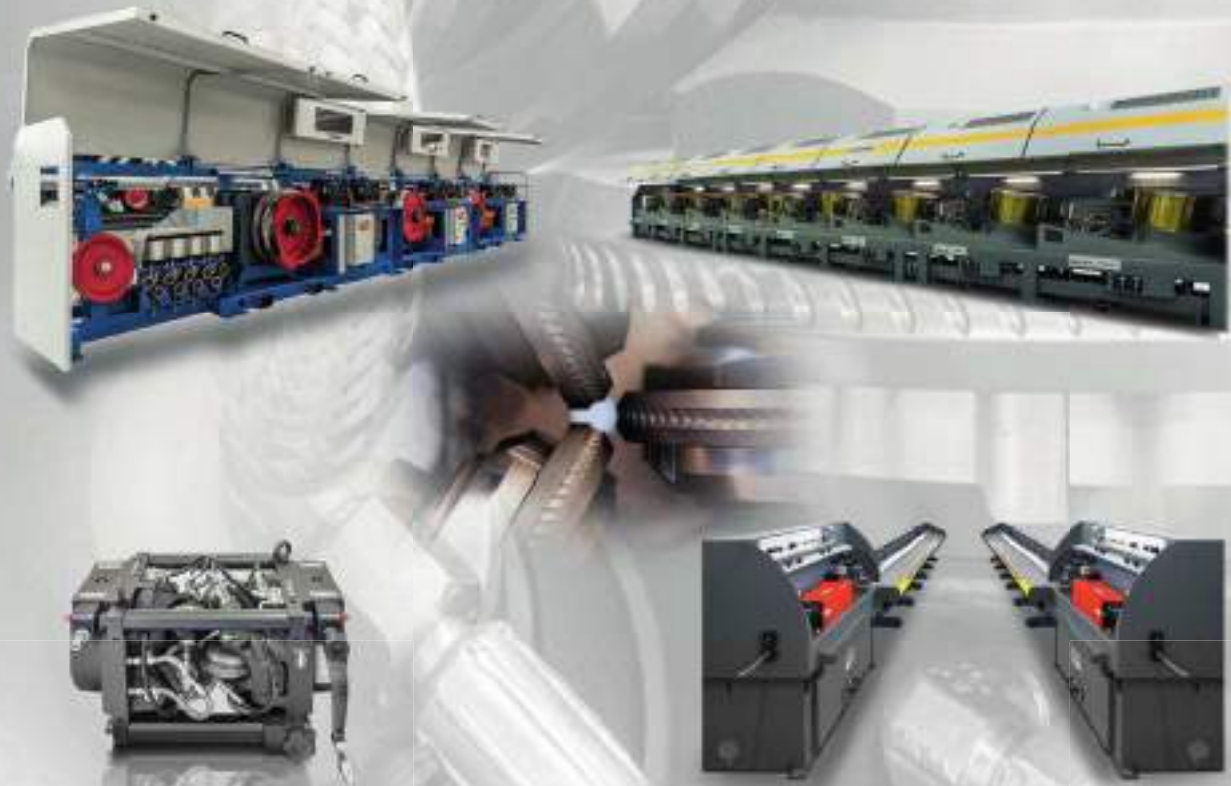
Both the exhibition and conference will focus on photovoltaics (PV), PV production technologies, energy storage systems and solar thermal technologies, offering a platform for manufacturers, suppliers, distributors, service providers and partners. ■

**"The physical environment and attitudes toward sustainability in the UAE make it an ideal hotbed for creating a world-class renewable energy sector."**

MESIA vice-president Hadi Tahboub



## THE RIGHT SOLUTION TO ALL YOUR WIRE NEEDS.



### Industrial and construction sector

- Rolls and Rolling cassettes
- Cold rolling lines for production of ribbed/smooth reinforcement steel
- Stretching lines for production of high ductility/high resistance reinforcement steel
- Lattice girder lines
- Multipass Dry Drawing/Rolling wire production lines
- Multipass Wet Drawing wire production lines
- Production lines for welding wires and electrodes
- LRPC wire, LRPC strand, bead wire and steel cord equipment
- Rod and wire treatment and preparation plants
- Steel fiber production machines

### Vitari processing lines

- Straightening and cutting machines
- Chain bending, welding and calibrating machines
- Nail making machines
- Barbed wire machines
- Chain link fencing machines
- Hexagonal wire netting roll and gabion machines
- Dress-hangers machines
- Chamfering and embossing machines



Contact: Graham Raynor (General Manager)  
International Trade Solutions (FZE), Dubai  
+971 (0)52 9373222

[www.itsol.ae](http://www.itsol.ae) | [www.eurolls.com](http://www.eurolls.com) | [www.cliffeng.com](http://www.cliffeng.com)



[www.eurolls.com](http://www.eurolls.com)

## HIMOINSA targets Egyptian public institutions at OTRAC event in Sharm el-Sheikh

MORE THAN 200 visitors, including representatives of Egyptian bodies such as the National Organisation for Potable Water and the National Electricity Company, were in attendance during the “OTRAC MANEUVER D4YS” event held in Sharm el-Sheikh, on the Egyptian Red Sea coast. The event was organised by OTRAC Heavy Equipment, HIMOINSA’s official distributor in Egypt, where the company demonstrated the HDW-120 T5 and the HYW-20 T5 generator sets.

The HYW-20 T5 is fitted with a Yanmar engine and features an integrated ATS, monitoring and remote control. Its 1,000 litre tank allows it to run for up to 14 days without interruption, and a special kit can be added that extends the maintenance periods to up to 1,000 hours.

Also showcased at the event was the APOLO Start AS4006 lighting tower, which is able to withstand temperatures of up to 45°C. The lighting tower can operate for up to 70 hours non-stop and more than seven nights without refuelling. Its four lightbulbs

have a 1,000W output, offering a total of 384,000 lumens and can light up to 32,000 square metres. The mast is nine metres high and folds manually and horizontally for optimal and easy transport, while its four lightbulbs fold vertically, allowing up to 18 units to be stacked in a 40’ container.

HIMOINSA regional sales manager Imen Sahbi said, “HIMOINSA has been working in the Egyptian market for more than 15 years. Our relationship with OTRAC began in 2012 and it has become an important partner for HIMOINSA in Egypt. We have many important projects in this country, primarily within the water treatment sector, where we work with organisations such as the Egyptian National Organisation for Potable Water.”

HIMOINSA’s power solutions have been used by Egyptian institutions in previous years, with the company having worked with the country’s Ministry of Defence, as well as supplying 12 HDW-525 T5 generator sets to provide energy during construction work on the second phase of the Suez Canal.

*The lighting tower showcased at the event. (Photo: HIMOINSA)*



## TAMGO wins major Saudi Arabian telecoms genset contract



*FG Wilson has had a presence in Saudi Arabia since the 1970s. (Photo: FG Wilson)*

FG WILSON’S SAUDI Arabian dealer TAMGO has won an award to supply and install 370 generator sets for a major telecoms service provider in the Kingdom.

The order, TAMGO’s largest contract in its history, will consist of the delivery of a mixture of 33 and 50 kVA units and will replace existing units supplied by other manufacturers.

The generating set will operate under extreme site conditions and will be required to operate in an ambient temperatures up to 55°C and regular sand storms. They will supply power to cellular towers spread throughout Saudi Arabia and will be installed on-site by the end of Q3 2016.

Islam Fathy, engineering products division manager at TAMGO, commented, “We have been working closely with the customer for a while leading up to the signing of the order, which included visits for the client to FG Wilson’s UK facility, and we’re delighted to have been selected as supplier for this project.

“It really underlines the quality of FG Wilson generator sets and also TAMGO’s commitment to supporting them in tough environmental conditions,” he added.

TAMGO has been the exclusive FG Wilson dealer in Saudi Arabia since 1995 and has installed more than 8,000 generator sets since that time, with a combined electric power output of 1.5GW.

Established in 1991, TAMGO has grown into one of Saudi Arabia’s

longest-standing and established industrial machinery providers, supplying products ranging from portable power and stationary compressors to construction machinery and welding machines.

Meanwhile, in 2016, FG Wilson has been celebrating 50 years within the power industry and has had a presence in the Saudi Arabian market since the early 1970s. Some of its earliest projects in the Kingdom were for large generator sets for standby power in hospitals and self-contained mini power stations for prime power.

Worldwide, FG Wilson’s products are supported by its global network of around 300 dealers, who offer full aftermarket and warranty support. Its dealers are trained on all aspects of the generator package and supported by the FG Wilson central technical helpdesk, technical libraries, on line systems and a parts distribution centre, which ships three million parts a year and carries 11,500 product line parts.



## SDMO unveils new rental engine models at German construction exhibition

OCCUPYING TWO STANDS at Bauma, one inside the exhibition halls and another in the outdoor arena, SDMO used its presence at the show, held in Munich in April 2016, to introduce visitors to the latest products in the company's Portable, Rental Compact, Rental Power and Contenergy ranges.

At Bauma 2016, SDMO demonstrated the diversity of its power product offering, with previews of the R22C3 and R44C3 KDI models from the Rental Compact range, the R1400 from the Contenergy range and the RL4500-5 lighting tower. Equipped with Kohler Diesel Engine Stage 3A engines, the R22C3 and R44C3 were on show and, along with the R33C3, represent the latest additions to SDMO's Rental Compact range.

Discussing these new products, SDMO communication department manager Philippe Forest remarked, "Our aim has been to continue integrating Kohler Direct Injection (KDI) engines into our compact generators, because they require less maintenance.



*The 22 kVA trailer-mounted model presented by SDMO at Bauma 2016.*

"The rental companies we sell these products to tend to use these gensets a lot and that means they want something with a lot of ability. Of course, they want to pay less to use it, so they want products with lower consumption and where the periods between maintenance are longer, and these really are the advantages of these engines.

"These machines have been designed for the rental market, for the people that may not be experts on using gensets. They're very easy to use and check, such as in cases where the oil level is low, for example. Their compactness and the fact they have low consumption levels makes them very attractive to rental companies and their customers."

While the machines have been configured for the strict regulations of the European genset market, Forest said that following the initial launch of the new models in January 2017, SDMO would shortly follow with the launch of non-certified engine versions for markets in the Middle East and Africa.

Also on show for SDMO at Bauma 2016 was the R1400, which has the capacity to generate 1.4MW and is situated inside a 20-foot CSC container. Designed to meet the often gruelling demands of the construction and rental markets, the genset has been equipped with a Mitsubishi engine and can be configured for 50 or 60 Hz operation.

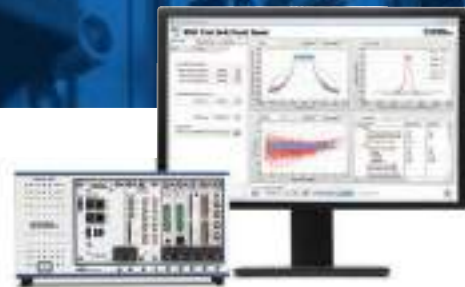
"It is a simple engine without too many electronics and it's easy to maintain – even if the fuel used to power it is not of a high quality," Forest remarked. "This unit is simple to use and has been adapted to suit the needs of the market."



## SMART DEVICES REQUIRE SMARTER AUTOMATED TEST SYSTEMS

The old approach to automated test isn't scaling, but you already knew that. Look at your balance sheet. To test smart devices, you need a smarter test system built on a platform of NI PXI, LabVIEW, and TestStand. More than 35,000 companies deploy NI technology to lower their cost of test—what are you waiting for?

Prepare for the future at [ni.com/smarter-test](http://ni.com/smarter-test)



NI PXI, LabVIEW, and TestStand

## Innovative gap filler for electronic applications

MUNICH-BASED CHEMICAL COMPANY WACKER has launched a new heat-conducting silicone gap filler material, SEMICOSIL 961 TC, for the electronics industry.

The new product is a highly filled, two-part silicone rubber that cures at room temperature through a platinum-catalysed addition reaction to form a soft silicone elastomer with a tacky surface. The cured rubber achieves a thermal conductivity of 2W/mK and, at the same time, is electrically insulating.

Before it cures, SEMICOSIL 961 TC is a non-sag material. However, its viscosity decreases with increased shearing, for example during mixing and metering. The shear-thinning property of the material is adjusted so that the silicone rubber can easily be fed by machine. This feature allows processors to achieve a high metering rate and very high dosing accuracy.

SEMICOSIL 961 TC ensures optimum heat transfer from the electrical circuit to a heat sink. The gap filler is first applied to the heat sink and the circuit board is then pressed on or fitted by means of a vacuum process. During compression, a continuous film is formed that conforms to the surfaces of the two joining parts. This minimises surface irregularities and tolerances and maximises the contact area, promoting heat transfer. The film cures to form a silicone layer between the joining parts. Its soft consistency ensures a tight fit even during frequent temperature changes and vibrations.

The new silicone gap filler can be used over a wide temperature range. Its properties remain unchanged between -45 and +180°C.



*According to the manufacturer, this silicone rubber is an ideal interface material for thermally connecting electronic circuits, ensuring effective heat management. (Image Source: Wacker Chemie AG)*

High thermal and thermal-shock resistance and the ability to absorb vibrations are important for applications in automotive electronics and electromobility, for example.

SEMICOSIL 961 TC was showcased at the Power Conversion and Intelligent Motion electronics tradeshow (PCIM) Europe held in Nuremberg, Germany, from May 10 to 12.

## Powering Riyadh Metro project

ROOTS GROUP ARABIA has delivered 80 Chicago Pneumatic CPSG stationary generators to the BACS consortium working on Riyadh Metro, scheduled for completion in 2018.

The Riyadh Metro project – one of the world's largest metro systems – comprises the construction of an automatic driverless public transport system featuring 87 stations, located across six lines totalling more than 170 km in length, more than 73.4 km of which will be underground. BACS is using the 80 gensets to help construct Lines 1 and 2 of the metro, where they are powering a large variety of applications including road and

tunnel lighting, site office electrification, electric power tools and water coolers.

Roots Group Arabia, an official distributor of Chicago Pneumatic generators in Saudi Arabia, won an order of US\$975,000 in June 2015 from BACS to acquire a total of 80 Chicago Pneumatic CPSG stationary generators. The order included 20 CPSG185 (185 KW/235 KVA) models, 30 CPSG40 (40 KW/ 50 KVA) models, and another 30 CPSG18 (18 KW/ 22.5 KVA) models.

Securing a reliable power supply with high levels of safety was of paramount importance for the main project and this called for generators that could run

continuously for between 24 and 36 hours with limited idle time and able to withstand the high ambient temperatures experienced in the Middle East.

The CPSG generators have been built to operate in both high temperature and high humidity conditions and come equipped with tough canopies featuring ultraviolet (UV) panes that protect the engine and control panel – even against the sandstorms occasionally witnessed in Saudi Arabia.

Roots Group Arabia deputy general manager Ashraf Hemaidah said, "The Riyadh Metro is a very time-sensitive project. One of the key requirements of the client was to keep all the equipment running safely to prevent any delays and cut downtime costs.

"With our comprehensive package of support services the customer did not need to worry about any possible disruptions and delays. The technical characteristics of the generators also made it easier to meet local health, safety, and environment requirements," he added.

Along with the machine order, Roots Group has also secured the service contract, which includes providing a one-year unlimited running hour warranty and other service provisions.



*The generators have been designed to withstand the harsh climatic conditions of Saudi Arabia. (Photo: Chicago Pneumatic)*



**Totally Focused. Totally Independent.**

# More than meets the eye

It's always a good idea to check what's going on under the surface. For example, many of the world's leading gen-set manufacturers have a Mecc Alte alternator inside. Because our entire focus is on making alternators, we can flex and adapt to suit the specialist needs and power requirements of our customers.

Teamed with our exceptional global sales and after-sales support, our customers can expect the best products with outstanding service and value, wherever they are in the world.

All of these reasons go some way to explaining why so many of our customers see us as...the natural choice for alternators.

Scientists believe that the venom from the hornet's sting can be effective in the fight against multidrug resistant microorganisms. Already proving effective in inhibiting the growth of bacteria such as E-coli and Staphylococcus aureus.

**The world's largest independent  
producer of alternators 1 – 5,000kVA**

**[www.meccalte.com](http://www.meccalte.com)**





- MOTOR CONTROL AND PROTECTION
- CONTROL AND SIGNALLING
- CIRCUIT PROTECTION AND ISOLATION
- AUTOMATION AND CONTROL
- ENERGY MANAGEMENT

**Lovato**  
**electric**

ENERGY AND AUTOMATION

[www.LovatoElectric.com](http://www.LovatoElectric.com)

## Transformer testing made easy

IN RESPONSE TO the growing demand for compact test systems capable of performing a wide range of tests, Megger has developed TRAX, a new range of multifunctional transformer and substation test systems.

The new system, TRAX220, weighs just 32kg and according to the manufacturers, is the lightest test system of its type.

Despite its compact construction, the system is capable of performing

numerous test functions, for example, the measurement of winding resistance including demagnetisation of the transformer core, tap-changer continuity and timing, turns ratio, excitation current, short-circuit impedance, tan delta, capacitance, CT and VT testing, as well as circuit breaker timing and motion analysis.

Apart from full manual control for measurements, the system also comes with dedicated apps for guided testing. Each app implements a specific test function and automatically configures the instrument for the test. This app-based approach is aimed at providing ease of use and eliminating the need for extensive user training.



*The test system supports the generation and measurement of a wide range of currents and voltages.*  
(Photo: Megger)

## Powering Ahead



### With high quality innovative products

Apar Industries Ltd., a Rs. 5000 crores diversified manufacturing company, is a leader in the fields of Power Transmission Conductors, Petroleum Specialties and Power and Telecommunications Cables. The company which has a presence in over 100 countries is the 4th largest manufacturer of Transformer Oils and in the top 5 producers of Aluminium and Alloy conductors in the world.

The POWEROIL product range of lubricants also include Turbine oils for the power industry. The company has also been at the forefront of developing and marketing high performance conductors which includes AL 59, AL-59 / TW, TACSR, ASCC, ACSS / TW, GZTACSR / GTACSR, STACIR / AW, ACCC etc. and is the largest exporter of these POWERLINE conductors from India.

Apar also offers a comprehensive range of Power and Telecommunications Cables under the UNICAB brand name.

Apar is a technology driven customer focused company with the ability to deliver innovative quality products and services that match the exacting customer needs with cost effectiveness and timely deliveries. The company continues to enjoy the trust of major Power Generation, Transmission and Distribution companies, OEMS & Utilities world over.



'Tomorrow's Progress Today'

### APAR INDUSTRIES LIMITED

(An ISO 9001-2008, ISO 14001-2004 & OSHAS 18001-2007 Certified Company)  
Apar House, Build. No.5, Corporate Park, Sion-Trombay Road, Chembur, Mumbai 400 071, Maharashtra, India  
Phone: + 91 22 25263400; Fax: + 91 22 67800400 E-Mail: corporate@apar.com Website: www.apar.com

# A new generation is born

New products.  
New technologies.  
New service capabilities.  
Ansaldo Energia: a global player  
in the power generation market.



## German chimney solutions for the Middle East

JEREMIAS, AN INTERNATIONAL manufacturer of flue and chimney systems for exhaust of gases and ventilation, offers a range of chimney solutions for the Middle Eastern market.

The German company, which recently launched its subsidiary in the Middle East, specialises in pre-fabricated and freestanding stainless steel chimney systems are offering its Middle East clients an all-in-one package with a large selection of products, technical support for projects, chimney sizing software, test-capable chimney static calculations and certifications.

The group offers a wide range of German-engineered stainless steel flue and chimney systems for various kinds of applications such as boilers, generators, kitchen extracts, laundry exhausts and ventilation towers.

The company's exhaust, chimney and special ventilation systems offer a wide variety of components for industrial use. Among these are generator and turbine exhausts, cogeneration/CHP-incinerator exhausts, industrial process exhausts, engine exhausts, dry oven exhaust, micro-



*Jeremias offers a wide range of stainless steel flue and chimney systems for the Middle East market. (Photo: Jeremias)*

cogeneration, chimney relining systems, fan assisted systems, freestanding chimneys, mast supported chimneys, ventilation towers for underground facilities, fire rated kitchen extract, collective shared kitchen extract, mechanical controlled ventilation systems and chemical ventilation.

Through its Dubai office, this technology has been made available to customers

throughout the Middle East along with a local service package incorporating site visits and inspections, design and specifications, chimney sizing and calculation, on-site installation, reports on existing flue conditions, technical advice and recommendations, complete supply including fixing elements, commissioning and maintenance.

## Dealing with low power quality

ITALIAN MANUFACTURER, ICAR, provides a range of power quality solutions aimed at reducing the threats posed by low power quality.

Power quality is gaining increasing attention in the electric power industry, especially in Middle Eastern countries where the demand for electricity is growing fast.

Low power quality can affect businesses in many ways, including power failures, breakdowns or malfunctions of machines, overheating of machines such as transformers and motors leading to the shortening of life expectancy, damage to sensitive equipment like computers and production line control systems, electronic communication interference, increased distribution system losses and luminosity flickering.

Interruption of production due to these impacts of low power quality entails high costs due to production loss and the associated waste. According to market research, for the industrial sector, the estimated costs due to poor power quality represent four per cent of the turnover, while for the service sector, it is 0.15 per cent

ICAR provides a full range of power quality solutions including power factor correction capacitors and banks, and active harmonic filters, aimed at reducing the threats posed by low power quality. The solutions vary depending on



*ICAR's ACTIVEmatic FA30 active harmonic filter is designed to provide robust protection against harmonic pollution. (Photo: ICAR)*

the cause of low power quality. Among the main causes of poor power quality in low voltage are excessive reactive power and harmonic pollution, which causes additional stress on the networks and systems, causing them to operate less efficiently.

Excessive reactive power is regulated by a power factor correction system, which not only avoids any penalties due to excessive reactive energy, but also reduces the "unnecessary" electrical current that flows into the lines and power components, yielding substantial benefits, such as reducing voltage drops along the lines and leakages due to the Joule effect. ICAR produces industrial LV polypropylene and bi-metallised paper power factor correction capacitors and systems.

Harmonic pollution is caused by large amounts of non-linear consumption from inverters, soft starters, rectifiers, power electronics and others sources. Such devices deform the electrical current causing disturbances and problems to the system. This pollution can cause problems within power systems ranging from the false operation of protection devices to the physical damage of power system components and loads. Active harmonic filters are a solution to harmonic pollution. ICAR has developed active harmonic filters to combine a high level of efficiency with flexibility of installation.

# SHAPING THE FUTURE OF SYNCHRONISING.



## DSE8610 MKII

### Synchronising & Load Sharing Control Module

- Powerful dual core main processor and high-capacity memory.
- Tier IV engine support.
- User definable start-up screen for adding individual customer logos.
- DTC display provides visibility of current and historic alarms in the ECU memory.
- Comprehensive data logging.
- Auto voltage sensing with alternative configuration.
- + Many more industry-leading **NEW** features.



# Electrical Equipment and Materials Buyers' Guide

# 2016

## The Middle East's annual where-to-buy guide

**Section One:** Listings by category

**Section Two:** Suppliers of electrical equipment and materials, page 53

**Section Three:** Contact details of Middle East agents & subsidiaries listed by country, page 66

### Section One: Listings by category

#### AC Alternators

Mecc Alte UK Limited

#### AC Drives

CG

Control Techniques, business unit of Emerson Industrial Automation

Lloyd Dynamowerke GmbH

#### Accumulators

Saft SA

#### Air Compressors

FAMCO (Al-Futtaim Auto & Machinery Co. LLC)

Gardner Denver FZE

Kaeser Kompressoren FZE

Samsung Techwin

#### Air Conditioning / Chillers / Heat Exchangers

Aggreko Middle East Ltd.

Bosch Industrial

Eksen Teknik Sunger San. ve Tic. Ltd. Sti.

LG Electronics Gulf FZE

Luvata Söderköping AB

Rittal Middle East FZE

UL

#### Air Curtains & Filters

Panasonic Marketing Middle East and Africa FZE

#### Ammeters

KFB Holding Group

#### Asbestos, GRP, Fibre Glass

Huegli Tech AG Ltd.

#### Auto Recloser

KFB Holding Group

Tripp Lite

#### Automation Systems

ASCO Numatics, business unit of Emerson Industrial Automation

Emerson Industrial Automation

HIMA Middle East FZE

KFB Holding Group

Phoenix Contact Middle East FZ LLC

#### Batteries

ASCO Numatics, business unit of Emerson Industrial Automation

Dale Power Solutions

KFB Holding Group

Saft SA

Silicon Power Systems

#### Battery Lighting

Saft SA

#### Biomass Systems

Jeremias Middle East

#### Boiler Plant/Instrumentation

Bosch Industrial

HIMA Middle East FZE

Jeremias Middle East

Megger Ltd.

#### Boilers & Auxiliary Equipment

Bosch Industrial

Jeremias Middle East

#### Bus Bar Systems

AREL®- New Arel Srl

Eaton Power Quality SAS

Imequadri Duestelle S.p.A.

KFB Holding Group

Pollmann Elektrotechnik GmbH

UL

#### Cable - Conductor Products

HellermannTyton GmbH

HELUKABEL Middle East DWC LLC

KFB Holding Group

UL

#### Cable Fault Locator

BAUR GmbH

Prime Meiden Ltd.

#### Cable Handling Equipment

Eland Cables

HellermannTyton GmbH

HELUKABEL Middle East DWC LLC

#### Cable Jointing & Termination

Eland Cables

First Forever Co. Ltd.

HellermannTyton GmbH

HELUKABEL Middle East DWC LLC

KFB Holding Group

Megger Ltd.

Mosdorfer GmbH

Novoflex Marketing Pvt. Ltd.

Power Testing Ltd.

Shawcor

Yamuna Cable Accessories

Pvt. Ltd.

#### Cable Labeling

Brady Middle East

HellermannTyton GmbH

#### Cable Laying Equipment

HellermannTyton GmbH

#### Cable Protection & Support

HellermannTyton GmbH

HELUKABEL Middle East DWC LLC

Novoflex Marketing Pvt. Ltd.

Thomas & Betts / A member of the

ABB Group

Valdinox

#### Cable Testing Equipment

BAUR GmbH

Eland Cables

Phenix Technologies Inc.

Tripp Lite

Udeyraj Electricals Pvt. Ltd.

Zahid Tractors

#### Cable Tiles / Protections

Novoflex Marketing Pvt. Ltd.

#### Cable Trays

Eland Cables

Electric House Est.

Galva Coat for Galvanizing & Light Poles

HellermannTyton GmbH

KFB Holding Group

Thomas & Betts / A member of the

ABB Group

UL

Valdinox

#### Cable Trunking & Support

Galva Coat for Galvanizing &

Light Poles

Valdinox

#### Cables & Cable Accessories

alfanar trading

Bahra Cables Co.

Brady Middle East

Eland Cables

HELUKABEL Middle East DWC LLC

KFB Holding Group

Nuhas Oman LLC

Pollmann Elektrotechnik GmbH

Shawcor

Tecnalia

Yamuna Cable Accessories

Pvt. Ltd.

#### Capacitor Banks

ICAR S.p.A.

ORTEA S.p.A.

Powertech Switchgear Industries

FZE

UL

#### Capacitors

ICAR S.p.A.

#### Cast Resin Transformers

KALPA ELEKTRIKAL Pvt Ltd.

KFB Holding Group

Power Testing Ltd.

Udeyraj Electricals Pvt. Ltd.

#### Cathodic Protection

Zahid Tractors

#### Ceiling Fans & Exhaust Fans

Jeremias Middle East

Leroy-Somer Electric Power

Generation

#### Centrifugal Machineries

Samsung Techwin

#### Circuit Breakers

alfanar trading

AREL®- New Arel Srl

Eaton Power Quality SAS

Electric House Est.

KFB Holding Group

KoCoS Messtechnik AG

Novateur Electricals & Digital

Systems Limited

Zahid Tractors

#### Cogeneration

Deep Sea Electronics PLC

Kohler Power Systems

S.I.C.E.S. S.r.l.

Samsung Techwin

SDMO Industries

#### Coiled Tubing

DHYBRID Power Systems

#### Communication Equipment

Deep Sea Electronics PLC

#### Components

Bin Ham Eletrical Equipment

Trading LLC

Metal Deploye Resistor

#### Compressor and Turbine Blades

Samsung Techwin

#### Compressors

DHYBRID Power Systems

Kaeser Kompressoren FZE

MAN Diesel & Turbo SE

Samsung Techwin

#### Conductors

Bahra Cables Co.

HELUKABEL Middle East DWC LLC

Oriental Copper Co. Ltd.

Pollmann Elektrotechnik GmbH

#### Conduit & Fittings

Appleton Group, business unit of

EMERSON Industrial

Automation

HellermannTyton GmbH

HELUKABEL Middle East DWC LLC

Novoflex Marketing Pvt. Ltd.

Panasonic Marketing Middle East

and Africa FZE

Super Impex

UL

Valdinox

#### Connectors

HELUKABEL Middle East DWC LLC

Marechal Electric

Pollmann Elektrotechnik GmbH

#### Connectors and Fittings

HellermannTyton GmbH

#### Consultancy Services

HIMA Middle East FZE

UL

#### Control Equipment/Systems

CG

Deep Sea Electronics PLC

HIMA Middle East FZE

Motortech GmbH

Rotork PLC

S.I.C.E.S. S.r.l.

WAGO Middle East FZC

#### Control Instruments

National Instruments

#### Control Safety, System Protection & Monitoring Equipment

HIMA Middle East FZE

Power Testing Ltd.

#### Control System - Industrial & Residential

alfanar trading

COELMO Spa

Deep Sea Electronics PLC

HIMA Middle East FZE

#### Conversion & Storage of Electrical Energy

Layer Electronics S.r.l.

#### Cooling & Heating Equipment

Bosch Industrial

Luvata Söderköping AB

#### Copper Rod & Wire

Bahra Cables Co.

HELUKABEL Middle East DWC LLC

John Deere Power Systems

Motorenfabrik Hatz GmbH &

Co. KG

Nuhas Oman LLC

Oriental Copper Co. Ltd.

#### Crimping Sockets

Super Impex

#### Current Transformers

Altaaqa Global CAT Rental Power

CG

KALPA ELEKTRIKAL Pvt Ltd.

KFB Holding Group

#### Damper System

Mosdorfer GmbH

#### Data Communications Equipment

Netcontrol

#### Data Logging

National Instruments

#### Detectors

Bin Ham Eletrical Equipment

Trading LLC

#### Diesel Engines

Caterpillar Inc.

Cummins Middle East FZE

Deep Sea Electronics PLC

Eksen Teknik Sunger San. ve Tic.

Ltd. Sti.

INMESOL S.L

JCB Power Products

JMG Limited

John Deere Power Systems

Jubaili Bros

Kirloskar Oil Engines Ltd.

Lister Petter Ltd.

Mahindra Powerol - Mahindra &

Mahindra Ltd.

MAN Diesel & Turbo SE

Mantrac Group

Perkins Engines Co. Ltd.

Rollo Power Solutions

Scania CV AB

SES SMART Energy Solutions

FZCO

Volvo Penta





# World-class, customised **CRANE SOLUTIONS**

for Manufacturing, Oil & Gas, Process plants, EPC projects

Established in 1979, ElectroMech has been present in the Middle East since the 90s. With our own local manufacturing facilities, offices and a team of experts, we have developed unmatched competence in this market through a range of solutions.

We are a trusted solutions partner to a variety of industries. Our safe, productive and advanced handling solutions are performing efficiently at over 5000 installations in over 40 countries around the world.

Obviously, ElectroMech is your first choice every time, anywhere in the world.

**Crane types: Single girder | Double girder | Jib | Wall travelling | Gantry | Customised**



KaleidoscopeB2B.com-05

contactus@emech.ae    www.emech.ae    +971-4-8857466



# ElectroMech

| Solutions | Service | Satisfaction |

**Dimmers**

alfanar trading  
Leroy-Somer Electric Power Generation

**Distance Relays**

CG

**Distribution Services / Equipment**

KFB Holding Group  
Power Testing Ltd.

**Downhole**

Megger Ltd.

**Earth Leakage Protection**

Novateur Electricals & Digital Systems Limited

**Earthing / Lightning Equipment & Accessories**

Cressall Resistors Ltd.  
Metal Deploye Resistor  
Phoenix Contact Middle East FZ LLC

Pollmann Elektrotechnik GmbH

Super Impex

Thomas & Betts / A member of the ABB Group

**Electric Drives**

Control Techniques, business unit of Emerson Industrial Automation

IGEL Electric

Lloyd Dynamowerke GmbH

**Electric Generators - Turbo Generators & Hydro Generators**

AJ Power Ltd.

Altaaqa Global CAT Rental Power

Ascot Industrial S.r.l.

Associated Power Solutions FZC

Cummins Middle East FZE

Deep Sea Electronics PLC

Eksen Teknik Sunger San. ve Tic. Ltd. Sti.

Gamesa Electric

HIMOINSA

INMESOL S.L

Jeremias Middle East

Kohler Power Systems

Linz Electric S.p.A

Lloyd Dynamowerke GmbH

Mahindra Powerol - Mahindra & Mahindra Ltd.

Marelli Motori S.p.A.

Mecc Alte UK Limited

**Electric Motors / Repairs Equipment**

CG

Gamesa Electric

Lloyd Dynamowerke GmbH

Marelli Motori S.p.A.

Tripp Lite

Udeyraj Electricals Pvt. Ltd.

Zahid Tractors

**Electrical Control Unit Equipment**

ELSTER SOLUTIONS LLC

National Instruments

S.I.C.E.S. S.r.l.

Sakr Power Systems S.A.L

**Electrical Meters / Actuators**

ASCO Numatics, business unit of Emerson Industrial Automation

KFB Holding Group

**Electrical Testing & Certification**

ELSTER SOLUTIONS LLC

LOVAG

Phenix Technologies Inc.

Power Testing Ltd.

**Electrical Wiring Accessories**

Eaton Power Quality SAS

Electric House Est.

HELUKABEL Middle East DWC LLC

Novoflex Marketing Pvt. Ltd.

One Electrical Ltd.

Super Impex

**Electricity Digital Markets**

ELSTER SOLUTIONS LLC

**Electricity Utilities**

Dale Power Solutions

ELSTER SOLUTIONS LLC

FAMCO (Al-Futtaim Auto & Machinery Co. LLC)

First Forever Co. Ltd.

Huegli Tech AG Ltd.

Sergi France

**Electronics**

LG Electronics Gulf FZE

**Emergency Lighting**

Eaton Power Quality SAS

Thomas & Betts / A member of the ABB Group

**Enclosures**

alfanar trading

AP Lanka Pvt. Ltd.

Eksen Teknik Sunger San. ve Tic. Ltd. Sti.

Jubaili Bros

Novateur Electricals & Digital Systems Limited

Rittal Middle East FZE

Sakr Power Systems S.A.L

**Energy Conservation Products**

Ascot Industrial S.r.l.

INMESOL S.L

**Energy Efficiency/Savers**

Bosch Industrial

Emerson Industrial Automation

HIMOINSA

INMESOL S.L

IREM S.p.A.

JCB Power Products

**Energy Management & Services**

DEIF India Pvt. Ltd.

Eaton Power Quality SAS

Galva Coat for Galvanizing & Light Poles

HIMOINSA

IREM S.p.A.

Lovato Electric S.p.A.

**Energy Measurements**

ELSTER SOLUTIONS LLC

KFB Holding Group

Lovato Electric S.p.A.

Phoenix Contact Middle East FZ LLC

**Engineering Services**

alfanar trading

COELMO Spa

Jeremias Middle East

Jubaili Bros

Mosdorfer GmbH

Motortech GmbH

Rittal Middle East FZE

**Engines/Motors/Engine Parts**

Caterpillar/Inc.

Cummins Middle East FZE

Dresser-Rand

Eksen Teknik Sunger San. ve Tic. Ltd. Sti.

INMESOL S.L

Marelli Motori S.p.A.

Rollo Power Solutions

Volvo Penta

Weichai Middle East FZE

**Equipment for Electric Motor Repair**

Marelli Motori S.p.A.

Phenix Technologies Inc.

**Equipment for Power Transmission Lines**

Cressall Resistors Ltd.

First Forever Co. Ltd.

Galva Coat for Galvanizing & Light Poles

Mosdorfer GmbH

Prime Meiden Ltd.

**Equipment Inspection & Repair**

Power Testing Ltd.

**Explosion Proof Equipment / Lighting & Switchgear**

Appleton Group, business unit of EMERSON Industrial Automation

Eaton Power Quality SAS

IGEL Electric

KFB Holding Group

Marelli Motori S.p.A.

Rittal Middle East FZE

Sakr Power Systems S.A.L

**Fan & Exhaust Systems**

Bosch Industrial

Jeremias Middle East

Panasonic Marketing Middle East and Africa FZE

Rittal Middle East FZE

**Fault Recorder/Event Recorder**

Huegli Tech AG Ltd.

KoCoS Messtechnik AG

**Fiber Glass Products**

Rittal Middle East FZE

**Field Instrumentation / Process Control / Valves**

Motortech GmbH

**Filters**

Jubaili Bros

Lucy Electric Ltd

**Fire Safety Systems**

Eaton Power Quality SAS

Sergi France

UL

**Firefighting Equipment & System**

Green Power Systems S.r.l.

UL

**Fuses / Fuse Switches / Fuse Gear**

Bin Ham Electrical Equipment Trading LLC

Eaton Power Quality SAS

Huegli Tech AG Ltd.

KFB Holding Group

Leroy-Somer Electric Power Generation

Motorenfabrik Hatz GmbH & Co. KG

Novateur Electricals & Digital Systems Limited

Rittal Middle East FZE

Sakr Power Systems S.A.L

**Galvanizing Products**

Galva Coat for Galvanizing & Light Poles

**Gas & Power Equipment**

Altaaqa Global CAT Rental Power

COELMO Spa

FAMCO (Al-Futtaim Auto & Machinery Co. LLC)

GENMAC Generators

Green Power Systems S.r.l.

HIMOINSA

IGEL Electric

JMG Limited

Leroy-Somer Electric Power Generation

Motortech GmbH

Samsung Techwin

**Gas Compressors / Detectors**

Samsung Techwin

**Gas Engines**

Ansaldo Energia

Cummins Middle East FZE

Deep Sea Electronics PLC

Dresser-Rand

Lister Petter Ltd.

MAN Diesel & Turbo SE

Mantrac Group

Weichai Middle East FZE

**Gas Insulated Switch Gear**

KoCoS Messtechnik AG

**Gas Turbines**

Ansaldo Energia

Dale Power Solutions

Jeremias Middle East

MAN Diesel & Turbo SE

Samsung Techwin

**Generating Sets**

ABZ Aggregate-Bau GmbH & Co. KG

AJ Power Ltd.

Aksa Power Generation FZE

Altaaqa Global CAT Rental Power

Associated Power Solutions FZC

COELMO Spa

Deep Sea Electronics PLC

Dresser-Rand

Eksen Teknik Sunger San. ve Tic. Ltd. Sti.

Enrogen Ltd.

FG Wilson

Genesal Energy

GENMAC Generators

Green Power Systems S.r.l.

HIMOINSA

JCB Power Products

Jeremias Middle East

JMG Limited

Jubaili Bros

KFB Holding Group

Kirloskar Oil Engines Ltd.

Kohler Power Systems

Lister Petter Ltd.

Lovato Electric S.p.A.

Mahindra Powerol - Mahindra & Mahindra Ltd.

MAN Diesel & Turbo SE

Mantrac Group

Mecc Alte UK Limited

Powersource Projects Ltd.

PR Middle East FZE

S.I.C.E.S. S.r.l.

SAB, Standard Aggregatebau

Evers GmbH & Co. KG

Sakr Power Systems S.A.L

SDMO Industries

SES SMART Energy Solutions

FZCO

Silicon Power Systems

Teksan Generator

Visa S.p.A.

Weichai Middle East FZE

**Generating Technologies**

Altaaqa Global CAT Rental Power

Deep Sea Electronics PLC

Eksen Teknik Sunger San. ve Tic. Ltd. Sti.

Enrogen Ltd.

FG Wilson

HIMOINSA

GENMAC S.L

Kirloskar Oil Engines Ltd.

Powersource Projects Ltd.

S.I.C.E.S. S.r.l.

Teksan Generator

**Generators**

Aggreko Middle East Ltd.

AJ Power Ltd.

Aksa Power Generation FZE

Ansaldo Energia

Ascot Industrial S.r.l.

Associated Power Solutions FZC

Autotank International Ltd.

Caterpillar Inc.

COELMO Spa

Cummins Middle East FZE

Dale Power Solutions

Deep Sea Electronics PLC

Eksen Teknik Sunger San. ve Tic. Ltd. Sti.

Enrogen Ltd.

FG Wilson

Gamesa Electric

GENMAC Generators

Green Power Systems S.r.l.

Grupos Electrogenos Europa SA

HIMOINSA

INMESOL S.L

JCB Power Products

Jeremias Middle East

JMG Limited

Kirloskar Oil Engines Ltd.

Kohler Power Systems

Linz Electric S.p.A

Lloyd Dynamowerke GmbH

INMESOL S.L  
JMG Limited

#### Industrial & Power Automation

DEIF India Pvt. Ltd.  
Emerson Industrial Automation  
HELUKABEL Middle East DWC LLC  
HIMA Middle East FZE  
Lovato Electric S.p.A.  
National Instruments  
Rittal Middle East FZE  
WAGO Middle East FZC

#### Industrial Electronics

Indian Electrical and Electronics  
Manufacturers Association (IEEMA)  
Phoenix Contact Middle East FZ LLC

#### Industrial Power Engineering

Altaaqa Global CAT Rental Power  
HIMA Middle East FZE  
HIMOINSA  
IGEL Electric  
KoCoS Messtechnik AG  
Lister Petter Ltd.  
Rittal Middle East FZE

#### Industrial Relays

KoCoS Messtechnik AG  
WAGO Middle East FZC

#### Industrial Ventilation Systems

HIMA Middle East FZE  
Jeremias Middle East  
Segula Ltd.

#### Information Systems and Telecommunication

Rittal Middle East FZE  
Segula Ltd.

#### Inspection and Testing

KoCoS Messtechnik AG  
LOVAG  
Tecnalia  
Zahid Tractors

#### Installations

Bosch Industrial

#### Instrumentation & Calibration

Rotork PLC

#### Insulation Materials

Eksen Teknik Sunger San. ve Tic. Ltd. Sti.  
HellermannTyton GmbH

#### Inverters

AEG Power Solutions B.V.  
Control Techniques, business unit of  
Emerson Industrial Automation  
Delta Energy Systems AG  
Fronius International GmbH  
Layer Electronics S.r.l.

#### Irrigations Systems

Green Power Systems S.r.l.  
Visa S.p.A.

#### Isolators

Phoenix Contact Middle East FZ LLC

#### Junction Boxes

alfanar trading  
Appleton Group, business unit of EMERSON  
Industrial Automation  
Marechal Electric  
Rittal Middle East FZE

#### Labeling & Identification

HellermannTyton GmbH  
Shawcor

#### Laboratory Equipment

Udeyraj Electricals Pvt. Ltd.

#### Lamps – Discharge & Special Lamps

alfanar trading

#### Leak Detection Equipment

Megger Ltd.

#### Level Detection & Control

Megger Ltd.

#### Lifting Equipment

Mantrac Group  
PR Middle East FZE

#### Lighting Design, Building etc.

One Electrical Ltd.

#### Lighting Equipment & Fittings

Galva Coat for Galvanizing & Light Poles  
Grupos Electr6genos Europa SA  
HIMOINSA  
Panasonic Marketing Middle East & Africa  
PR Middle East FZE

#### Lighting Fixtures - Industrial & Residential

One Electrical Ltd.  
Panasonic Marketing Middle East & Africa

#### Lightning Protection

Specialist Services  
Super Impex  
Thomas & Betts / A member of the  
ABB Group

#### Limit Switches

Bin Ham Eletrical Equipment Trading LLC

#### Load Banks

Aggreko Middle East Ltd.  
Cressall Resistors Ltd.  
Metal Deploye Resistor  
Powersource Projects Ltd.

#### Low - Energy Buildings

Bosch Industrial

#### Magnet Wire

Nuhas Oman LLC  
Precision Wires India Ltd.

#### Magnetic Cores

AEM Cores Pty Ltd.

#### Maintenance Services

SAB, Standard Aggregatebau Evers GmbH &  
Co. KG

#### Management Systems & Maintenance Services

Bosch Industrial

#### Measure & Test

#### Equipment/Systems/Monitoring

BAUR GmbH  
National Instruments  
Phenix Technologies Inc.  
Udeyraj Electricals Pvt. Ltd.

#### Measurement, Control & Diagnostic Instrumentation, Diagnostic

#### Equipment

BAUR GmbH  
FAMCO (Al-Futtaim Auto & Machinery  
Co. LLC)  
S.I.C.E.S. S.r.l.  
Udeyraj Electricals Pvt. Ltd.

#### Metallic Expansion Joints

Inmarco Industries FZC

#### Meter Cabinets

KFB Holding Group  
Specialist Services

#### Metering Devices

KFB Holding Group

#### Minor Hydro-Power Engineering

DHYBRID Power Systems  
Marelli Motori S.p.A.

#### Motors & Motor Winding Equipment

Gamesa Electric

#### Motors/Starters/Control

#### Gear/Protection Relays

IGEL Electric  
Novateur Electricals & Digital Systems  
Limited

#### Mud

DHYBRID Power Systems  
Leroy-Somer Electric Power Generation

#### New & Renewable Energy

AEG Power Solutions B.V.  
Bosch Industrial  
Fronius International GmbH  
HellermannTyton GmbH  
SES SMART Energy Solutions FZCO  
Teksan Generator



Stefan Böhler  
Application Engineer

Reliability you can trust  
for rotating machine  
diagnosis.

When customers ask me why they should use our testing and monitoring devices for rotating machines, I tell them that it comes down to a single word, trust. This trust is built on our several years of machine diagnostic experience, high reliability standards and dedicated support. Service providers, manufacturers and utilities all over the world rely on our solutions for identifying insulation defects early enough to prevent machine failures.

**New Energy-Related Organizations**

DHYBRID Power Systems

**Noise Control Equipment**

Eksen Teknik Sunger San. ve Tic. Ltd. Sti.

**Non Metallic Expansion Joints**

Eksen Teknik Sunger San. ve Tic. Ltd. Sti.

**Outdoor Lighting / Floodlighting**Appleton Group, business unit of EMERSON Industrial Automation  
Eaton Power Quality SAS  
One Electrical Ltd.**Overhead Line Equipment Materials/ Hardware & Accessories**

Galva Coat for Galvanizing &amp; Light Poles

KFB Holding Group

**Package Transformer Substations**alfanar trading  
Altaaqa Global CAT Rental Power  
FAMCO (Al-Futtaim Auto & Machinery Co. LLC)

KFB Holding Group

Visa S.p.A.

**Panel Instruments**

KFB Holding Group

**Photovoltaic**Control Techniques, business unit of Emerson Industrial Automation  
Fronius International GmbH  
HELUKABEL Middle East DWC LLC  
UL**Pipe & Pipeline Fittings / Coating Items**

Inmarco Industries FZC

Lucy Electric Ltd

**Pipe Suspension**

Lucy Electric Ltd

**Plugs & Sockets**

Appleton Group, business unit of EMERSON Industrial Automation

Electric House Est.

Marechal Electric

**Pneumatics**

ASCO Numatics, business unit of Emerson Industrial Automation

Motortech GmbH

Rotork PLC

**Power Control & Regulation Equip for Generators & Motors**

Associated Power Solutions FZC

Deep Sea Electronics PLC

DEIF India Pvt. Ltd.

General Energy

HIMOINSA

INMESOL S.L

S.I.C.E.S. S.r.l.

Silicon Power Systems

**Power Factor Correction Equip/Regulators**

ICAR S.p.A.

Powertech Switchgear

Industries FZE

**Power Monitoring & Supplies**

AEG Power Solutions B.V.

Deep Sea Electronics PLC

Eaton Power Quality SAS

HIMOINSA

**Power Plant Design**

Ansaldo Energia

Associated Power Solutions FZC

Dresser-Rand

General Energy

HIMOINSA

MAN Diesel &amp; Turbo SE

SAB, Standard Aggregatebau Evers

GmbH &amp; Co. KG

SDMO Industries

Segula Ltd.

SES SMART Energy Solutions FZCO

Weichai Middle East FZE

**Power Transformers**

AEM Cores Pty Ltd.

Altaaqa Global CAT Rental Power

KALPA ELEKTRIKAL Pvt Ltd.

KoCoS Messtechnik AG

Power Testing Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

Prime Meiden Ltd.

**Protective Coating Items**

Lucy Electric Ltd

**Public Power Utilities**

Altaaqa Global CAT Rental Power

Huegli Tech AG Ltd.

**Pumps, Compressors & Filters**

Kaeser Kompressoren FZE

Lister Petter Ltd.

Samsung Techwin

**Reactors**

ICAR S.p.A.

KALPA ELEKTRIKAL Pvt Ltd.

Powertech Switchgear

Industries FZE

**Refineries/ Refinery Equipment**

HIMA Middle East FZE

**Regulators**

ICAR S.p.A.

Silicon Power Systems

**Relays - Control & Protection**

KoCoS Messtechnik AG

Powertech Switchgear

Industries FZE

S.I.C.E.S. S.r.l.

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

Specialist Services

**Stand-Alone Sources of Energy**

ABZ Aggregate-Bau GmbH &amp; Co. KG

AJ Power Ltd.

Altaaqa Global CAT Rental Power

Genesal Energy

INMESOL S.L

Saft SA

**Steam Turbines, Electric-Power, Combined-Cycle & Gas-Turbine Units**

Ansaldo Energia

Deep Sea Electronics PLC

Samsung Techwin

**Steam Turbines/Metering Systems**

Ansaldo Energia

Samsung Techwin

**Street Lighting & Poles**

One Electrical Ltd.

**Substations**

alfanar trading

Imequadri Duestelle S.p.A.

**Switchboards & Switchgear**

Aksa Power Generation FZE

AREL®- New Arel Srl

Eaton Power Quality SAS

Enrogen Ltd.

Imequadri Duestelle S.p.A.

INMESOL S.L

KFB Holding Group

Kohler Power Systems

LOVAG

Novateur Electricals &amp; Digital

Systems Limited

Panasonic Marketing Middle East &amp; Africa

Power Testing Ltd.

Rittal Middle East FZE

S.I.C.E.S. S.r.l.

SAB, Standard Aggregatebau Evers

GmbH &amp; Co. KG

Tecnalia

UL

**Switches**

alfanar trading

Panasonic Marketing Middle East and Africa FZE

**Switchgear Products, Low & Med Voltage**

alfanar trading

Bin Ham Eletrical Equipment

Trading LLC

HellermannTyton GmbH

Imequadri Duestelle S.p.A.

KoCoS Messtechnik AG

Kohler Power Systems

LOVAG

Novateur Electricals &amp; Digital

Systems Limited

Powersource Projects Ltd.

Powertech Switchgear

Industries FZE

Rittal Middle East FZE

S.I.C.E.S. S.r.l.

UL

**Synchronizing Equipment**

Aksa Power Generation FZE

Deep Sea Electronics PLC

DEIF India Pvt. Ltd.

INMESOL S.L

Kohler Power Systems

S.I.C.E.S. S.r.l.

**Systems**

HIMA Middle East FZE

Netcontrol

**Systems Engineering**

Delta Energy Systems AG

HIMA Middle East FZE

Jeremias Middle East

Power Testing Ltd.

Rittal Middle East FZE

**Systems Operation & Control**

Deep Sea Electronics PLC

HIMA Middle East FZE

Netcontrol

S.I.C.E.S. S.r.l.

**Tanks & Silos**

UL

**Technology & System of Water Treatment**

Ascot Industrial S.r.l.

**Technology of Energy Efficiency and Energy Saving**

Ascot Industrial S.r.l.

INMESOL S.L

JCB Power Products

KoCoS Messtechnik AG

Samsung Techwin

**Telecommunication Equipment**

INMESOL S.L

Mahindra Powerol - Mahindra &amp; Mahindra Ltd.

Mecc Alte UK Limited

Netcontrol

S.I.C.E.S. S.r.l.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

Visa S.p.A.

**IGEL** ELECTRIC

Best in class Motor Starting Solutions

**WELCOME TO OUR NETWORK**

Engineering



Manufacturing



Global-Technology

**IGEL ISA-TS Soft Starter**

- Reduction of mechanical stresses

**Testing & Inspection Services**

Ansaldo Energia  
KoCoS Messtechnik AG  
LOVAG  
Power Testing Ltd.  
Tecnalia

**Transducers**

KoCoS Messtechnik AG  
WAGO Middle East FZC

**Transformers**

AEM Cores Pty Ltd.  
alfanar trading  
Altaaqa Global CAT Rental Power  
KFB Holding Group  
KoCoS Messtechnik AG  
Power Testing Ltd.  
Sergi France  
Udeyraj Electricals Pvt. Ltd.

**Transmission & Distribution**

AEM Cores Pty Ltd.  
Imequadri Duestelle S.p.A.

Indian Electrical and Electronics  
Manufacturers Association  
(IEEMA)

Metal Deploy Resistor  
Netcontrol  
Power Testing Ltd.

**Tubes**

Jeremias Middle East

**Tubes and Tubing Services**

Jeremias Middle East

**Turbines**

Ansaldo Energia  
IREM S.p.A.  
Samsung Techwin

**Turnkey Installations**

Aksa Power Generation FZE  
Altaaqa Global CAT Rental Power  
Ansaldo Energia  
Delta Energy Systems AG  
Dresser-Rand  
Genesal Energy

**Uninterruptible Power Systems**

AEG Power Solutions B.V.  
Caterpillar Inc.  
Dale Power Solutions  
Delta Energy Systems AG  
Eaton Power Quality SAS  
GENMAC Generators  
INMESOL S.L  
KFB Holding Group  
Layer Electronics S.r.l.  
Marelli Motori S.p.A.  
SAB, Standard Aggregatebau Evers  
GmbH & Co. KG

**Valves / Gauges / Fittings**

ASCO Numatics, business unit of  
Emerson Industrial Automation  
Inmarco Industries FZC  
Rotork PLC

**Variable Speed Drives**

Control Techniques, business unit  
of Emerson Industrial Automation  
Eaton Power Quality SAS

Mahindra Powerol - Mahindra &  
Mahindra Ltd.

**Voltage Stabilizers & Regulators**

IREM S.p.A.  
Layer Electronics S.r.l.  
ORTEA S.p.A.

**Welding Equipment / Electrodes / Services**

Fronius International GmbH  
GENMAC Generators  
Linzi Electric S.p.A

**Wind Energy**

HellermannTyton GmbH  
HELUKABEL Middle East DWC LLC

**Wind Power Engineering**

KoCoS Messtechnik AG  
Power Testing Ltd.

**Wind Turbines and Related Equipment**

Deep Sea Electronics PLC  
DEIF India Pvt. Ltd.

**Wire Manufacturing**

Bahra Cables Co.  
Nuhas Oman LLC  
Shawcor

**Wiring / Tubes & Accessories**

Bahra Cables Co.  
Electric House Est.  
HELUKABEL Middle East DWC LLC  
Novoflex Marketing Pvt. Ltd.

**Wiring Identification / Wire Markers**

Brady Middle East  
Shawcor

**Section Two: Suppliers****3GK Ltd.**

Unit 3 Price Street Business Park  
Park Street, Birkenhead  
Wirral, CH41 3PE, United Kingdom  
Tel: +44 151 6475380  
Fax: +44 151 6662660  
Web: www.3gk.co.uk  
E-mail: enquiries@3gk.co.uk

**ABZ Aggregate-Bau GmbH & Co. KG**

Gutenbergstr.11, Henstedt-Ulzburg  
D-24558, Germany  
Tel: +49 4193 903635  
Fax: +49 4193 93473  
Web: www.abz-power.com  
E-mail: info@abz-power.com

ABZ manufactures, installs and services custom-built diesel gensets of 50 kVA to 5000 kVA capacity for continuous, stand by or peak load operation for all possible applications as stationary, mobile, containerized or canopied units. A wide range of control systems and switchboards for all kinds of operations is available.

**AEG Power Solutions B.V.**

Weerenweg 29, AG Zwanzburg  
1161, Netherlands  
Tel: +31 20 4077800  
Fax: +31 20 4077801  
Web: www.aegps.com  
E-mail: info@aegps.com

AEG Power Solutions helps customers worldwide to meet their power challenges with rugged, highly reliable, innovative, premium power solutions. The company offers a full range of AC and DC Power Systems.

**Agents:**

United Arab Emirates - AEG Power Solutions

**AEM Cores Pty Ltd.**

95B Bedford Street, Gillman  
South Australia, 5013, Australia  
Tel: +61 8 83410086  
Fax: +61 8 83410225  
Web: www.aemcores.com.au  
E-mail: sales@aemcores.com.au

AEM Unicore Machinery for the manufacture of LOW LOSS Distribution and General Purpose Transformers Cores is used in 40 countries worldwide. It is preferred by major

manufacturers in North and South America, India, Europe and Asia. Unicore Machines feature integrated dust extraction hood and industrial touch screen controller.

**Aggreko Middle East Ltd.**

PO Box 16875  
Jebel Ali, Dubai  
United Arab Emirates  
Tel: +971 4 8086100  
Fax: +971 4 8831825  
Web: www.me.aggreko.com  
E-mail: rentals@aggreko.ae

Aggreko has grown to become the world's leading provider of rental power and temperature control solutions and offers round-the-clock service, support and equipment availability in the Middle East through a network of twelve locations. Aggreko serves a diverse market from construction sites to quarrying, oil & gas to refineries and events.

**AJ Power Ltd.**

1 Charlestown Drive  
Carn Industrial Area  
Craigavon  
Northern Ireland  
BT63 5GA  
United Kingdom  
Tel: +44 28 38361000  
Fax: +44 28 38361010  
Web: www.ajpower.net  
E-mail: sales@ajpower.net  
info@ajpower.net

AJ Power specializes in the volume manufacture and design of diesel generating sets from 10kVA to 3340kVA. These are provided as open skid base units, as well as in sound attenuated canopies and containers. Our range includes 110V single phase to 13.8kV, 60Hz. The company offers volume production of high sets on short lead time at highly competitive prices.

**Agents:**

United Arab Emirates - AJ Power Ltd.

**Aksa Power Generation FZE**

PO Box 18167, Jebel Ali Free Zone  
Dubai, United Arab Emirates  
Tel: +971 4 8809140  
Fax: +971 4 8809141  
Web: www.aksa.ae  
E-mail: sales@aksauae.com

For 30 years, Aksa Power Generation has manufactured generating sets from 1kVA up to 2500kVA, supplies comprehensive spare parts, rental solutions and a customer-focused after sales service all around the world.

**Al Muqarram Auto Spare Parts LLC**

PO Box 60235, Deira, Dubai  
United Arab Emirates  
Tel: +971 4 2241423  
Fax: +971 4 2241450  
Web: www.a-map.net  
E-mail: info@a-map.net

A-Map trading is the sole distributor of Solite Batteries in the region. Solite Batteries are O.E.M to Hyundai and KIA motors. The batteries are currently being used by some of the biggest Construction and Heavy Equipment companies in the UAE.

**alfanar trading**

PO Box 16396, Istanbul Street  
Near exit - 18, Sulai District  
Riyadh, 11464, Saudi Arabia  
Tel: +966 920006111/1761  
Fax: +966 11 4945489  
Web: www.alfanar.com  
E-mail: hossam.fashtaki@alfanar.com

Headquartered in Riyadh, alfanar operates a group of companies within a wide spectrum of industries covering electrical, electromechanical and civil engineering construction in addition to manufacturing and marketing electrical construction products and allied engineering services. Numerous design and development centers integrate with a distinguished host of facilities in the Kingdom, the Middle East and other countries.

**Agents:**

United Arab Emirates - Alfanar Electric LLC

**Alkhorayef Commercial Co.**

PO Box 281808  
Riyadh, 11392  
Saudi Arabia  
Tel: +966 11 4955452  
Fax: +966 11 2134716  
Web: www.alkhorayef.com  
E-mail: msd@alkhorayef.com

**Altaaqa Global CAT Rental Power**

PO Box 262989  
Dubai  
United Arab Emirates  
Tel: +971 4 8808006  
Fax: +971 4 8808007  
Web: www.altaaqaqglobal.com  
E-mail: rbagatsing@altaaqaqglobal.com

Altaaqa Global, subsidiary of Zahid Group, has been selected by Caterpillar Inc. to deliver multi-megawatt turnkey temporary power solutions. The company owns, mobilizes, installs, and operates temporary independent power plants at customer sites, focusing on markets in Sub-Sahara Africa, Central Asia, Indian Subcontinent, Latin America, South East Asia and MENA.

**Ansaldo Energia**

Via Nicola Lorenzi  
8, 16152  
Italy  
Tel: +39 010 6551  
Fax: +39 010 6553411  
Web: www.ansaldoenergia.com  
E-mail: ansaldoenergia@aen.ansaldo.it

Ansaldo Energia is Italy's largest supplier, installer and service provider for power generation plants and components and one of the world's leading players in the sector. It's a full-cycle, integrated operator, with the capabilities to build turnkey power plants on green field sites using its own technology and its own independent design, production construction, commissioning and service resources.

**AP Lanka Pvt. Ltd.**

No 416/5 Leyland Road  
Panagoda, Homagama  
Sri Lanka  
Tel: +94 112 751751/750 288  
Fax: +94 112 751740  
Web: www.timikenclosures.com  
E-mail: info@timikenclosures.com

AP Lanka Pvt. Ltd. Manufacture and supply high quality electrical enclosures. Our products include Modular Panel Systems, Wall Mounting Enclosures, Stainless steel Enclosures, Stainless steel Terminal Boxes, 19" Racks under 'TIMIK' brand name. Our enclosures are manufactured in an ultra-modern factory and tested and complied with international standards.

**APC by Schneider Electric**

PO Box 341057  
Dubai Technology Entrepreneurship  
Level 2, Dubai  
United Arab Emirates  
Tel: +971 4 7099333  
Web: www.apc.com

APC by Schneider Electric provides industry leading products, software and systems for home, office, data center and factory floor applications. APC solutions include uninterruptible power supplies (UPS), precision cooling units, racks, physical security and design and management software, including APC's InfraStruxure® architecture, the industry's most comprehensive integrated power, cooling and management solution.

**Appleton Group, business unit of EMERSON Industrial Automation**

PO Box 17034  
Jebel Ali South Zone  
Dubai, United Arab Emirates  
Tel: +971 4 8118100  
Fax: +971 4 8865465  
Web: www.emersonindustrial.com  
E-mail: industrialautomation.mea@emerson.com

As a global manufacturer of electrical products for commercial, industrial, hazardous and adverse environments. Appleton Group combines the industry's best known brands, including ATX and SolaHD. Together, these brands offer a complete solution for electrical power, distribution, control and lighting that lead the industry in efficiency, durability, safety, quality and ease of installation.

**APR Energy**

Dubai  
United Arab Emirates  
Tel: +971 800 27738224  
Web: www.aprenergy.com  
E-mail: info@aprenergy.com

APR Energy is a global leader in rapidly delivered large-scale power solutions and, following its purchase of GE's power rental business, is the world's leading provider of fast-track mobile turbine power. APR Energy sells electricity and generation capacity to utility and industrial customers that require power generation solutions.

**AREI®- New Arel Srl**

Via Carnevali 14  
Italy  
Tel: +39 02 39320325  
Web: www.arel-locks.com  
E-mail: g.frigio@newarel.com

**ASCO Numatics, business unit of Emerson Industrial Automation**

PO Box 17034, Jebel Ali South Zone  
Dubai, United Arab Emirates  
Tel: +971 4 8118100  
Fax: +971 4 8865465  
Web: www.asconumatics.com  
E-mail: industrialautomation.mea@emerson.com

ASCO is the worldwide leader in high-quality solenoid valves and related fluid control products used to control the flow of air, gas, water, oil and steam. Numatics is a leading supplier of fluid power and motion control products. The strengths of these two have been combined to offer comprehensive fluid automation solutions.

**Ascot Industrial S.r.l.**

Zona Industriale, Terza Strada, Gela 93012, Italy  
Tel: +39 093 3901192 /  
+39 3922116904  
Fax: +39 093 3917682  
Web: www.ascotinternational.com  
E-mail: sales@ascotinternational.com

Ascot is an Italian company providing diesel generating sets in the range 20-2000kVA; hybrid power plant (PV+diesel) 10 MW onwards for off or unstable grid application; hybrid diesel generator for telecom & defense application, range 1-20kW. More than 38,000 Power Solutions are installed worldwide. The Ascot mission is "ENERGY EVERYWHERE"

**Associated Power Solutions FZC**

Q1-43, 44, SAIF Zone  
Sharjah, United Arab Emirates  
Tel: +971 6 5528142  
Fax: +971 6 5528143  
Web: www.apsuae.com  
E-mail: sales@apsuae.com

Associated Power solutions (APS) offers various products like:  
Diesel Generators (with choice of any engine) ranging from 9 kVA up to 2500 kVA  
Associated Switchgear (ATS Panels and Synchronizing Panels)  
Fuel tanks – Bunded and Containerised  
Lighting Towers – ranging from 9 kVA, 13 kVA & 20 kVA  
Turnkey Project and Installation services: - 1MW to 50MW.

We can also offer a complete site survey and provide you with the most cost effective solutions from our in-house design / manufacturing / commissioning teams.

**Autotank International Ltd.**

111 Washingbay Road, Coalisland  
County Tyrone, Northern Ireland  
BT71 4QE, United Kingdom  
Tel: +44 28 87741581  
Fax: +44 28 88749868  
Web: www.autotank.co.uk  
E-mail: sales@autotank.co.uk

**Bahra Cables Co.**

PO Box 5989, Jeddah, 21432  
Saudi Arabia  
Tel: +966 12 5911115  
Fax: +966 12 5915683  
Web: www.bahra-cables.com  
E-mail: sales@bahra-cables.com

Since 2008, Bahra Cables Co. has been committed to provide an exceptional service in the manufacturing of Electric Cables

(Building Wires, Low, Medium and High Voltage Cables, Fire Resistant Cables, Flame Retardant Cables, Overhead Lines, etc.) to serve the Saudi & GCC markets.

**BAUR GmbH**

Raiffeisenstrasse 8, Sulz, 6832, Austria  
Tel: +43 5522 49410  
Fax: +43 5522 49413  
Web: www.baur.eu  
E-mail: headoffice@baur.at

BAUR GmbH is a market leader in the servicing and maintenance of electrical power distribution systems and their components

**Billets Elektro Werke Ltd.**

42nd, 1st Floor, Jagat Satguru  
Industrial Estate, Off Aarey Road  
Goregaon East, Mumbai, 400063  
India  
Tel: +91 22 40584200/04/05  
Fax: +91 22 40584222  
Web: www.bewl.in  
E-mail: india-sales@bewl.in

**Agents:**

United Arab Emirates - Sai International FZCO

**Bin Ham Electrical Equipment Trading LLC**

PO Box 4301  
Burj Street, Naif  
Deira  
Dubai  
United Arab Emirates  
Tel: +971 4 2273939  
Fax: +971 4 2217619  
Web: www.binhameet.com  
E-mail: sales@binhameet.com  
Electrical trading distributor.

**Bosch Industrial**

Ankara Asfalti Uzeri, Acibadem Mah.  
Onur Sok. No: 18/A  
Kosuyolu Kadikoy, Istanbul  
34718, Turkey  
Tel: +90 21 65441100  
Fax: +90 21 63404017  
Web: www.bosch-industrial.com  
E-mail: onurcan.gunay@tr.bosch.com

The Thermotechnology Division of the Bosch Group is one of the key business division in Bosch World. With total sales of some three billion Euros, it ranks among the world's leading suppliers of energy-efficient solutions for warm water and a comfortable indoor climate.

**Agents:**

United Arab Emirates - Robert Bosch Middle East FZE

**Brady Middle East**

Jebel Ali, Dubai, United Arab Emirates  
Tel: +971 4 8812524  
Fax: +971 4 8813183  
Web: www.bradymiddleeast.com  
E-mail: emea\_request@bradycorp.com  
With Brady's cable & component identification labels, you can install faster, lower the risk of mistakes, spend less time on maintenance diagnostics, reduce the cost

of downtime and create a safer workplace. Brady has a label material for every application in the most versatile offer on the market.

**C & S Electric Ltd.**

222, Okhla Industrial Estate  
Phase - 111, New Delhi, 110020, India  
Tel: +91 11 33849000/9009  
Fax: +91 11 26847342/26829063  
Web: www.cselectric.co.in  
E-mail: info@cselectric.co.in  
cmo@cselectric.co.in  
exports@cselectric.co.in

**Caterpillar Inc.**

501 SW Jefferson Avenue  
Peoria, IL, 61630, USA  
Tel: +1 309 6752337

For nearly 90 years, Caterpillar Inc. has been making sustainable progress possible and driving positive change on every continent. Customers turn to Caterpillar for infrastructure, energy and natural resources assets. Caterpillar is the world's leading manufacturer of construction/mining equipment, diesel/natural gas engines, industrial gas turbines and diesel-electric locomotives.

**Agents:**

United Arab Emirates - Caterpillar SARL Branch

**Caterpillar SARL**

PO Box 262147  
Jebel Ali Free Zone (South)  
Dubai  
United Arab Emirates  
Tel: +971 4 8106464  
Fax: +971 4 8106465  
Web: www.cat.com

For more than 85 years, Caterpillar Inc. has been making sustainable progress possible and driving positive change on every continent. With 2012 sales and revenues of \$ 65.875 billions, Caterpillar is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives.  
http://www.caterpillar.com

**CG**

PO Box 341201  
Dubai Silicon Oasis E/6/7  
Dubai  
United Arab Emirates  
Tel: +971 4 3724667  
Fax: +971 4 3724677  
Web: www.cgglobal.com  
E-mail: middleeast@cgglobal.com

With over 75 years of experience in the energy sector, CG is an established manufacturer of three-phase distribution and power transformers, and a strong competitor in the market of substations, integrated solutions, automation systems and services. At CG we continually focus on providing smart solutions to our customers' challenges.

**CGS Instrument Transformers Srl**

Via Ercolano, 25  
Monza (MB)  
20900, Italy  
Tel: +39 039 394141  
Fax: +39 039 39414202  
Web: www.cgs-monza.it  
E-mail: sales@it-cgs.it



### COELMO Spa

Agglomerato Industriale ASI  
Acerra (NA), 80011, Italy  
Tel: +39 081 8039731  
Fax: +39 081 8039724  
Web: www.coelmo.it  
E-mail: sales@coelmo.it

COELMO is one of the oldest European manufacturers of industrial and marine generators from 3kVA up to 3000kVA. Based in Italy, with a large stock of generating sets available to be shipped overnight to any destination in the world. Company profile, products and models are available online at www.coelmo.it.

#### Agents:

United Arab Emirates - COELMO (DMCC BRANCH)

### Control Techniques, business unit of Emerson Industrial Automation

PO Box 17034, Jebel Ali South Zone  
Dubai, United Arab Emirates  
Tel: +971 4 8118100  
Fax: +971 4 8865465  
Web: www.EmersonIndustrial.com  
E-mail: industrialautomation.mea@emerson.com

Control Techniques is renowned for quality, durability and innovation in the field of AC and DC variable speed drives, servo systems and power conversion technologies. Commercial and industrial customers worldwide count on the Control Techniques brand to deliver performance, reliability and energy efficiency in the most demanding applications.

### Cressall Resistors Ltd.

Evington Valley Road, Leicester  
England, LE5 5LZ, United Kingdom  
Tel: +44 116 2733633  
Fax: +44 116 2737911  
Web: www.cressall.com  
E-mail: sales@cressall.com

Cressall Resistors manufacture high power resistors, neutral earthing resistors (NERS), portable load units, bespoke LV and HV load banks, dummy loads and dynamic braking resistors as well as resistors for use in high voltage filters such as HVDC, SVC and MSC Systems.

### Cummins Generator Technologies

Fountain Court, Lynch Wood  
Peterborough, PE2 6FZ, UK  
Tel: +44 1733 395300  
Web: stamford-avk.com  
E-mail: info@cumminsgeneratortechologies.com

The only manufacturer of genuine STAMFORD and AvK alternators ranging up to 11,000 kVA, our class leading alternators are designed for prime power, standby, oil and gas, mining and marine. Established 1904.

#### Agents:

United Arab Emirates - Cummins Generator Technologies (Middle East)

### Cummins Middle East FZE

PO Box 17636, South Zone 2  
Jebel Ali Free Zone, Dubai, UAE  
Tel: +971 4 8809911/800 CUMMINS  
Fax: +971 4 8860518/9  
Web: www.middleeast.cummins.com  
E-mail: cummins.middleeast@cummins.com

Cummins Middle East FZE, the first wholly-

owned Cummins Inc. Distributor in the region, was established in 2000. In early 2014, CME transitioned to an area business organization structure to allow the company to invest and grow in the region by bringing all Cummins business units closer to the market and covers UAE, Bahrain, Qatar, Yemen, Oman, Saudi Arabia, Kuwait, Jordan, Iraq, Lebanon, Afghanistan and Pakistan. CPG (Cummins Power Generation) offers one of the widest ranges in diesel power generators, starting from 17kVA till 3750kVA.

### Dale Power Solutions

PO Box 487282, Suite 28, 33rd Floor  
HDS Business Centre, Cluster M1  
Jumeirah Lake Towers, Dubai  
United Arab Emirates  
Tel: +971 4 364 1228  
Web: www.dalepowersolutions.com  
E-mail: info@dalepowersolutions.com

Founded in 1935 as a diesel generator manufacturer, Dale Power Solutions has since grown into a manufacturer of UPS systems, AC/DC systems and generators which manage and provide back-up electricity and can ensure a smooth transition between mains and generator power. On top of this we can provide turnkey solutions - keeping your power in safe hands.



### Deep Sea Electronics PLC

Highfield House  
Hunmanby Industrial Estate  
Hunmanby, North Yorkshire  
England, YO14 0PH, United Kingdom  
Tel: +44 1723 890099  
Fax: +44 1723 893303  
Web: www.deepseapl.com  
E-mail: sales@deepseapl.com

DSE is a UK manufacturer of genset engine only and ATS controls, battery chargers & power supplies. With an outstanding worldwide reputation for a range of expertly engineered products that offer user-friendly operation and with 24hr global support there's no surprise DSE is the world's Number 1.

### DEIF India Pvt. Ltd.

602, Town Centre II  
Andheri Kurla Road, Sakinaka  
Andheri (E), Mumbai, 400059, India  
Tel: +91 22 42452000  
Fax: +91 22 42452020  
Web: www.deif.com  
E-mail: india@deif.com

DEIF is a multi-national company HQ in Denmark engaged in the field of power management systems for diesel, gas, hydro and wind power for over 7 decades delivering "Power in Control". To know more about our intelligent power management to operate up to 256 plants in group, visit www.deif.com.

#### Agents:

United Arab Emirates - KDU Worldwide Technical Services FZC

### Delta Energy Systems AG

PO Box 185668  
Al Maktoum Road, Al Rigga Palace  
Building, Suite 504, Dubai, UAE  
Web: www.deltapowersolutions.com  
E-mail: info.uae@delta-es.com

Delta provides its customers with a wide range of power products and services

globally. Operating in the area of telecom power, UPS and photovoltaic solutions the core of our business is securing the vital processes of our customers with innovative easy-to-use technology. We also aim to promote sustainable development with energy efficient solutions.

### DHYBRID Power Systems

Perchtinger Straße 1A  
Gauting - Hausen, 82131  
Germany  
Tel: +49 89 8994810  
Web: www.dhybrid.de  
E-mail: contact@dhybrid.de

DHYBRID Power offers self-developed high quality HyGRID Controllers, made in Germany, for HyGRID Fuel Reduction Systems and all high quality material needed. We are your provider for industrial-scale Diesel-Photovoltaic-Hybrid-Systems to synchronize photovoltaic with diesel gensets. Our Products are all proven. Our customized projects are realized with a global partner network.

### Dresser-Rand

PO Box 30, Barrio de Oikia, 44  
Zumaiia, Gipuzkoa, 20759, Spain  
Tel: +34 943 865200  
Fax: +34 943 865210  
Web: www.dresser-rand.com  
E-mail: guascor@dresser-rand.com  
Engine, Gensets, Energy Solutions, Design supply and manufacturing for Cogeneration, Generation, Bioenergy from Landfill, Sewage, Biodigestion and Biomass Marine Sectors.

### Eaton Power Quality SAS

PO Box 9398  
Dubai World Trade Center  
Level 16, Dubai  
United Arab Emirates  
Tel: +971 4 3313938  
Fax: +971 4 3329239  
Web: www.eaton.eu  
E-mail: customerservice-me@eaton.com

Eaton, with 2012 sales of \$16.3 billion, is a global technology leader in electrical products, system and services for power quality, distribution and control, power transmission, lighting and wiring products. Eaton acquired Cooper Industries PLC in 2012. Eaton has approximately 103,000 employees and sells products to customers in more than 175 countries.

#### Agents:

Egypt - Eaton  
Iraq - Eaton  
Jordan - Eaton  
Kuwait - Eaton Electric  
Lebanon - Eaton  
Oman - Eaton  
Qatar - Eaton

### Eksen Teknik Sunger San. ve Tic. Ltd. Sti.

Zuhuratbaba Mah  
Sukran Ciftligi Sk. 49/10  
Bakirkoy, Istanbul  
Turkey  
Tel: +90 212 5831241  
Fax: +90 212 5831285  
Web: www.eksensunger.com  
E-mail: info@eksensunger.com

Eksen specializing in technical foams delivers the best combination of functions in acoustic comfort with fire-safe products. Procell® Flame proof acoustical foam, PE, EPDM and rubber tapes, seals and auxiliary items are customized for clients' requirements for genset enclosures, engine

housing linings, lagging in air-ducting & hvac applications.

### Eland Cables

120 Highgate Studios  
53-79 Highgate Road  
London, NW5 1TL  
United Kingdom  
Tel: +44 20 72418740  
Fax: +44 20 72418700  
Web: www.elandcables.com  
E-mail: international@eland.co.uk

Eland Cables is a global supplier of power, data, instrumentation and control cables to the world's most demanding industries including prestigious mining, construction, petrochemical and infrastructure projects. Our unwavering focus on quality, technical expertise and customer service makes us a key contributor to projects in over 130 countries each year.

### Electric House Est.

PO Box 11967  
Jeddah, 21463  
Saudi Arabia  
Tel: +966 12 2879111  
Fax: +966 12 2879191/2879292  
Web: www.electric-house.com  
E-mail: info@electric-house.com

Electric House was established in 1955 as a family business for supply and distribution of parts in the electrical industry. The great success of the business over the last half century is based on its record of comprehensive stockholding, service and reliable delivery to the customer. These remain the core strengths of the business.

### Electric Way LLC

PO Box 87512  
Ras Al Khor, Industrial Area No. 2  
Warehouse No. 9 & Warehouse No. 10  
Opposite JBC Express Freight  
Dubai  
United Arab Emirates  
Tel: +971 4 3330479  
Fax: +971 4 3330495  
Web: www.electric-way.com  
E-mail: sales@electric-way.com

### ELSTER SOLUTIONS LLC

PO Box 9035  
1906 Saeed Tower 1  
Sheikh Zayed Road  
Dubai  
United Arab Emirates  
Tel: +971 4 3313194  
Fax: +971 4 3313197  
Web: www.elster.com  
E-mail: ali.moustmani@elster.com

Elster, an industry-leading global provider of electricity meters, related communications solutions and software solutions for meter data collection and management applications, reports rapid growth in markets across the Middle East and North Africa (MENA). Buoyed by thriving economies and unparalleled growth in MENA's construction industry, Elster has established a substantial share of the region's smart metering market through its core strategy of modular design, interoperability, standards development and innovation.

#### Agents:

United Arab Emirates - Obaid Humaid Al Tayer - Engineering Division

**Emerson Industrial Automation**

Emerson FZE, PO Box 17034  
Jebel Ali Free Zone  
Dubai  
United Arab Emirates  
Tel: +971 4 8118100/945  
Fax: +971 4 8865465  
Web: www.emersonindustrial.com  
E-mail: industrialautomation.mea@emerson.com

Emerson Industrial Automation is a global technology provider that enables productivity, efficiency and quality gains for customers across a spectrum of industries. Our products include alternators, electric motors and drives, electrical protection and power quality and fluid automation. Emerson brands include Appleton, Asco Numatics, Control Techniques, Leroy-Somer and much more.

**Enrogen Ltd.**

Electricity Building  
Blenheim Road  
Pocklington Ind Est  
York, YO42 1NR  
United Kingdom  
Tel: +44 1759 307070  
Fax: +44 1759 305070  
Web: www.enrogen.com  
E-mail: mail@enrogen.com

Enrogen supply, install and maintain diesel generating sets from 10kVA to 2500kVA. All our generating sets are of United Kingdom origin, powered by Perkins, Sisu, Scania and Mitsubishi engines at 1500 RPM. We can also assist with spare parts, switch-gear and distribution panels. Standard changeovers range from 63A to 4000A.

**FAMCO (Al-Futtaim Auto & Machinery Co. LLC)**

PO Box 5502, United Arab Emirates  
Tel: +971 4 2135100  
Fax: +971 4 2135400  
Web: www.famcouae.com  
E-mail: famco@alfuttaim.ae

FAMCO is a market leading supplier of products and services to a diverse range of industries and commercial undertakings covering the transportation, construction, manufacturing, warehousing, oil & gas and marine sectors. FAMCO serves these industries with world-class brands like Yanmar generators & Himoinsa generators & lighting towers, Volvo, Merlo, Ingersoll Rand, Linde, Dexion, Hart, Nassau, Steril & Stanley Proto. FAMCO's operations cover the entire UAE, with bases in Dubai, Abu Dhabi, Al Ain and Ras Al Khaimah, plus branches across Saudi Arabia, Oman, Qatar, Bahrain Lebanon & Egypt. The company's development and success has been based on an in-depth understanding of customer needs and the dedication of its skilled staff.



titron –  
a system with  
exclusive features

**BAUR**  
ensuring the flow

## The intelligent cable test van. For all requirements.

- New intuitive operational concept and high-performance technology
- Central, automatic system control
- Cable fault location, testing and diagnostics



www.baur.eu/titron

BAUR GmbH  
headoffice@baur.at - www.baur.eu

**NEW!**  
Integrated cable diagnostics  
BAUR Remote App  
Interface to GIS systems

**FG Wilson**

1 Millennium Way, Springvale Business Park  
Springfield Road, Belfast, Country Antrim  
Northern Ireland, BT12 7AL, United Kingdom  
Tel: +44 28 90495000  
Fax: +44 28 28261111  
Web: www.fgwilson.com  
E-mail: sales@fgwilson.com

FG Wilson provides reliable, fuel-efficient diesel and gas generators sets, from 6.8 - 2500 kVA, that are designed and manufactured to the highest UK standards. Coupled with our global product availability via our product distribution centres and expert local support through our worldwide dealer network, we have the power to deliver.

**First Forever Co. Ltd.**

No.151, Sec. 1, Pei-Shen Road  
Shen-Keng District  
New Taipei City, 22246, Taiwan  
Tel: +886 2 26627367  
Fax: +886 2 26627882/3  
Web: www.kudostools.com  
E-mail: sales@kudostools.com

Kudos is a leading tool maker offers a wide range of hand tools for electrical and telecom applications, as well as professional grade hydraulic products for utility market.

**Forest City Export Services Ltd.**

Bowden Hall, Bowden Lane  
Marple, Cheshire, England  
SK6 6NE, United Kingdom  
Tel: +44 161 4490660/0770  
Fax: +44 161 4490880  
Web: www.forestcitygenerators.com  
E-mail: forestcity@compuserve.com

Suppliers of UK manufactured diesel generator sets from 7.5kVA to 3045kVA and associated spare parts.

**Fronius International GmbH**

Froniusplatz 1  
Wels, 4600  
Austria  
Tel: +43 664 88536662  
Fax: +43 7242 2413013  
Web: www.fronius.com  
E-mail: razik.korayem@fronius.com

With 3,723 employees worldwide and 838 granted patents Fronius International GmbH is an Austrian innovation leader active in the fields of welding technology, photovoltaics and battery charging technology. Around 90% of its products are exported through 24 international Fronius subsidiaries and sales partners in more than 60 countries.

**Agents:**

United Arab Emirates - Fronius Middle East FZE





### Galva Coat for Galvanizing & Light Poles

PO Box 8485  
Mussaffah Industrial Area - MW 4  
Abu Dhabi, United Arab Emirates  
Tel: +971 2 5511188  
Fax: +971 2 5510188  
Web: www.galvacoat.ae  
E-mail: galvaind@eim.ae

Galvacoat, 3 time winner of Sheikh Khalifa Industry Golden Award, winner of Sheikh Khalifa Excellence Quality Award and having ISO 9001-2008 & 14001-2004 & Oshad approval certificates is one of the major manufacturers of various kinds of lighting & transmission poles, guard rails and providing hot dip galvanizing services in UAE.

**Agents:**  
Saudi Arabia - M/s Inanra Co. Ltd.

### Gamesa Electric

Parque Tecnológico de Bizkaia, Ed. 100, Zamudio (Vizcaya), 48170, Spain  
Tel: +34 90 2734949  
Web: www.gamesaelectric.com  
E-mail: gamesaelectric@gamesacorp.com

Gamesa Electric has more than 80 years of experience in the design and manufacture of state of the art motors and generators for the most demanding applications in low, medium and high voltage. Tailor made solutions up to 40 MVA and 15KV. Low and high speed. Asynchronous, synchronous and permanent magnet motors and generators. Nuclear, Oil & Gas, marine and military norms available under request.



### Gardner Denver FZE

2 Floor, Office 202, Jafza View 18  
Jebel Ali Free Zone, Dubai  
United Arab Emirates  
Tel: +971 4 8811744  
Fax: +971 4 8811898  
Web: www.gardnerdenver.com  
E-mail: enquiries.fze@gardnerdenver.com

Gardner Denver is a leading supplier of compressed air solutions and with over 200 years experience in the design of portable

compressors, can offer from the smallest model, powering a single pneumatic tool, through to the innovative Turboscrew range. With an extensive network of sales companies and distributors, Gardner Denver offers global expertise with local service capability.

### Genesal Energy

Parroquia De Cortinan, D13-14 POL. IND. Bergondo, A Coruña, 15165, Spain  
Tel: +34 981 674158  
Fax: +34 981 676462  
Web: www.genesalenergy.com  
E-mail: genesal@genesal.es

Genesal Energy is a European company which has been providing worldwide power generation solutions for over 20 years, focusing on adaptability and innovation. Our power range starts from 5kVA up to 2500kVA diesel and gas powered, as well as hybrid Gensets for eco-friendly solutions.

**Agents:**  
United Arab Emirates - Bauer GT

### GENMAC Generators

Via Don Minzoni 13  
Gualtieri (RE), 42044, Italy  
Tel: +39 0522 222311  
Fax: +39 0522 222330  
Web: www.genmac.it  
E-mail: info@genmac.it

Generators manufactured since 1983. Made in Italy. Power range 2kVA - 2000kVA. Gas version available full range of accessories. References for: telecom, oil & gas, hospitals, government projects, arms rental & construction.

### Green Power Systems S.r.l.

Localita' Maiano  
Caprazzino Di Sassocorvaro  
61028, Italy  
Tel: +39 0722 726411  
Fax: +39 0722 720092  
Web: www.greenpowergen.com  
E-mail: giovanni@greenpowergen.com

Manufacture of generating sets up to 2200 kVA

- Different engine types: Perkins - Cummins - Deutz - Volvo - John Deere - Iveco - Lombardini - Yanmar - Mitsubishi - Honda
- Telecommunication Power solutions
- Customized generators
- Natural Gas and LPG gensets
- Lighting towers
- Welding Machines
- ISO 9001/2000 - ISO 14001/2004

### Grupos Electrógenos Europa SA

Polígono Pitarco II  
Parcela 20  
Muel (Zaragoza), 50450  
Spain  
Tel: +34 976 145432  
Web: www.gesan.com  
E-mail: export@gesan.com  
info@gesan.com

Founded in 1986, Gesan is today an energy solutions integrator engaged in the manufacture of water and air-cooled diesel generators, welders, petrol units and lighting towers. Offering a complete range of products up to 3,100 kVA, we are able to supply over 778,000 kVA per annum in 90 countries around the world.

### Haci Ayvaz Endüstriyel Mamuller Sanayi Ve Tic. AS

Atatürk Organize  
Sanayi Bölgesi Mustafaînan  
Cad. No: 36 Hadımköy  
İstanbul  
Turkey  
Tel: +90 212 7710145  
Fax: +90 212 7712560/7714727  
Web: www.ayvaz.com  
E-mail: info@ayvaz.com

## HellermannTyton

### HellermannTyton GmbH

HellermannTyton Group PLC  
PO Box 124011  
SAIF Zone  
Sharjah  
United Arab Emirates  
Tel: +971 6 5375637  
Web: www.hellermannntyton.ae  
E-mail: info@hellermannntyton.ae

HellermannTyton are one of the leading suppliers of products for fastening, fixing and protecting cables and their connecting components. We also develop pioneering systems in the field of data and network technology. Our corporate philosophy focuses on our customers and their requirements for the best possible solutions to all their cable needs.

## HELUKABEL®

The Worry-Free Cable Experience

### HELUKABEL Middle East DWC LLC

Office E-1-0103, Building E, Business Park  
Dubai World Central, Dubai, UAE  
Tel: +971 4 8879594  
Fax: +971 4 8879266  
Web: www.helukabel.ae  
E-mail: info@helukabel.ae

- Flexible control & data cables
- Power & infrastructure cables
- Instrumentation cables
- High flex cables for drag chains & motors
- Cable accessories
- Custom cables solutions

Established in 1978, HELUKABEL is one of the world's leading cable manufacturers with 50 global warehouse locations and 30,000+ products in stock.



### HIMA Middle East FZE

PO Box 261487, UC # 06, RA # 08  
Jebel Ali Free Zone, Dubai, UAE  
Tel: +971 4 8834489  
Fax: +971 4 8834778  
Web: www.hima.ae  
E-mail: info.hme@hima.com

## HIMOINSA

### HIMOINSA

Ctra. San Javier km 23.6  
San Javier / Murcia, 30730, Spain  
Tel: +34 968 191128  
Fax: +34 968 191217  
Web: www.himoinsa.com  
E-mail: info@himoinsa.com

HIMOINSA is a global corporation that designs, manufactures and distributes power generation equipment worldwide. The company adds incomparable application and engineering know-how, excellent design and service capabilities, delivering value beyond the equipment it produces. The product range that the brand offers includes diesel and gas generator sets, control panels and paralleling systems for standby emergency power, prime power, peak power and distributed power. It also develops hybrid power gensets for the telecom sector and manufactures lighting towers for the rental and construction markets.

**Agents:**  
United Arab Emirates - HIMOINSA Middle East

**Jeremias Exhaust Solution for DIESEL and GAS POWER GENERATION**

Jeremias Middle East office | Jumeriah lake Towers | Tiffany Tower | PO Box 75873 Dubai | UAE | Main: +971509596119 | Fax: +97144470152 | info@jeremias-me.com | www.jeremias-me.com

**Hold Key Electric Wire & Cable Co. Ltd.**

Zhongxiao East Road  
Section 1  
Taipei Zhongzheng District  
No. 85, 19th Floor  
Taipei City, 100  
Taiwan  
Tel: +886 2 23956602  
Fax: +886 2 23956022  
Web: www.hold-key.com.tw  
E-mail: Intl-sales@hold-key.com.tw

**Huegli Tech AG Ltd.**

Murgenthalstrasse 30  
Langenthal  
4900  
Switzerland  
Tel: +41 62 9165030  
Fax: +41 62 9165035  
Web: www.huegli-tech.com  
E-mail: rhellemann@huegli-tech.com

Huegli Tech is a leading supplier and wholesaler with core competences in Engine Governing Systems, Generating Set Controls, Hydraulic Engine Starting Systems, Vehicle Control Systems, Gas Engine Management System, Engine Accessories and Dual Fuel Conversions. We are active worldwide and our distribution network is well developed.

**Agents:**

Lebanon - Black Box SARL  
Saudi Arabia - Black Box KSA  
United Arab Emirates - Natheer Technical Services

**ICAR S.p.a.**

Via Isonzo, 10, Monza (MB), 20900  
Italy  
Tel: +39 039 83951  
Fax: +39 039 833227  
Web: www.icar.com  
E-mail: sales@icar.com

ICAR is one of Europe's leading capacitor specialists and bases its reputation on over 70 years of experience in the design, development and production of high performance capacitors. Today ICAR range is made of capacitors and automatic systems for power factor correction, capacitors for motors and lighting, DC and AC capacitors for power electronics use.

**IGEL Electric**

Industrieweg 13-15  
Sendenhorst, 48324, Germany  
Tel: +49 2526 93890  
Fax: +49 2526 938922  
Web: www.igelelectric.de  
E-mail: Vertrieb@igelelectric.de

IGEL Electric boasts the largest range of products in the field of soft starter systems worldwide. IGEL supplies drive solutions with

quality that is "Made in Germany". IGEL products are installed in Europe, in the Far East, the Middle East as well as in the America and in Africa.

**Agents:**

United Arab Emirates - IGEL Electric Dubai

**Imequadri Duestelle S.p.a.**

Via Provinciale, 568, Urgnano (BG)  
24059, Italy  
Tel: +39 035 4814211  
Fax: +39 035 4814333  
Web: www.imequadrduestelle.com  
E-mail: commerciale.quadri@imequadrduestelle.it

Imequadri Duestelle designs and produces: LV switchgears: PC and MCC; MV switchboards: Metal Clad LSC2B-PM, Metal Enclosed LSC2A-PI with air insulated LBS, Metal Enclosed LSC2A-PM with SF6 insulated LBS, Busducts and Prefabricated substations; indoor MV LBS and Disconnectors (air or SF6 gas-insulated), fix Circuit breakers and Earthing Switches for panel or wall mounting.

**Indian Electrical and Electronics Manufacturers Association (IEEMA)**

501 Kakad Chambers  
132, Dr. Annie Besant Road, Worli  
Mumbai, 400018, India  
Tel: +91 22 24930532/6528/6529  
Fax: +91 22 24932705  
Web: www.ieema.org  
E-mail: mumbai@ieema.org

IEEMA - Indian Electrical and Electronics Manufacturers Association is the apex association of manufacturers of electrical, industrial electronics and allied equipment in India. IEEMA the first ISO certified Industry Association in India, has over 800 members organisations. IEEMA also organizes, the world's largest biennial T & D Exhibition ELECRAMA.

**Inmarco Industries FZC**

PO Box 120284, SAIF-Zone  
Sharjah  
United Arab Emirates  
Tel: +971 6 5578378  
Fax: +971 6 5578948  
Web: www.inmarco.ae  
E-mail: info@inmarco.ae

Inmarco is one of the leading manufacturers of superior quality fluid sealing and thermal insulation products. An ISO 9001:2008 certified company serving the entire Middle East countries.

**INMESOL S.L.**

Ctra. Fuente Álamo, 2  
Corvera - Murcia  
30153  
Spain  
Tel: +34 968 380300  
Fax: +34 968 380400  
Web: www.inmesol.com  
E-mail: inmesol@inmesol.com

INMESOL S.L. is a Spanish company dedicated to the design, manufacture and technical services of generators from 3-2500 KVA, engine-driven welders, lighting towers and hybrid modules. His philosophy is to satisfy the requirements of all kinds of projects, including those most demanding.

**IREM S.p.a.**

Via Abegg 75  
Borgone (Torino)  
10050  
Italy  
Tel: +39 011 9648211  
Fax: +39 011 9648222  
Web: www.irem.it  
E-mail: svm@irem.it

IREM S.p.a. specialises in design and manufacture of 1PH and 3PH electro-dynamic voltage regulators and line conditioners - in standard and customized versions - with power ratings from 1 to 4750kVA for indoor and outdoor installation. In business since 1947, IREM is a medium size company (staff 110 people) exporting all over the world. Company according to ISO9001 (since 1983) and ISO 14001 (since year 2000), BS OHAS 18001 (since 2014) Standards. Typical application fields: Broadcast, telecommunication, industrial applications, electro-medical appliances, machine tools, manufacturing plants, banks and insurance companies, construction, oil and gas, mining, a.s.o.

**JCB Power Products**

Hixon Airfield Industrial Estate  
Hixon  
Staffordshire  
ST18 0PF  
United Kingdom  
Tel: +44 1889 272200  
Fax: +44 1889 272220  
Web: www.jcbgenerators.com

JCB Power Products offer a comprehensive range of over 170 generators and lighting towers ranging from 8-3300 kVA. Open or canopied, single or 3 phase or 60Hz frequency, plus various voltage options; the JCB range of generators gives you a lot of options to meet your exact power requirements.

**Agents:**

Egypt - IPC  
Iraq - Al Ghodwa  
Kuwait - Riham  
Lebanon - Fares Baladi  
Libya - Al Noras  
Oman - MOS  
Qatar - Mannai  
Turkey - SIF  
United Arab Emirates - Galadari

**Jeremias Middle East**

PO Box 75873, Tiffany Tower  
Jumeirah Lake Towers, JLT, Dubai  
United Arab Emirates  
Tel: +971 50 9596119  
Web: www.jeremias-me.com  
E-mail: info@jeremias-me.com

Jeremias is one of the world's leading manufacturers of high pressure, high temperature stainless steel flue and chimney systems for the exhaust of gases and ventilation. Jeremias product range includes 60 different CE certified systems covering all kind of domestic, commercial and industrial applications complemented by freestanding industrial steel chimneys up to 3 meter diameter.

**gc GALVA COAT**  
For Galvanizing & Lighting Poles

**NEW PRESS BREAK MACHINE**  
We are proud to introduce one of the biggest FOLDING MACHINES in the world, with the following capacity:  
 ◆ Folding Length: 15 meters  
 ◆ Maximum thickness of 50 millimeter steel plates  
 ◆ Variable Punch, Die Setting & Bending

**NEW CNC PUNCH MACHINE**  
Perforation and Decoction Cable Management System (Tray / Ladder / Trunking, etc.)

**NEW LASER MACHINE**  
Laser Cutting Services (Flat plates / Tubes, etc.)

P.O. Box: 8485, Abu Dhabi - U.A.E.  
Tel: +971 2 5511188 - Fax: +971 2 5510188  
Email: galvaand@emirates.net.ae, Website: www.galvaccoat.ae

**JMG Limited**

15A Redemption Crescent  
Gbagada, Lagos, Nigeria  
Tel: +234 70 30005470/18980282  
Web: www.jmglimited.com/iraq  
E-mail: marketing@jmglimited.com

JMG Limited, official FG Wilson Dealer in Iraq, is a leading member in the generator industry, providing premium products with excellent after-sales support wherever reliable energy is needed.

**Agents:**

Lebanon - JMG International



**JOHN DEERE**

**John Deere Power Systems**

Unité d'Orléans-Saran  
La Foulonnerie - BP 11013  
Fleury les Aubrais Cedex  
45401, France  
Tel: +33 23 8826119  
Fax: +33 23 8846266  
Web: www.johndeere.com  
E-mail: jdengine@johndeere.com

- Manufactured Engine: John Deere
- Nos of cyl: 3, 4, 6
- Power range: 36 to 205 kW (48 to 275 hp)

**Agents:**

Egypt - Orascom Trading SAE  
Lebanon - Allied Diesel S.A.R.L.  
Oman - General Engineering Services Est.  
Saudi Arabia - Electrical Work & Maintenance (John Deere)

Turkey - AKSA Servis Ve Yedek Parca AS (John Deere)  
United Arab Emirates - GENAVCO  
Yemen - Abu Alrejal Trading Corporation

**Jubaili Bros**

Jebel Ali Free Zone, UAE  
Tel: +971 4 8832023  
Fax: +971 4 8832053  
Web: www.JubailiBros.com  
E-mail: jbdubai@jubailibros.com

Jubaili Bros is one of the leading providers of Power Solutions in the Middle East, Africa and Asia. With over 35 years of experience in the field of power generation, Jubaili Bros is the perfect choice for your power solution needs. Jubaili Bros serves its customers from 8 countries with 23 branches and a strong dealer network.

**Agents:**

Kuwait - Jubaili Bros  
Lebanon - Jubaili Bros  
Qatar - Jubaili Bros



**Kaeser Kompressoren FZE**

PO Box 17485, Street 1243  
Jebel Ali Free Zone (North), Dubai, UAE  
Tel: +971 4 8050000  
Fax: +971 4 8050077  
Web: www.kaeser.com  
E-mail: info.dubai@kaeser.com

Manufacturers of industrial and portable air compressors, rotary blowers and associated accessories.

**KALPA ELEKTRIKAL Pvt Ltd.**

PO Box No 4413, 149/25  
III Main  
Industrial Town  
Rajajinagar  
Bangalore, 560010  
India  
Tel: +91 80 23405248  
Fax: +91 80 23116165  
Web: www.kalpaelektrikal.com  
E-mail: exim@kalpaelektrikal.com

KALPA ELEKTRIKAL Pvt Ltd., India established in the year 1978, with over 35 years of vast experience in design, manufacturing, testing and supply of LV & MV current transformers, voltage transformers, dry type control & power transformers and line chokes to utilities, switchgear manufacturers, other industries.

**KFB Holding Group**

PO Box 61891, Exit 14  
Al-Rayan Area  
Eastern Ring Road  
Riyadh, 11575  
Saudi Arabia  
Tel: +966 11 4966667  
Fax: +966 11 4917919  
Web: www.kfbgroup.com.sa  
E-mail: santhosh.kumar@kfbgroup.com.sa

Manufacturing & trading of electrical distribution products & systems, DG sets, UPS, DC power, transformers, automation & rotating machine services.



Enriching Lives

**Kirloskar Oil Engines Ltd.**

Laxmanrao Kirloskar Road, Khadki  
Pune, 411003, India  
Tel: +91 20 6608 4424  
Fax: +91 20 25813208  
Web: www.koel.co.in  
E-mail: Milind.Panadare@kirloskar.com

Kirloskar Group is counted among India's largest multi-products, multi-location diversified engineering conglomerates with annual sales of US \$1.6 billion. Kirloskar Oil Engines Ltd. was incorporated in 1946, and is the flagship company of the Kirloskar Group. Today KOEL is an acknowledged leader in the manufacturing of diesel engines, agricultural pump sets and 'Kirloskar Green' generating sets. Company has state-of-the-art manufacturing units in India that offers world-class products. KOEL has a sizable presence in international markets, with offices in Dubai, South Africa and Kenya and representatives in Nigeria. KOEL also has a strong distribution network throughout the Middle East and Africa.

**Agents:**

Algeria - Sari Pro Pompes  
Bahrain - M.H. Al Mahroos BSC  
Egypt - Egyptian Engineering & Trading Co.  
Kuwait - Boodai Trading Co.  
Lebanon - HMH Machinery Est.  
Morocco - HIB Agricole  
Oman - Kala International LLC  
Qatar - Boodai Trading Co. Ltd.  
Saudi Arabia - Abdullah Hashim Co. Ltd.  
United Arab Emirates - Al Shirawi Enterprises LLC

**HellermannTyton**  
www.HellermannTyton.ae

**Tailormade solutions for your industry**

**Cable Ties and Fixings**



**Insulation Products**



**Identification Systems**



**Application Tooling**



For eight decades, the HellermannTyton Group of companies has been developing and manufacturing innovative products for fastening, protecting, routing and marking cables and their connecting components.

Today, thousands of customers across all industries rely on our wealth of engineering experience to design and supply high-quality, best-fit solutions for their specialised part requirements.

Learn more about  
**HellermannTyton**  
products and  
solutions with our  
downloadable  
product catalogue.



**KoCoS Messtechnik AG**

Suedring 42, Korbach, 34497  
Germany  
Tel: +49 5631 959640  
Fax: +49 5631 959616  
Web: www.kocos.com  
E-mail: info@kocos.com

KoCoS Messtechnik AG has over 25 years experience in developing and manufacturing measuring and test systems for equipment in electricity supply systems: digital fault recorders, relay test systems, circuit breaker test systems, high-precision ohm meters, power sources, meter test systems and power quality measuring systems - MADE IN GERMANY.

**Agents:**

Bahrain - KoCoS Middle East

## KOHLER Power Systems

**Kohler Power Systems**

Kristallaan 1, Zevenbergen, 4761 ZC  
Netherlands  
Tel: +31 168 331630  
Web: www.kohlerpower.com  
E-mail: powersystems.emea@kohler.com

For every aspect of your critical load requirements, Kohler has engineered the product: EPA-compliant generator sets from 5 to 3250kW, a full line of automatic transfer switches, customizable paralleling switchgear, controls that can manage a multitude of power systems applications, along with wireless and Web-enabled remote PC power system monitoring.

**Agents:**

Saudi Arabia - A.Abunayyan Trading Corporation

**Layer Electronics S.r.l.**

S.P. Km 5, 3 C/da S. Cusumano  
Trapani, 91100, Italy  
Tel: +39 0923 562794  
Fax: +39 0923 567880  
Web: www.layer.it  
E-mail: layer@layer.it

Layer Electronics is an Italian leading company producing industrial AC&DC UPS, frequency converters, stabilizers, solar and wind inverters, charge regulators, cathodic protection power supplies, DC/DC converters and anything else, which you may need. Your Industrial partner since 1967. Made in Italy: All Layer products are designed and manufactured in Trapani - Sicily

**Leroy-Somer Electric Power Generation**

Blvd. Marcellin Leroy - CS 10015  
16915 Angoulême Cedex, France  
Tel: +33 5 45644564  
Web: www.leroy-somer.com  
E-mail: ContactLeroySomer.ials@Emerson.com

Leroy-Somer, a business of Emerson, is the world leader in low and medium voltage alternators. We specialize in high-quality, reliable products that combine long-lasting performance and reduced lifetime costs. We serve all industries and provide a complete range of solutions. Get in touch!

**Agents:**

United Arab Emirates - Leroy-Somer Electric Power Generation

**LG Electronics Gulf FZE**

36th Floor, Shatha Tower  
Road # 82, Al Sofouh 2nd  
TECOM, Dubai Media City, Dubai  
United Arab Emirates  
Web: www.lg.com/ae

LG Electronics Middle East & Africa is the regional headquarters for LG Electronics based in Dubai that oversees operations in 23 countries comprised of 12 subsidiaries, 11 branch offices & 3 manufacturing facilities. LG's world-leading products are an investment for the future that are made up of 4 forward-looking business units - Home Entertainment, Mobile Communications, Home Appliance & Air Solution & Vehicle Components. For more information about LG Electronics, please visit www.LGnewsroom.com.

**Agents:**

Bahrain - AJM Kooheji and Sons  
Kuwait - Al Babtain Air Conditioning & Refrigeration Co.  
Oman - ASPIRE  
Oman - Oman Gulf Enterprise  
Qatar - LG Qatar Office  
Qatar - Video Home Electronics Centre  
United Arab Emirates - Al Yusuf Electronics  
United Arab Emirates - District Cooling Company  
United Arab Emirates - Fortune International Trading LLC  
United Arab Emirates - LG Electronics Gulf FZE  
United Arab Emirates - LG Electronics Middle East and Africa  
United Arab Emirates - United Entraco Trading company

**Lijan Insulation Contracting LLC**

PO Box 84801, Dubai  
United Arab Emirates  
Tel: +971 4 2674966  
Fax: +971 4 2675477  
Web: www.lijangroup.com  
E-mail: lijan@eim.ae

**Linz Electric S.p.A**

Viale Del Lavoro  
30 - Arcole (Verona), 37040, Italy  
Tel: +39 045 7639201  
Fax: +39 045 7639202  
Web: www.linzelectric.com  
E-mail: info@linzelectric.com

Linz Electric S.p.A is specialized in the production of alternators and rotating welders. Part of the Pedrollo Group of companies, Linz Electric has become one of the major players in the sector in just a few years, thanks to the original innovative solutions in energy transformations.

**Lister Petter Ltd.**

Unit 13-15, Waterwells Business Park  
Quadrant Way, Hardwicke, Gloucester  
GL2 2RN, United Kingdom  
Tel: +44 1452 229990  
Web: www.lister-petter.co.uk  
www.lister-petter.com  
E-mail: global@lister-petter.co.uk

Since 1867, Lister Petter has not only manufactured diesel engines, generating sets and parts but most importantly it has continued to live and breathe quality, experience and rugged durability into every product. We do this by simply understanding and responding to customers needs and the particular requirements of different markets.

**Agents:**

Bahrain - Abbas Bilkeek & Son  
Iraq - Nafithat Al-Sharg For General Contracting Company  
Jordan - Yazoure Est. Engineering Mechanical Argicultural  
Kuwait - Al-Khonaini Gen. Trading & Contracting Co. WLL  
Lebanon - Arison Sari  
Oman - Mohamed & Ahmed Alkhonji Lic  
Oman - Moosa Abdul Rahman Hassan & Co. LLC  
Palestine - Eng Moustafa Mourtaga & Sons Co.  
Qatar - Al-Kholaifi Trading Co.  
United Arab Emirates - Al Masaoood - Power Engineering Division  
United Arab Emirates - M.A.H.Y. Khoory & Co.  
Yemen - Bahaj-Yemen

**Lloyd Dynamowerke GmbH**

Hastedter Osterdeich 250  
Bremen, 28207  
Germany  
Tel: +49 421 45890  
Fax: +49 421 4589260  
Web: www.ldwde  
E-mail: sales@ldw.de

Newest technologies in combination with over 90 years of experience - that's the successful foundation on which the extraordinary quality of LDW's machines and drives is based. We do not manufacture standard machinery. Instead we develop specific solutions for asynchronous, synchronous and direct-current motors and generators for your individual needs.

**Agents:**

Bahrain - Electrical Machines Industries  
United Arab Emirates - Salwo Trading Ltd.  
United Arab Emirates - TRIZAC Abu Dhabi Oilfield Supply and Services

**LOVAG**

C/o ETICS International  
20-22 rue de Commerce  
Brussels, 1000, Belgium  
Tel: +49 151 11628718  
Web: www.lovag.net  
E-mail: office@lovag.net

LOVAG (low Voltage Agreement Group) consist of 7 European third party certification bodies, issuing LOVAG Certificates and LOVAG Mark Licences for LV industrial equipment, in compliance to IEC and En-standard.

- ACAE, Italy
- ALPHA at VDE, Germany
- APPLUS+Laboratories, Spain
- ASEFA, France
- IMQ, Italy
- Intertek Semko AB, Sweden
- SGS Cebec, Belgium

**Agents:**

United Arab Emirates - SGS Gulf Ltd.



ENERGY AND AUTOMATION

**Lovato Electric S.p.A.**

Via Don Mazza  
12 Gorle (BG)  
24020, Italy  
Tel: +39 035 4282111  
Fax: +39 035 4282400  
Web: www.lovatoelectric.com  
E-mail: info@lovatoelectric.com

Lovato Electric, Italian solid tradition with almost 90 years of on-going activity, is the leader in industrial controls, diesel gen-set, energy management product manufacturing field for industry. The presence of Lovato

Electric in the most important world markets is the result of the company's constant international strategy, which is now exporting its products in over 100 countries.

**Lucy Electric Ltd**

Howland Road, Thame  
Oxfordshire  
OX9 3UJ  
United Kingdom  
Tel: +44 1844 267267  
Fax: +44 1844 267223  
Web: www.lucyelectric.com  
E-mail: salesuk@lucyelectric.com

Lucy Electric is a global leader in secondary power distribution solutions with over 100 years' industry experience. Specialising in high-performance switchgear, we develop and supply intelligent solutions and services for utility, industrial and commercial applications. This enables the safe and reliable distribution of energy to homes and businesses worldwide.

**Agents:**

United Arab Emirates - Lucy Middle East

**Luvata Söderköping AB**

Industrigatan 2B  
Söderköping  
61481, Sweden  
Tel: +46 12119100  
Fax: +46 12110101  
Web: www.luvata.com  
E-mail: luvata.soderkoping@luvata.com

Luvata is a world leader in metal solutions manufacturing and related engineering services. Luvata's solutions are used in industries such as renewable energy, power generation, automotive, medicine, air-conditioning, industrial refrigeration and consumer products. The continued success of the company is attributed to its longevity, technological excellence and strategy of building partnership with customers such as Siemens, Toyota, CERN and DWD International.

**Mahindra Powerol - Mahindra & Mahindra Ltd.**

Fes, Gate No 02, Akurli Road  
Kandivali East, Mumbai  
400101, India  
Tel: +91 220 67504023  
Web: www.mahindrapowerol.com  
E-mail: shelke.krunal@mahindra.com

Mahindra group, US 16.2 bn dollar empire, tractor & multi-utility vehicles major in India forayed into the field of Power Generation in 2002. Today, Mahindra engines with the brand name Mahindra Powerol are powering over 270,000 Diesel generating sets in India & in global markets ranging from 5kVA to 500kVA.

It offers several advantages like: fuel efficiency, minimal vibration and low noise levels apart from diesel generators, Powerol also deals in industrial engines across India & home inverters in selected markets. Mahindra Powerol products are presently available in over 20 Countries across Africa, Middle East & Asia.

**Agents:**

Bahrain - Al Thawadi Electrical & Mechanical Est.  
Oman - Bin Salim Enterprises LLC  
Qatar - Mannai Trading Co. WLL  
Saudi Arabia - Intermodal Services of S.A.  
Trading & Contracting  
United Arab Emirates - Al Rawahy Establishment LLC

The stage is yours...

All night long!

## Diesel & Hybrid Lighting Towers

Thanks to their practical usage and fuel efficiency, Teksan Diesel & Hybrid Lighting Towers deliver significant savings for your projects.



WE DELIVER POWER TO THE WORLD



More inspiration: Simply scan this code with your smartphone

Yenidogan Mah. Edebali Cad.  
34791 No: 12 Sancaktepe - ISTANBUL / TURKEY

T: +90 216 312 05 50  
F: +90 216 312 69 09

info@teksangenerator.com  
www.teksangenerator.com

 **TEKSAN**



### MAN Diesel & Turbo SE

Stadbachstr 1, Augsburg, 86153  
Germany  
Tel: +49 821 3220  
Fax: +49 821 3223382  
Web: www.mandieselturbo.com  
E-mail: info-de@mandieselturbo.com

MAN Diesel & Turbo SE is the world's leading provider of large-bore diesel engines and turbomachinery for marine and stationary applications. It designs two-stroke and four-stroke engines, gas and steam turbines as well as compressors. The product range is rounded off by turbochargers, propellers, gas engines and chemical reactors. Customers receive worldwide after-sales services marketed under the MAN PrimeServ brand.

#### Agents:

Jordan - MAN Diesel & Turbo Jordan LLC  
Saudi Arabia - MAN Diesel & Turbo Saudi Arabia LLC  
United Arab Emirates - MAN Diesel & Turbo Middle East LLC

### Mantrac Group

(B-17) Smart Village Km 28  
Cairo-Alexandria Desert Road - 6th of October, Egypt  
Tel: +20 2 35370798  
Fax: +20 2 35314000  
Web: www.mantracgroup.com  
E-mail: info@mantracgroup.com

Mantrac Group is the authorized Caterpillar dealer, distributing and supporting Caterpillar construction machines, power systems and material-handling equipment in nine countries spread over three continents. With decades of experience as CAT suppliers, Mantrac provides customers with comprehensive solutions backed by technical know-how, experience and in-depth knowledge of their local markets.

#### Agents:

Egypt - Mantrac Egypt Ltd.  
Iraq - Irtarac  
United Arab Emirates - UNA Trading FZE

### Marechal Electric

5 Avenue de Presles, Saint-Maurice  
Cedex, 94417, France  
Tel: +33 1 45116000  
Fax: +33 1 45116060  
Web: www.marechal.com/en  
E-mail: contact@marechal.com

For over 60 years Marechal has been known for the safety, reliability and flexibility of its connector technology. We continue to innovate and offer the products to meet the highest requirements for heavy duty applications, ship to shore connections and ex. environments.

#### Agents:

United Arab Emirates - Technor Middle East DMCC

### Marelli Motori S.p.A.

Via Sabbionara 1, Arzignano, Vicenza  
36071, Italy  
Tel: +39 0444 479711  
Fax: +39 0444 479888  
Web: www.marellimotori.com  
E-mail: sales@marellimotori.com

Marelli Motori is a global leading designer and manufacturer of generators and electric motors. Our products are suitable for a variety of applications: power generation, industrial manufacturing, oil & gas, renewable energies (hydro), cogeneration and UPS, marine and navy.



### Mecc Alte UK Limited

6 Lands End Way, Oakham  
Rutland, LE15 6RF  
United Kingdom  
Tel: +44 1572 771160  
Fax: +44 1572 771161  
Web: www.meccalte.com  
E-mail: steve.ohara@meccalte.co.uk

Mecc Alte is proud to be the largest independent producer of synchronous alternators. Quite simply, we manufacture alternators through 'made for manufacturing' product designs from 1kVA through to 5000kVA. Operating in electromechanical sector, we produce many types of special rotating machines, to cover a highly diverse range of applications. We've been totally independent since 1947 and that means we don't have to keep looking over our shoulder. We're free to do what we think is best for our customers.... every hour of every day..



### Megger Ltd.

Millennium Tower  
Office No.142, Bldg. No.205  
Road 2803  
King Mohammed IV Avenue  
Block No.428 Seef Area  
Bahrain  
Tel: +973 17740620  
Web: www.megger.com/me  
E-mail: mesales@megger.com

The Megger product range includes some of the latest developments in electrical safety testing, cable fault location, protection testing, circuit breaker testing, earth transformer and battery testing, power quality analysis and insulation diagnostics. For over 100 years, Megger has been helping electrical utilities to operate safely, efficiently and reliably.



### Metal Deploye Resistor

1 Route de Semur  
Montbard  
21500  
France  
Tel: +33 3 80895858  
Web: www.mdresistor.com  
E-mail: info@mdresistor.com

With a know-how developed since 1938 and a continuous approach of quality, innovation and customer satisfaction, Metal Deploye Resistor is a foremost industrial power resistors manufacturer: Neutral earthing resistors, Filter resistors, Load bank resistors, Braking resistors. MD Resistor offers both standard and custom designed resistors for any application.

### Mets Energy

PO Box 113/7354  
Choueifat - Bchamoun Crossroad  
Beirut, 1103 2170  
Lebanon  
Tel: +961 5 801401  
Fax: +961 5 801337  
Web: www.metsenergy.com  
E-mail: info@metsenergy.com

### Middle East Specialized Cables

PO Box 585  
Second Industrial Area Phase 3  
Riyadh, 11383  
Saudi Arabia  
Tel: +966 1 2650555  
Fax: +966 1 2650614  
Web: www.mescables.com  
E-mail: sales@mescables.com

#### Agents:

Bahrain - Al Mosawi Trading and Electrical Contracting Co.  
Kuwait - Reem Al Kuwait  
Oman - Sami Abdul Aziz Jaffer Co.  
Qatar - KBF Trading and Contracting Co.  
United Arab Emirates - General Trading Group

### Mohammed Abdulrahman Al Bahar

PO Box 5357, Manama, Bahrain  
Tel: +973 17705177  
Fax: +973 17704710  
Web: www.albahar.com  
E-mail: info@albahar.com



MOSDORFER  
KONIG GRUPPE

### Mosdorfer GmbH

Mosdorfergasse 1, Weiz, 8160  
Austria  
Tel: +43 3172 25050  
Fax: +43 3172 250529  
Web: www.mosdorfer.com  
E-mail: office@mosdorfer.com

Mosdorfer specializes in fittings and damping systems for high-voltage overhead transmission lines. More than 1,000 projects worldwide with numerous references in the Middle East are obvious sign of international competence as global supplier. The product portfolio includes string fittings, fittings for OPGW, OPPC, ADSS, damping systems, insulators, end fittings as well as fittings for high temperature conductors.

### Motorenfabrik Hatz GmbH & Co. KG

Ernst-Hatz Strasse 16  
Ruhstorf a.d. Rott, 94099  
Germany  
Tel: +49 8531 3190  
Fax: +49 8531 319418  
Web: www.hatz-diesel.com  
E-mail: marketing@hatz-diesel.de

Hatz is a specialist for industrial diesel engines with up to 56kW of power and systems based on combustion engines like generating sets and pumps. Hatz develops and produces generating sets with an output of 2 to several hundred kVA including smart-grid systems and other customized power solutions.

#### Agents:

Bahrain - Gulf Equipment & Technology  
Jordan - Al Ghanem Trading & Contracting Co.  
Oman - Inma Co. Oman LLC  
Qatar - Inma Co. Qatar LLC  
Saudi Arabia - Electrical Work & Maintenance (Motorenfabrik)  
United Arab Emirates - Inma Gulf Development & Construction LLC (Hatz)

### Motortech GmbH

Hogrevestr. 21-23, Celle  
29223, Germany  
Tel: +49 5141 93990  
Fax: +49 5141 939999  
Web: www.motortech.de  
E-mail: motortech@motortech.de

Motortech develops and manufactures igniters components, air fuel ratio controllers engine management systems and other accessories for stationary gas engines.

### MTU Friedrichshafen GmbH

Maybachplatz 1, Friedrichshafen  
88040, Germany  
Tel: +49 7541 900  
Fax: +49 7541 905000  
Web: www.mtu-online.com



### National Instruments

11500 N Mopac Expwy  
Austin, Texas, 78759-3504, USA  
Tel: +1 512 6830100  
Fax: +1 512 6835794  
Web: www.ni.com

National Instruments is a provider of automated test, control and monitoring equipment and graphical system design with a broad focus on the energy, oil and gas, and condition monitoring sectors. NI has established its presence in Arabia in 2004 along with offices in Lebanon, Egypt, Saudi Arabia and Turkey.

#### Agents:

Lebanon - National Instruments Lebanon SARL

### Netcontrol

Unit 4E  
Bramhall Moor Technology Park  
Pepper Road, Hazel Grove, SK7 5BW  
United Kingdom  
Tel: +44 161 4842600  
Fax: +44 161 4842601  
Web: www.netcontrol.com  
E-mail: mk-group@netcontrol.com

Netcontrol provides energy network automation solutions for utility communication, distribution automation, substation automation, and control centres. Netcontrol has a strong portfolio of products and services for the electricity transmission and distribution sector, power companies and energy intensive industry.

#### Agents:

United Arab Emirates - Autochim Systems Abu Dhabi

### New CTA S.r.l.

Vico II della Quercia, 4, Napoli  
80134, Italy  
Tel: +39 081 7100925  
Fax: +39 081 7100897  
Web: www.newcta.com  
E-mail: newcta@newcta.com

New CTA is an Italian company that designs and manufactures low-voltage transformers since 1986. Our production consists of transformers, auto-transformers, ballast, cast resin for different fields: industrial, civil, photovoltaic, lift, naval, medical, panel, starting motor. We have obtained quality certification ISO 9001: 2008 and we also have Saudi Aramco Registration Number.

### Novateur Electricals & Digital Systems Limited

B-24, Phase II, Noida, 201305, India  
Tel: +91 120 3853000  
Fax: +91 120 3853002  
Web: www.indoasian.com  
E-mail: ajay.wali@indoasian.com

Indo Asian leading brand from Euro 4.5 Billion Legrand Group France launches exciting new generation Catreon, Optipro range of MCB, RCCB, ISOLATORS, distribution boards. Exporting over 50 countries since 1958. Other products include fuses, MCCB, ACB, switches, changeovers. USP value for money standard/customized products. Global customers include leading power distribution companies, OEMs.

**Novoflex Marketing Pvt. Ltd.**

Raikva 3A Ram Mohan  
Mullick Garden Lane, Kolkata  
700010, India  
Tel: +91 33 23720088/0020  
Web: www.novoflex.in  
E-mail: sales@novoflex.co.in  
dinesh@novoflex.in

Novoflex is an ISO 9001:2008 certified growth oriented, state-of-the-art company known for its quality products, engineering expertise and manufacturing capabilities. Novoflex has a wide variety of products ranging from cable binding, securing and fixing systems, cable identification systems. Products are primarily designed to make assembly more efficient and cost effective by reducing labor and promoting easy interchangeability for maintenance and repair.

**Nuhas Oman LLC**

PO Box 186  
Rusayl Industrial Estate  
124, Oman  
Tel: +968 24449007/  
24449247/24449249  
Fax: +968 24446790  
Web: www.nuhasoman.com  
E-mail: marketing@nuhasoman.com  
info@nuhasoman.com  
purchase@nuhasoman.com

We are an ISO:9001:2008 BASEC, UK certified producer of LV (Power, Control, Instrumentation, Specialty, Flexible), MV Cables up to 33 KV, 8mm OFE CC Copper Rods, Bare Copper Conductors and Enamelled Wires.  
Our products are type test approved by BSI, U.K. and KEMA, Netherlands confirming conformance with relevant BS & IEC Specifications.

**OMICRON****OMICRON Electronics Middle East**

Almoayad Tower 39th Floor  
Offices 3901 & 3902 – Bldg 2504 –  
Rd 2832, Block 428  
Seef District – Manama, Bahrain  
Tel: +973 17116400  
Fax: +973 17116401  
Web: www.omicron.at

OMICRON Electronics develops and manufactures state-of-the-art test solutions for the advanced electrical testing of primary and secondary substation equipment, including protection systems and power transformers. With innovation in technology and software, OMICRON has earned world leader status from sales and excellent customer support in more than 130 countries.

**One Electrical Ltd.**

Bankfield Road, Tyldesley  
Manchester, M29 8QH, UK  
Tel: +44 161 7032201  
Fax: +44 161 7039939  
Web: www.oneelectrical.com  
E-mail: ghall@oneelectrical.com

Established for over 15 years, One Electrical Ltd are a UK based premium brand of electrical wiring accessories & lighting. The brand is a well known name across the global industry and more recent growth can be put down to the specialisation in LED lighting and a huge growth in export demand.

**Agents:**

United Arab Emirates - MSS Electrical LLC

**Oriental Copper Co. Ltd.**

27th Fl. Bangkok Insurance  
Y.W.C.A. Building M, 25 South Sathon Rd.,  
Thungmahamek, Sathon, Bangkok  
10120, Thailand  
Tel: +66 2 6975100  
Fax: +66 2 6975199  
Web: www.orientalcopper.com  
E-mail: sale@orientalcopper.com

**ORTEA S.p.A.**

Via dei Chiosi  
21 Cavenago di Brianza (MB)  
20873, Italy  
Tel: +39 02 95917800  
Fax: +39 02 95917801  
Web: www.ortea.it  
E-mail: ortea@ortea.com

Founded in 1969, ORTEA is now a leading company in manufacturing and engineering voltage stabilisers, generators, magnetic components, power factor correction systems and electrical equipments. Beside standard production, ORTEA is able to be extremely flexible in developing and manufacturing special equipment according to user's specifications.

**Panasonic Marketing Middle East & Africa**

PO Box 17985  
Jebel Ali Free Zone - South, Dubai  
United Arab Emirates  
Tel: +971 4 8862142  
Fax: +971 4 8862338  
Web: www.panasonic.com  
E-mail: customercare@  
ae.panasonic.com

Panasonic Marketing Middle East and Africa FZE (PMMAF) is the regional headquarters, handling all functions related to sales and marketing, supply chain and customer service solutions and advertising. The vision of PMMAF is to be the No 1 Customer-centric company and No 1 Customer-preferred brand in the Middle East and Africa region.

**Agents:**

United Arab Emirates - Advance Est. For Lighting & Electricals

**Perkins Engines Co. Ltd.**

Frank Perkins Way, Peterborough  
Cambridgeshire, PE1 5FQ, UK  
Tel: +44 1733 583000  
Fax: +44 1733 582240  
Web: www.perkins.com

One of the world's leading supplier of off-highway diesel and gas engines in the 4 - 2000kW market, Perkins key strength is its ability to tailor engines to meet customer's precise requirements, which is why its power solutions are trusted by over 1000 leading manufacturers around the world.

**Agents:**

United Arab Emirates - Power Systems Gulf LLC

**Phenix Technologies Inc.**

75, Speicher Drive, Accident  
Maryland, 21520, USA  
Tel: +1 301 7468118  
Fax: +1 301 8955570  
Web: www.PhenixTech.com  
E-mail: info@phenixtech.com

Phenix Technologies is a manufacturer and global supplier of ultramodern high voltage, high current, high power test systems and components for testing cables, circuit

breakers, generators, GIS/switchgear, insulation materials, motors, reclosers, transformers, utility worker's rubber goods/protective gear including mobile field test sets, plus 40 years' experience, and ISO9001 quality certification.

**Agents:**

United Arab Emirates - ARABCAL

**Phoenix Contact Middle East FZ LLC**

PO Box 345002  
Dubai International Academic City  
Office No. 301, 3rd Floor  
Block No.10, Dubai, UAE  
Tel: +971 4 4370324  
Fax: +971 4 4370323  
Web: www.phoenixcontact.ae  
E-mail: info-me@phoenixcontact.com

Phoenix Contact, founded in 1923, is a leading manufacturer of electrical connection, electronics interface and industrial automation technology with headquarters in Germany. Our worldwide distribution is effected via a global network of 50 own subsidiaries and approximately 30 representations in Europe and Overseas. For agents and suppliers please check our website for more details:  
www.phoenixcontact.ae/channel\_partners

**Plumettaz SA**

Route de la Gribannaz 7, Bex  
1880, Switzerland  
Tel: +41 24 4630606  
Fax: +41 24 4630607  
Web: www.plumettaz.com

**Pollmann Elektrotechnik GmbH**

Mittelweg 98, Oelde, 59302, Germany  
Tel: +49 2522 93210  
Fax: +49 2522 1000  
Web: www.pollmann-elektrotechnik.de  
E-mail: export@pollmann-  
elektrotechnik.de

Pollmann Elektrotechnik is specialised in busbars for low-voltage switchboards. Furthermore we produce main terminals, connectors, earthing material and fixing devices. We are able to manufacture within our product range nearly every special type according to our customers' needs and their various applications. Pollmann Elektrotechnik is DIN EN ISO 9001:2008 certified.

**Power Testing Ltd.**

33 Hanbury Road  
Widford Industrial Estate  
Chelmsford, Essex, CM1 3AE, UK  
Tel: +44 1245 266800  
Fax: +44 1245 265229  
Web: www.powertesting.co.uk  
E-mail: info@powertesting.co.uk

Founded in 1966, PTL specialize in LV and MV commercial industry, offering solutions to testing, maintenance, installation and reactive works.

It is our aim to offer our excellent service to new clients in the UAE and Middle East assisting in their economic growth and ensuring safety of supplies.

**Powersource Projects Ltd.**

PowerPro House  
Capital Park Industrial Estate  
Combe Lane, Wormley, Surrey  
GU8 5TJ, United Kingdom  
Tel: +44 1428 684980  
Fax: +44 1428 687799  
Web: www.power-source-pro.co.uk  
E-mail: chris@power-source-pro.co.uk

UK manufactured diesel generating sets and associated products with expert, in house parts department giving full product support and genuine parts from renowned global

manufacturers such as Perkins, Stamford (Newage), Meccalte, Deep Sea, FG Wilson and more. Please visit www.power-source-pro.co.uk to find out more.

**Powertech Switchgear Industries FZE**

PO Box 2335, Ajman Freezone  
Ajman, United Arab Emirates  
Tel: +971 6 7472274  
Fax: +971 6 7472551  
Web: www.powertechswitchgear.com  
E-mail: info@ptswitch.ae

Powertech Switchgear Industries FZE is a panel builder for ABB ArTu-K Systems and authorized value provider for ABB VFDs in UAE. Our panels are fully type tested by ASTA/LOVAG and have ADDC and AADC approvals up to 3200A and SEWA approval up to 2500A. We also fulfill DEWA, FEWA and KAHRAMAA regulations.

**Agents:**

United Arab Emirates - Powertech Electrical  
Distribution Boards Manufacturing LLC

**PR Middle East FZE**

PO Box 262478, 1206 JAFZA View 18  
Jebel Ali Free Zone - South 1  
Dubai, United Arab Emirates  
Tel: +971 4 8865275  
Fax: +971 4 8865276  
Web: www.pramac.com www.lifter.it  
E-mail: dubai@pramac.com

Pramac develops and manufactures a wide range of power generation equipment from 1 kVA to 3.360 kVA with Perkins, Volvo, MTU, Deutz, Cummins, Doosan, FPT, Iveco and Yanmar Engines and materials handling equipment. Pramac uses its global network to supply these products to markets throughout the world.

**Precision Wires India Ltd.**

Saiman House, J. A. Raul Street  
Off Sayani Road, Prabhadevi  
Mumbai, 400025, India  
Tel: +91 22 24360089  
Fax: +91 22 24362593  
Web: www.precisionwires.com  
E-mail: export@pwil.net

Precision Wires India Ltd. is the largest manufacturers of enamelled copper wire in South Asia with a capacity of 35000 MTs p.a. We manufacture round wires in the range of 0.080 mm – 5.00 mm, PCCC in the range of 5 sq mm to 65 sq mm and continuously transposed conductor from 5 strands to 43 strands.

**Prime Meiden Ltd.**

Prime Tower, 287-288  
Udyog Vihar, Phase-II, Gurgaon  
122016, India  
Tel: +91 124 4111999 (30 Lines)  
Fax: +91 124 4871698/99  
Web: www.primemeiden.com  
E-mail: info@primemeiden.com

Prime Meiden Ltd. (PML) is one of the leading players in the field of power transformer having the most modern and state-of-the-art factory for supply of EHV power transformer up to 765 kV located in special economic zone (SEZ), Naidupeta; district Nellore, Seemandhra the Southern State of India, spread over 100 acres of land.

**Rittal Middle East FZE**

PO Box 17599, Dubai, UAE  
Tel: +971 4 3416855  
Fax: +971 4 3416856  
Web: www.rittal-middle-east.com  
E-mail: info@rittal-middle-east.com

Founded in 1999, Rittal Middle East FZE - a subsidiary of Rittal GmbH & Co. KG. Composing an active team with over 30 professionals addressing the Middle East market, with headquarters based in Herbon, Germany. Rittal Middle East is one of the recognized innovative suppliers for the industrial and electrical sectors as well as a key player in the networking infrastructure & datacentre arena. A perfectly coordinated platform with a vast product range covering industrial/electrical enclosures, system climate control and power distribution suitable for oil & gas, energy, industries, construction etc. Ri4Power Form 2-4: New structured solution for reliable low-voltage switchgear system compatible with international players (breakers), type tested to 5500A as per the worldwide standard, IEC60439-1 and IEC61439-1/2.

**Rollo Power Solutions**

Unit 18 Garanor Way, Portbury  
Bristol, BS20 7XE, United Kingdom  
Tel: +44 1275 377800  
Fax: +44 1275 377877  
Web: www.rollopowersolutions.co.uk  
E-mail: bristol@rollopowersolutions.co.uk

Rollo Power Solutions are a one stop shop for parts - supplying genuine OEM parts for all makes and models of engines and generators, including engine components, filters, oils, coolants, batteries and other essential maintenance parts. Many lines are available for immediate dispatch and all come with standard OEM warranty.

**Rolls-Royce PLC**

The Icen Centre  
Warwick Technology Park, Warwick  
CV34 6DA, United Kingdom  
Tel: +44 1926 307700  
Fax: +44 1926 307987  
Web: www.rolls-royce.com

**Rotork PLC**

Brassmill Lane, Bath, BA1 3JQ, UK  
Tel: +44 1225 733200  
Fax: +44 1225 333467  
Web: www.rotork.com  
E-mail: information@rotork.com

Rotork is the world's leading manufacturer of electric, pneumatic & hydraulic valve actuators and control systems, valve gearboxes, valve accessories and precision control instruments supported by the Rotork worldwide service network.

**Agents:**

United Arab Emirates - Rotork Middle East FZE

**Rove Electric**

PO Box 33647, Dubai, UAE  
Tel: +971 4 2679123  
Fax: +971 4 2679285  
Web: www.roveelectric.com  
E-mail: info@roveelectric.com

**S.I.C.E.S. S.r.l.**

Via Molinello 8B, Jerago Con Orago (VA)  
21040, Italy  
Tel: +39 0331 212941  
Fax: +39 0331 216102  
Web: www.sices.eu  
E-mail: sales@sices.eu

SICES S.r.l. is an Italian company with more than 35 years of experience in the field of

design, supply and start-up of electronic control panels & electronic controllers for generator sets equipped with diesel, gas or vegetable oil engines. SICES provides the ideal control module for AMF, parallel and cogeneration gen sets.

**SAB, Standard Aggregatebau Evers GmbH & Co. KG**

Oststrasse 11, Norderstedt, 22844  
Germany  
Tel: +49 40 52250110  
Fax: +49 40 522501144  
Web: www.generatingset.com  
E-mail: info@generatingset.com

Reputable German manufacturer of diesel-driven generating sets from 50 to 8000 kVA in stationary, transportable or mobile executions for standby, peak load or base load applications world-wide. Main competencies are planning, designing, manufacturing, installation and servicing of global plant constructions under consideration of individual customer and project requirements.

**Saft SA**

12 Rue Sadi Carnot, Bagnolet  
93170, France  
Tel: +33 1 49931918  
Fax: +33 1 49931950  
Web: www.saftbatteries.com  
E-mail: webmaster@saftbatteries.com

SAFT manufactures nickel-based stationary battery systems to provide reliable power. From original pocket plate to our new lithium-ion batteries, we provide low maintenance and effective energy storage to assure security of supply and total autonomy in several applications.

**Agents:**

Iran - Dooman Co. Ltd.  
Saudi Arabia - Dar Al Fursan Trading Est.  
United Arab Emirates - Al Hamra

**Sakr Power Systems S.A.L**

Halat - Kartaba Road, Lebanon  
Tel: +961 9 442000  
Fax: +961 9 445444  
Web: www.sakr.com  
E-mail: lebanon@sakr.com  
sales@sakr.com

Founded in 1972 in Lebanon, Sakr Power Group is a group of companies specialized in power generation, with a scope of services covering the manufacturing, sales and rental of power generating sets and related electrical equipment, and the implementation of turnkey power projects. We are present around the world through our branches and our distributors.

**Agents:**

United Arab Emirates - Sakr Power Generation FZE

**Samsung Techwin**

Samsung Techwin R&D Center  
6, Pangyo-ro, 319 Beon-gil  
Bundang-gu  
Seongnam-si  
Gyeonggi-do, 463-400  
Korea  
Tel: +82 70 71474012  
Fax: +82 31 80183731  
Web: www.samsungcomp.com  
E-mail: turbosales@samsung.com

Samsung Techwin is specialized in designing and manufacturing of integrally geared air and gas compressors which are being operated around the world for plant air, process air and gas applications.

**Agents:**

United Arab Emirates - Samsung Techwin  
Dubai Office

**Scania CV AB**

Vagnmakarvägen 1  
Södertälje, 151 87, Sweden  
Tel: +46 8 55381000  
Fax: +46 8 55381037  
Web: www.scania.com

**Agents:**

Bahrain - National Establishment of Technical & Trade Services (NETS)  
Iraq - Qanadeel Al Rafidain Auto Trading Company Ltd.  
Kuwait - ICTCO Industrial Construction & Trading Co. WLL  
Oman - SATA LLC  
Qatar - Arabian Agencies Company (ARACO) LLC  
Saudi Arabia - General Contracting Company - Olayan  
Saudi Arabia - Mohammed A Al-Faddaghi & Partners  
United Arab Emirates - Al Shirawi Enterprises LLC (Scania)  
United Arab Emirates - Bin Brook Motors & Equipment LLC

**SDMO Industries**

12 Bis, Rue de la Villeneuve  
CS 92848, Brest Cedex 2, 28228  
France  
Tel: +33 2 98414141  
Fax: +33 2 98416307  
Web: www.sdmo.com  
E-mail: sdmo@sdmo.com

SDMO Industries is one of the world's leading generating sets manufacturers. A wide range of standard products from 1 kVA to several megawatts through an efficient engineering department meets non-standard requirements. Present in over 150 countries through a dense network, SDMO Industries devotes its energy to supporting you in the successful completion of each of your projects worldwide.

**Agents:**

United Arab Emirates - SDMO Middle East

**Segula Ltd.**

Offices C-F, 11/Floor  
Hollywood Centre  
77-91 Queen's Road West, Hong Kong  
Tel: +852 28519924  
Fax: +852 28519934  
Web: www.segula.com.hk  
E-mail: marketing@segula.com.hk

Segula offers LED lighting replacement for classical bulb shapes, flood & street lights, T8 for commercial, government and private energy saving goals.

**Agents:**

Saudi Arabia - Lifelight Co.

**Sergi France**

PO Box 90  
186 Avenue du Général de Gaulle  
Achères, 78260, France  
Tel: +33 1 39224840  
Fax: +33 1 39221111  
Web: www.sergi-france.com  
E-mail: marketing@sergi-france.com

Sergi France was created in 1955 to design and manufacture of oil-filled transformer fire extinguishing systems. Since then, the company has specialised in the transformer fire protection business by developing the Transformer Protector (TP). During a transformer short circuit, the TP is activated within milliseconds by the first dynamic pressure peak of the shock wave, before static pressure increases thus avoiding transformer explosions.

**Agents:**

Iran - UBUN Best Parts Engineering Company Ltd.  
Oman - National Factory for Security and Safety Equipment LLC  
Qatar - KBF Trading & Contracting Co. (Sergi France)  
United Arab Emirates - Ageco International FZE  
United Arab Emirates - FALCOR

**SES SMART Energy Solutions FZCO**

PO Box 18089, South 1  
Jebel Ali Free Zone, Dubai, UAE  
Tel: +971 4 8862066  
Fax: +971 4 8862067  
Web: www.sesrent.com  
E-mail: sales@sesrent.com

SES is leading power provider serving temporary and medium term energy needs across the Middle East, Africa and South East Asia region. SES offers fast tract turnkey power rental solutions to help our customers maximise on productivity and profitability, while minimizing on downtime and resources with highest safety standards.

**Agents:**

Iraq - SES SMART Energy Solutions  
Oman - SES SMART Energy Solutions  
Qatar - SES SMART Energy Solutions  
Saudi Arabia - SES SMART Energy Solutions  
Yemen - SES SMART Energy Solutions

**Shawcor**

Boschstraße 17, Rheinbach, 53359  
Germany  
Tel: +49 22 2690470  
Fax: +49 22 269047340  
Web: www.shawcor.com  
E-mail: info-de@dsgcanusa.com

**Silicon Power Systems**

Bhavati Society, Haydari Chowk  
Nr. Rajkot Milk Dairy, Rajkot, 360003  
India  
Tel: +91 281 2387053  
Web: www.spsindia.biz  
E-mail: sales@spsindia.biz

SPS is world leading manufacturer of AVR (Alternator Voltage Regulator) and Battery charger for all types- Brushless, Brush, PMG and synchronising Generators from 1kVA to 3000kVA with capabilities to design customised AVR for our clients. Battery Charges are of 12/24 volts.

**Specialist Services**

PO Box 2752, 7th Floor  
Tameem House, Tecom, Al Barsha  
Dubai, United Arab Emirates  
Tel: +971 4 4579500  
Fax: +971 4 4579501  
Web: www.specserve.com  
E-mail: sales@specserve.com.

Specialist Services is a global supplier of modular buildings and packaging solutions for people and equipment in Oil & Gas and Utility industries. Our electrical power skids ranges from basic off the shelf design for sound attenuation containers to full EPIC transformer and switchgear packages including VSD/VFD shelter, Gensets etc.

**Super Impex**

305 Adhyaru Industrial Estate  
Sun Mill Compound, Lower Parel  
Mumbai, 400013, India  
Tel: +91 22 61485400  
Fax: +91 22 66341933  
Web: www.superimpex.com  
E-mail: sanjay@superimpex.com

ISO, UL approved exporter of electrical accessories, earthing and lightning protection, cable glands accessories, flexible conduit and fittings, cable lugs, bimetallic lugs, grounding rods, cable accessories, panel board and switchgear accessories, overhead line accessories, bimetallic lugs, cable terminals, pole mounted cutout, fuses, pvc conduit fittings



**Tecnalia**

Parque Científico y Tecnológico de Bizkaia  
Laida Bidea Edificio 700  
Zamudio (Bizkaia)  
48160, Spain  
Tel: +34 946430850  
Web: www.tecnalia.com  
E-mail: aitor.kortajarena@tecnalia.com

Tecnalia Research & Innovation is the largest private Research & Testing Institute in Spain and among the top 5 in Europe. Our activity is focused on R&D projects, technical consultancy and third-party testing and certification for different sectors such as Energy, Construction, Industry and Automotive. Worldwide recognized test reports.

**Teksan Generator**

Yenidogan Mh. Edebali Cd. No: 12  
Sancaktepe, Istanbul  
34791, Turkey  
Tel: +90 216 3120550  
Fax: +90 216 3126909  
Web: www.teksangenerator.com  
E-mail: deniz.ar@teksangenerator.com.tr

Teksan, a registered supplier for top ENR companies, is a leading engineering company that manufactures power solutions such as diesel, natural-biogas gensets, lighting towers, portable gensets, cogeneration-trigeneration and hybrid power systems for Telco, heavy construction and infrastructure projects, industrial plants, retail chains, banks, hospitals, residences in more than 120 countries.

**Thomas & Betts / A member of the ABB Group**

PO Box 54567  
Office 724, 6WA West Wing  
Dubai Airport Free Zone  
Dubai  
United Arab Emirates  
Tel: +971 4 6091635  
Fax: +971 4 6091636  
Web: www.tnb.com  
E-mail: enquiry@tnb.com

At Thomas & Betts, our focus is on improving your business performance by providing practical, reliable electrical products and services that solve everyday problems in the areas of wire & cable management, cable protection, power connection & control and safety technology.

**Tripp Lite**

1111 West 35th Street  
Chicago, IL  
60609, USA  
Tel: +1 733 8691111  
Fax: +1 773 8691329  
Web: www.triplite.com  
E-mail: international@triplite.com

Over 90 years of manufacturing excellence. Tripp Lite is a leading manufacturer of products that power, connect and protect computers and other electronics. Founded in 1922, it is best known for its uninterruptible power supply (UPS) systems and ISOBAR® Surge Suppressors (with over 18 million sold).

**Agents:**

United Arab Emirates - Tripp Lite Middle East

**Udeyraj Electricals Pvt. Ltd.**

212-A, Hind Saurashtra Indl. Est.  
85-86, M.V. Road, Marol Naka  
Mumbai, 400059, India  
Tel: +91 22 66916181/2  
Fax: +91 22 66942787  
Web: www.udeyraj.com  
E-mail: info@udeyraj.com

We are manufacturers cum exporters of testing equipments like hipots, oil BDV, TTR meters, primary current injectors, relay testers, IR testers, contact resistance testers, CTPT testers, tan delta testers etc.

**UL**

PO Box 54873  
DAFZA, Block 4WA  
Office 421  
Dubai  
United Arab Emirates  
Tel: +971 52 6414011  
Web: www.ul.com  
E-mail: jomy.joseph@ul.com

UL is a premier global independent safety science company that has championed progress for 120 years. Its more than 10,000 professionals are guided by the UL mission to promote safe working and living environments for all people. UL uses research and standards to continually advance and meet ever-evolving safety needs. We partner with businesses, manufacturers, trade associations and international regulatory authorities to bring solutions to a more complex global supply chain. For more information about our certification, testing, inspection, advisory and education services, visit www.UL.com

**Valdinox**

B° El Campo S/N - CP 39192  
San Miguel de Meruelo  
Cantabria  
Spain  
Tel: +34 942677135  
Web: www.valdinox.com  
E-mail: export@valdinox.com

VALDINOX is among the most experienced basket cable trays manufacturers in Europe, and a worldwide-recognized manufacturer for the EASYCONNECT basket cable trays system, patented in 2013. EASYCONNECT is the unique integrated self-connecting system that has proven to be the most reliable, resistant and versatile ever, saving time and money, and extending lifespan of cable installations.

**Visa S.p.A.**

Via 1° Maggio 55  
Fontanelle (TV)  
31043, Italy  
Tel: +39 04 225091  
Fax: +39 04 22509350  
Web: www.visa.it  
E-mail: visa@visa.it

Visa S.p.A. is one of the world's leading gensets supplier, based in Italy, designing and manufacturing diesel gensets, from 9 to 3000 kVA, in standard or customized versions for a large variety of applications to meet customers precise requirements (telecommunications, constructions, industry, etc.). It is present in over 80 countries

through a global network to support in the successful completion of projects through an efficient engineering department, guaranteeing a highly operational flexibility and qualitative standard for which it has become a leader in the market for more than 50 years.

**Volvo Penta**

Gothenburg, 40508, Sweden  
Tel: +46 31 235460  
Fax: +46 31 508187  
Web: www.volvopenta.com  
E-mail: info.volvopenta@volvo.com

Volvo Penta, with approximately 4,000 dealers in over 130 countries, is a world-leading and global manufacturer of engines and complete power systems for boats, vessels and industrial applications. The engine program comprises diesel and gasoline engines with power outputs of between 10 and 900 hp. Volvo Penta is part of the Volvo Group, one of the world's leading manufacturers of heavy trucks, buses and construction equipment. For dealer information, please visit the Dealer Locator at www.volvopenta.com

**WAGO Middle East FZC**

PO Box 120665, Q4- 282  
SAIF Zone, Sharjah  
United Arab Emirates  
Tel: +971 6 5579920  
Fax: +971 6 5579921  
Web: www.wago.ae  
E-mail: info.uae@wago.com  
export@wago.com

WAGO is a family owned company headquartered in Minden, Germany that has been operating in the market independently for three generations and has become an international trend setting provider of electrical connection and automation technology. WAGO is the world leader in spring clamp technology having a workforce of 5600 around the globe.

**Wahab Electric Supply Co. of Saudi Arabia Ltd.**

PO Box 2389  
First Industrial City Dammam  
Dammam, 31451  
Saudi Arabia  
Tel: +966 2 6512394  
Fax: +966 2 6512664  
Web: www.wescosa.com  
E-mail: wescosa@wescosa.com

**Weichai Middle East FZE**

PO Box 18698  
Warehouse No. LA04  
Near Round About 8  
Jebel Ali Free Zone, Dubai  
United Arab Emirates  
Tel: +971 4 8810650  
Fax: +971 4 8810651  
Web: www.weichai.com  
E-mail: amitdeshpande@weichai.com  
zhonglei@weichai.com

We are a world class manufacturer of Diesel and Gas engines branded Deutz, Weichai, Baudouin & MAN used for Automotive, Industrial and Marine applications. We also produce Generator Sets rated from 10kW to 12000kW. Our products are supported with

spare parts and warranty by Global Weichai Service network.

**Agents:**

Bahrain - National Establishment of Technical & Trade Services (1)  
Saudi Arabia - Advance Machinery EST.  
United Arab Emirates - SunPower Gen FZCO

**Whitelegg Machines Ltd.**

19 Crompton Way, Manor Royal  
Crawley, West Sussex, RH10 9QR  
United Kingdom  
Tel: +44 1293 526230  
Fax: +44 1293 538910  
Web: www.whitelegg.com  
E-mail: info@whitelegg.com

**Yamuna Cable Accessories Pvt. Ltd.**

3/101 Kaushalaya Park  
Hauz Khas, New Delhi, 110016  
India  
Web: www.yamunadensons.com  
E-mail: enquiry@yamunadensons.com

Established in 1973, Yamuna Cable Accessories Pvt. Ltd. (YCAPL) is a leading designing/manufacturing/supplier for Power Cable jointing accessories and associated power distribution goods, through its 4 global plants and channel partners through 35 countries under "Densons" brand.

Offering complete range in Resin Cast, Heat Shrink, Cold Shrink and Pre Moulded power cable jointing accessories upto 66 kV and Plug in and Elbow/Straight/T connectors for GIS and RMU's application.

All products are qualified and type tested under qualifying standards in NABL approved labs such as CESI, CPRI, KEMA, etc. The companies strong R&D wing in house manufacturing of all key inputs, and strict qualification compliance inputs ensures high quality materials and solutions, batch on batch, year on year.

**Zahid Tractors**

PO Box 3298, Alkhobar, 31952  
Saudi Arabia  
Tel: +966 3 8829546  
Fax: +966 3 8829547  
Web: www.sesco-me.com  
E-mail: sesco.corporate@sesco-me.com

Established in 1976 by Sheik Ali A. Tamimi and the General Electric Company, Saudi Electric Supply Company (SESCO) is the premier distributor in the Middle East for electrical supplies. SESCO offers a full range of electrical, industrial, mechanical, valve, instrumentation and automation products from many of the world's leading manufacturers.

## Section Three: Agents/Subsidiaries

**ALGERIA****Sarl Pro Pompes**

Rue Belssdi Aek, Khemis Milihan  
W.Ain-Defla, 44226  
Tel: +213 27 664961  
Fax: +213 27 664734  
E-mail: sarlpropompes@  
hotmail.fr

**BAHRAIN****Abbas Bilkeek & Son**

PO Box 308, Sh. Salman Avenue  
Manama  
Tel: +973 17401555  
Fax: +973 17401333  
Web: www.bilkeek.com  
E-mail: bilkeek@  
bilkeek.com.bh

**AJM Kooheji and Sons**

PO Box 74, Manama  
Tel: +973 3 9944644  
E-mail: sanjeevawasthi@  
ajmkooheji.com

**Al Mosawi Trading and Electrical Contracting Co.**

PO Box 5373, Manama, 302  
Tel: +973 17270000  
Fax: +973 17261503  
E-mail: almosawi@  
batelco.com.bh

**Al Thawadi Electrical & Mechanical Est.**

PO Box 28372, East Riffa  
Tel: +973 17 700114  
Fax: +973 17 700998  
Web: www.althawadigroup.com  
E-mail: althawadisales@  
batelco.com.bh

**Electrical Machines Industries**

PO Box 5696, Manama  
Tel: +973 1 7830710  
Fax: +973 1 7830709  
E-mail: emib@batelco.com.bh

**Gulf Equipment & Technology**

PO Box 704  
Office 2596 Avenue E80  
Al Estiqlal Highway  
Nuwaidrat, 646  
Tel: +973 17700008  
Fax: +973 17700983  
Web: www.al-alawi.com  
E-mail: sales@al-alawi.com

**KoCoS Middle East**

PO Box 65453, Flat 36  
Bldg 1046  
Road 3019, Zinj, 330  
Tel: +973 17 300768  
Fax: +973 17 300768  
Web: www.kocos.com  
E-mail: info@me.kocos.com

**M.H. Al Mahroos BSC**

PO Box 65, Manama  
Tel: +973 17408090  
Fax: +973 17404323  
Web: www.almahroos.com  
E-mail: ajit@almahroos.com

**National Establishment of Technical & Trade Services**

PO Box 644  
Building 128, Lulu Road (336)  
Block 314, Manama  
Tel: +973 17270783  
Fax: +973 17273849  
Web: www.engineer.bh  
E-mail: fahad@engineer.bh

**EGYPT****Eaton - Egypt**

Building No. 289  
Apartment 4B 4th Floor  
New Cairo 90th Street behind C  
Tel: +20 12 23165911  
E-mail: dinamahmoud@  
eaton.com

**Egyptian Engineering & Trading Co.**

45, Champillion Street, Cairo  
Tel: +20 2 25755229/2  
5757636  
Fax: +20 2 25755887/2  
25787926  
E-mail: eetco@link.net

**IPC**

9 Mohamed Adly Kafafy Street,  
Heliopolis 9, 11361  
Tel: +20 226348397  
E-mail: samir.wahib@  
ipcmachinery.com

**Mantrac Egypt Ltd.**

30 Lebanon St., El Mohandesin  
Cairo  
Tel: +20 2 33004000  
Fax: +20 2 33039648  
Web: www.mantracegypt.com  
E-mail: hmounir@  
mantracegypt.com

**Orascom Trading SAE**

120, 26th July Street  
Agouza, Cairo  
Tel: +20 2 334 52510  
Fax: +20 2 334 73191  
Web: www.orascom.com  
E-mail: marianm@  
orascom.com

**IRAN****Dooman Co. Ltd.**

6 Mahnaz Street  
Vali-E-Asr Avenue  
Tehran  
19667  
Tel: +98 21 26215216/17/18  
Fax: +98 21 26215444  
E-mail: info@  
doomanpower.com

**UBUN Best Parts****Engineering Company Ltd.**

PO Box 41635-3534  
Bardia Building  
Takhti Str.  
Rasht  
Tel: +981 317 222144  
Fax: +981 317 220471

**IRAQ****Al Ghodwa**

Baghdad  
Tel: +964 7 809124 689  
E-mail: sales@  
alghodwagroup.com

**Eaton - Iraq**

Royal City Apartments  
Building A5, 4th floor, Erbil  
Tel: +964 771 2281010  
Web: www.eaton.com  
E-mail: mohammedshimmery@  
eaton.com

**Iratrac**

Dist 923, St. 29, Bldg 76  
University St. Jaderia, Baghdad  
Tel: +964 1 7783783  
Fax: +964 1 7786714  
Web: www.iratrac.com  
E-mail: idawood@iratrac.iq

**Nafithat Al-Sharq For General Contracting Company**

Al Wahda Quarter  
District No 904 No 56  
Hse #1/16, Baghdad  
Tel: +964 781 1111196  
Fax: +964 770 0008000  
E-mail: ahmedk@  
orientgroupiraq.com

**Qanadeel Al Rafidain Auto Trading Company Ltd.**

Makhmour, 100m, Intersection  
Makhmour Road, Erbil  
Tel: +964 7 508168888  
Web: www.scania-iraq.com

**SES SMART Energy Solutions (Iraq)**

Tel: +971 4 8862066  
Fax: +971 4 8862067  
Web: www.sesrent.com  
E-mail: sales@sesrent.com

**JORDAN****Al Ghanem Trading & Contracting Co.**

PO Box 7109  
Amman Commercial Complex  
Omaya Street Al Abdali  
Amman, 11118  
Tel: +962 6 4395155  
Fax: +962 6 4395663  
Web: www.alghanemgroup.com  
E-mail: m.naji@  
alghanemgroup.com

**Eaton - Jordan**

Amman-Mekka Street  
Al-Haramien intersection  
Al Hajar Al Aswad Cplx  
3rd floor - Office 306  
Tel: +962 795311171  
Web: www.eaton.eu  
E-mail: ahmadalnsour@  
eaton.com

**MAN Diesel & Turbo Jordan LLC**

Aqaba International Industrial  
Estate, Aqaba, 77110  
Tel: +962 3 2058444  
E-mail: powersalesregion-  
mena@mandieselturbo.com

**Yazoure Est. Engineering Mechanical Argicultural**

PO Box 12067, Amman, 11141  
Tel: +962 6 4771071  
Fax: +962 6 4771071  
E-mail: ramadan\_estgroup@  
yahoo.com

**KUWAIT****Al Babtain Air Conditioning & Refrigeration Co. (LG Electronics)**

Al Ardiyah (industrial area)  
Block 2, Plot 172  
Tel: +965 2 4347130/1 822666  
E-mail: imad.rhayel@  
albabtaingroup.com.kw

**Al-Khonaini Gen. Trading & Contracting Co. WLL**

PO Box 593  
Safat, 13006  
Tel: +965 4831955  
Fax: +965 4842986  
Web: www.alkhonaini.net  
E-mail: akackw@qualitynet.net

**Boodai Trading Co. (Kuwait)**

PO Box 1287, Safat  
Tel: +965 248 43986/248  
41314  
Fax: +965 248 18294/248  
48368  
Web: www.boodaitrading.com  
E-mail: psharma@boodai.com

**Eaton Electric**

Shayma Tower, Mezzanine Floor  
Omar Bin Al Khattab Street  
Sharq  
Tel: +965 2 2253606/7  
Fax: +965 2 2253608  
Web: www.eaton.com  
E-mail: oswind'silva@eaton.com

**ICTCO Industrial Construction & Trading Co. WLL**

Beirut Street, Hashem Complex  
First Floor, Office No. 1  
Hawally, 32057  
Tel: +965 2668624/294913  
Fax: +965 2668619  
Web: www.ictcogrup.com

**Jubaili Bros**

Kuwait Free Trade Zone  
Tel: +965 24610356/  
24318547  
Web: www.JubailiBros.com  
E-mail: jbkwait@  
jubailibros.com

**Reem Al Kuwait**

PO Box 4387, Al Safat, 13044  
Tel: +965 22460148  
Fax: +965 22401787  
E-mail: reemalkw@  
qualitynet.net

**Riham**

Tel: +965 66945557  
E-mail: david.peterson@  
faa.com.kw

**LEBANON****Allied Diesel S.A.R.L.**

PO Box 90-1232  
Nahr El Mot Roumlet Road  
Allied Building, Beirut  
Tel: +961 1 877285  
Fax: +961 1 887583  
Web: www.allieddiesel.com  
E-mail: alids@dm.net.lb

**Arison Sarl**

Itani Brothers Building  
PO Box No.13/582  
El Solh Avenue, Beirut  
Tel: +961 1 864824  
Fax: +961 3 287936  
Web: www.arison.com.lb  
E-mail: ahmad@arison.com.lb

**Black Box SARL**

Acar Building - ARZ Street  
LB - Saifi, Beirut  
Tel: +961 1 443773  
Fax: +961 1 445795  
Web: www.blackboxcontrol.com  
E-mail: mark@  
blackboxcontrol.com

**Eaton - Lebanon**

Sin El Fil  
Saydet Al Wardiyed street  
Beirut Symposium Building  
2nd floor - Office 2A, Beirut  
Tel: +961 1 494711  
Fax: +961 1 494711  
Web: www.eaton.com  
E-mail: josephkorkmaz@  
eaton.com

**Fares Baladi**

Tel: +961 3688060  
E-mail: carl@baladifreres.com

**HMH Machinery Est.**

Deir, Zahran  
Nabatieh Main Road  
Tel: +961 7 530730  
Fax: +961 7 530930  
Web: www.hmh-machines.com  
E-mail: info@  
hmmachinery.com

**JMG International**

Gemayeh Nahr Ibrahim Street  
Saifi Tower 8th floor, Beirut  
Tel: +961 1 445667  
Web: www.jmglimited.com  
E-mail: adib@jmglimited.com

**Jubaili Bros**

Sidon  
Tel: +961 7 730871  
Fax: +961 7 720813  
Web: www.JubailiBros.com  
E-mail: jblebanon@  
jubailibros.com

**National Instruments Lebanon SARL**

Berytech Beirut  
Digital District, 5th Floor  
Bechara El Khoury Avenue  
Bachoura Sector, Beirut  
Tel: +961 1 646111  
Fax: +961 1 646999  
Web: www.arabia.ni.com  
E-mail: ni.arabia@ni.com

**LIBYA****Al Noras**

Alsawni, Tripoli  
Tel: +218 91 2123504  
E-mail: m.rwimi@  
alnoras.com.ly

**MOROCCO****HIB Agricole**

28-29 Zone Industrielle  
Kenitra, 14000  
Tel: +212 53 7367379  
Fax: +212 53 7372391  
Web: www.hibagricole.ma  
E-mail: achat@hibagricole.ma

**OMAN****ASPIRE**

PO Box 533  
Sultanate of Oman, 100  
Tel: +968 2  
4525622/99713034  
E-mail: rajesh.khanna@  
aspireoman.com

**Bin Salim Enterprises LLC**

PO Box 808  
Al Rawahy Building, Muscat,  
100  
Tel: +968 24563078  
Fax: +968 24561193  
Web: www.binsalim.com  
E-mail: michael@binsalim.com

**Eaton - Oman**

PO Box 1982  
109, Maktabi Building  
Near Zakher Mall  
Al Khuwair  
PC 111 CPO  
Tel: +968 93290419  
Fax: +968 24483801  
Web: www.eaton.com  
E-mail: nirmalparmar@  
eaton.com

**General Engineering Services Est.**

PO Box 2690, Ruwi, 112  
Tel: +968 2 4490755  
Fax: +968 5 03327  
Web: www.genserv-oman.com  
E-mail: genserv@omantel.net.om

**Inma Co. Oman LLC**

Nizwa Salalah Road  
Al Mawaleh South, Al Seeb  
Tel: +968 24552455  
Fax: +968 24552555  
E-mail: inmaco@omantel.net.om

**Kala International LLC**

PO Box 3613  
Ruwi, Muscat, 112  
Tel: +96 824694278  
Fax: +96 824603599  
Web: www.kalabiz.com  
E-mail: kalainternational@kalabiz.com

**Mohamed & Ahmed Alkhoneji Ltd**

PO Box 73, Muscat, 100  
Tel: +968 24795007  
Fax: +968 24795958  
Web: www.alkhoneji.com  
E-mail: knonji1@omantel.net.om

**Moosa Abdul Rahman Hassan & Co. LLC**

PO Box 4, Muscat, 100  
Tel: +968 24591261  
Fax: +968 24505441  
Web: www.moosagroup.com  
E-mail: moosahvy@omantel.net.om

**MOS**

PO Box 1288  
Muttrah  
Muscat, 114  
Tel: +968 97750460  
E-mail: kumar.senthil@muscatoverseas.com

**National Factory for Security and Safety Equipment LLC**

PO Box 129  
Road 19  
Rusayl Industrial Est  
PC: 124, Al Rusayl  
Tel: +968 2 4505176  
Fax: +968 2 4505189

**Oman Gulf Enterprise**

PO Box 421  
Al Harthy Complex  
Sultanate of Oman, 118  
Tel: +968 9 7474505/2  
4797308  
E-mail: narenderk@otegroup.com

**Sami Abdul Aziz Jaffer Co.**

PO Box 210, Muscat, 100  
Tel: +968 2 4783387  
Fax: +968 2 4708671  
E-mail: saajaaj@omantel.net.om

**SATA LLC**

Al Umran Street  
Ghala Muscat  
Tel: +968 24502515  
Fax: +968 24502268

**SES SMART Energy Solutions (Oman)**

Tel: +971 4 8862066  
Fax: +971 4 8862067  
Web: www.sesrent.com  
E-mail: sales@sesrent.com

**QATAR****Al-Kholafi Trading Co.**

PO Box 301  
Al Aziziyah Round About  
Salwa  
Doha  
Tel: +974 4416010  
Fax: +974 44516020  
Web: www.alkholafi.com  
E-mail: kholaifi@qatar.net.qa

**Arabian Agencies Company (ARACO) LLC**

Industrial Area Street No. 43  
Doha  
Tel: +974 44500925  
Fax: +974 44604841  
Web: www.araco.com.qa

**Boodai Trading Co. Ltd.**

PO Box 4569  
Doha  
Tel: +974 44601304/  
44601317  
Fax: +974 44606922  
Web: www.boodaitrading.com  
E-mail: muhammad@btccqtr.com

**Eaton**

PO Box 32522, Office No. 10  
Al Emadi Business Centre  
C Ring Road, Doha  
Tel: +974 44674273  
Fax: +974 44667134  
Web: www.eaton.com  
E-mail: razvancotofana@eaton.com

**Inma Co. Qatar LLC**

PO Box 9238  
Al Awqaf Commercial Complex  
Al Mirqaf Area  
Salwa Main Rd., Doha  
Tel: +974 44430088  
Fax: +974 44430099  
E-mail: inmaco@qatar.net.qa

**Jubaili Bros**

Doha  
Tel: +974 44160121  
Fax: +974 44162257  
Web: www.jubailibros.com  
E-mail: jbqatar@jubailibros.com

**KBF Trading & Contracting Co. (Sergi France)**

PO Box 22015  
Doha  
Tel: +974 55 558365  
Fax: +974 44 366900

**LG Qatar Office**

PO Box 10480  
Jaidah Square Building  
Airport Road, Doha  
Tel: +974 6 6817241  
E-mail: gilbert.koussa@lge.com

**Mannai (JCB Power Products)**

PO Box 76  
Doha  
Tel: +974 55861787  
Web: www.mannaiautos.com  
E-mail: hashim.elgendi@mannai.com.qa

**Mannai Trading Co. WLL**

PO Box 76  
Industrial Supplies & Building Materials (ISBM)  
Doha  
Tel: +974 4 4076000  
Fax: +974 4 4076398  
Web: www.mannai.com  
E-mail: ramanna.rai@mannai.com.qa

**SES SMART Energy Solutions (Qatar)**

Tel: +971 4 8862066  
Fax: +971 4 8862067  
Web: www.sesrent.com  
E-mail: sales@sesrent.com

**Video Home Electronics Centre**

PO Box:4668, Jumbo Electronics  
Bldg No.13, Zone No.47,  
Street No. 902,  
Airport-Wakra Road, Doha  
Tel: 974 50 190206/44011788  
E-mail: adharsh@jumboqatar.com

**SAUDI ARABIA****A.AbuNayyan Trading Corporation**

PO Box 321  
Abunayyan Group Building King  
Abdulaziz Street Intersection  
with Mecca Road, Riyadh  
11411  
Web: www.abunayyantrading.com

**Abdullah Hashim Co. Ltd.**

PO Box No 44, Jeddah  
21411  
Tel: +966 2 6472200  
Fax: +966 2 6486968  
Web: www.aahl-machinery.com  
E-mail: azizr@ahcl.com.sa

**Advance Machinery EST.**

PO Box 262165, S-10810  
Jebel Ali Free Zone South  
Dubai  
Tel: +966 3 8946434  
Fax: +966 3 8946206  
Web: www.advance  
machinery.com.sa  
E-mail: ameho@  
advancemachinery.com.sa

**Black Box KSA**

PO Box 10438  
91 Prince Hazlool Bin Abd  
El Aziz Street  
King Fahd District, Riyadh  
11432  
Tel: +966 1 2107737  
Fax: +966 1 2106930  
Web: www.blackboxcontrol.com  
E-mail: salesksa@  
blackboxcontrol.com

**Dar Al Fursan Trading Est.**

PO Box 16221  
Riyadh, 11464  
Tel: +966 1 4620816  
Fax: +966 1 4620816

**Electrical Work & Maintenance**

PO Box 7240, Jeddah, 21462  
Tel: +966 2 6916655  
Fax: +966 2 6911116  
Web: www.ewm.com

**Electrical Work & Maintenance**

Madinah Road Kilo 9  
Jeddah, 21462  
Tel: +966 2 6916655  
Fax: +966 2 6911116  
Web: www.ewm.com  
E-mail:  
commercial@ewmcom.com

**General Contracting Company - Olayan**

King Fahad Road  
Al-Khobar, 31952  
Tel: +966 13 8820888  
Fax: +966 13 8828560

**Intermodal Services of S.A. Trading & Contracting**

PO Box 23317  
Khalid Bin Al Walid Street  
Jeddah  
Tel: +966 2 6144364  
Fax: +966 2 6515191  
Web:  
www.intermodaltrade.com  
E-mail: rohan@  
intermodal.sa.com

**Lifelight Co.**

PO Box 265  
Imam Saud Road  
Riyadh, 11461  
Tel: +966 1 4501454  
Fax: +966 1 4501454  
E-mail: info@  
segulasaudi.com

**M/s Inanra Co. Ltd.**

PO Box 8326  
Riyadh, 11482  
Tel: +966 1 4791902  
Fax: +966 1 4721948  
Web: www.inanra.com  
E-mail: amustapha@  
inanra.com

**MAN Diesel & Turbo Saudi Arabia LLC**

King Abdulaziz St.  
Al Jomaih B, Riyadh, 11411  
Tel: +966 11 4720353  
E-mail:  
powersalesregionmena@  
mandieselturbo.com

**Mohammed A Al-Faddaghi & Partners**

2554 Al Kharj Rd  
Al Manakh  
Riyadh, 31952  
Tel: +966 1 4953000  
Fax: +966 1 4954000  
Web: www.alfaddaghi.com

**SES SMART Energy Solutions**

Tel: +971 4 8862066  
Fax: +971 4 8862067  
Web: www.sesrent.com  
E-mail: sales@sesrent.com

**TURKEY****AKSA Servis Ve Yedek Parca AS**

Basin Ekspres Yolu  
Cemal Ulusoy Caddesi No. 33  
Yenibosna, Istanbul, 34630  
Tel: +90 212 4713434  
Fax: +90 212 6962029  
Web: www.aksaservis.com.tr  
E-mail: omers@  
aksaservis.com.tr

**SIF**

E-5 Maltepe Kavşagi  
Ataturk Cad, Istanbul, 4034844  
Tel: +90 216 3520000  
Web: www.sif-  
jcb.com.tr/products  
E-mail: cihan.unlu@sif.com.tr

**UNITED ARAB EMIRATES****Advance Est. For Lighting & Electricals**

Office no. M09  
Al Yousifi Building  
3B, Southren Park Street  
Opp. Al Majaz Park  
Off Jamal Abdul Nasser Street  
Sharjah  
Tel: +971 6 5509260  
Fax: +971 6 5509263  
Web: www.advest-uae.com  
E-mail: office@advest-uae.com

**AEG Power Solutions - Dubai**

Dubai Airport Free Zone  
Office 5EA 225, Dubai  
Tel: +971 4 6091290  
Fax: +971 4 6091291  
Web: www.aegps.com  
E-mail: sales.me@aegps.com

**Ageco International FZE**

PO Box 341192  
Office G024  
Techno Point Bui  
Dubai Silicon Oasis FZE, Dubai  
Tel: +971 4 3261500  
Fax: +971 4 3267714

**AJ Power Ltd.**

PO Box 211860  
33rd Floor, BB1 Tower  
Mazaya Business Avenue  
Jumeirah Lake Towers, Dubai  
Tel: +971 43637757 Etx. 165  
Web: www.ajpower.net  
E-mail: imcclay@ajpower.net

**Al Hamra**

8 Floor, Red Crescent Building  
Al Nahyan Camp  
Muroor Street, Abu Dhabi  
Tel: +971 2 6271501  
Fax: +971 2 6269894  
E-mail:  
energy@alhamragroup.com  
g.grillo@alhamragroup.com

**Al Masaood - Power Engineering Division**

PO Box 322, Office No. 703  
Al Masaood Tower  
Najda Street, Abu Dhabi  
Tel: +971 2 6729197  
Fax: +971 2 6770836  
Web: www.masaood.com  
E-mail: gensets@  
masaood.com

**Al Rawahy Establishment LLC**

PO Box 14405, Dubai  
Tel: +971 4 8829570  
Fax: +971 4 8829571  
Web: www.alrawahyudbai.com  
E-mail: jfermandes@  
alrawahyudbai.com

**Al Shirawi Enterprises LLC**

PO Box 282679  
Dubai  
Tel: +971 4 3388776  
Fax: +971 4 3389559  
Web: www.alshirawi.com  
E-mail: charan@ase.ae

**Al Shirawi Enterprises LLC (Scania)**

Scania Showroom  
Sheikh Zayed Road  
Dubai  
Tel: +971 4 3718585  
Fax: +971 4 3389559  
Web:  
www.alshirawienterprises.com

**Al Yusuf Electronics**

PO Box:25  
Sh.Zayed Road,  
Al Ghouz, Dubai  
Tel: 971 50 4576170  
E-mail: pmoitra@  
alyousuf.com

**Alfanar Electric LLC**

Al Qusais Industrial Area 5  
Amman Street, Dubai  
Tel: +971 4 2677500/222  
Fax: +971 4 2678197  
Web: www.alfanar.com  
E-mail: raed.alnaib@  
alfanar.com

**ARABCAL**

PO Box 24650  
Sharjah  
Tel: +971 6 5345747  
Fax: +971 6 5345727  
Web: www.arabcal.com  
E-mail: cs@arabcal.com

**Autochim Systems Abu Dhabi**

PO Box 26166  
Abu Dhabi  
Tel: +971 2 6265774  
Fax: +971 2 6265778  
Web:  
www.autochimsystems.com  
E-mail: asme@  
autochimsystems.com

**Bauer GT**

PO Box 390667  
Business Center  
Dubai World Central, Dubai  
Tel: +971 55 8478893  
Web: www.bauergt.com  
E-mail: lcasares@bauergt.com

**Bin Brook Motors & Equipment LLC**

PO Box 879  
Scania Showroom  
Umm-Al-Nar  
Abu Dhabi  
Tel: +971 2 5584888  
Fax: +971 2 5582090  
Web: www.binbrook.com

**Caterpillar SARRL Branch**

Jebel Ali Free Zone  
South 3  
Dubai

**COELMO (DMCC BRANCH)**

PO Box 39311  
Office 909  
1 Lake Plaza  
Jumeira Lake  
Town Cluster T, Dubai  
Tel: +971 4 3695548  
Fax: +971 4 3695549  
Web: www.coelmo.it  
E-mail: sacopo.monosurro@  
coelmo.it

**Cummins Generator Technologies (Middle East)**

Jebel Ali Free Zone  
PO Box 17636  
Dubai  
Tel: +971 48 830461  
Fax: +971 48 860518  
Web: stamford-avk.com  
E-mail: nahi.thebian@  
cummins.com

**District Cooling Company**

PO Box 52094  
Office No.7 3rd Floor  
Oasis Centre  
Sheikh Zayed Road  
Dubai  
Tel: +971 50 6584832  
E-mail: ahmed@  
districtcoolingcompany.com

**FALCOR**

PO Box 48576  
Abu Dhabi  
Tel: +971 2 6342555  
Fax: +971 2 6348562

**Fortune International Trading LLC**

PO Box 25818  
Sharjah  
Tel: +971 50 4813570  
E-mail: fortintl@  
emirates.net.ae

**Fronius Middle East FZE**

JAFZA One, P.O. Box 263241  
Jebel Ali, Dubai  
Tel: +971 4 8811600  
Web: www.fronius.ae  
E-mail: puryova.romana@  
fronius.com

**Galadari (JCB Power Products)**

PO Box 11080, Dubai  
Tel: +971 501215275  
E-mail: khaled.gthe@  
galadarigroup.com

**GENAVCO**

ZA Abeel Road  
PO Box 5563, Dubai  
Tel: +971 4 3961000  
Fax: +971 4 3961308  
Web: www.genavco.com  
E-mail: equipment@  
genavco.com

**General Trading Group**

PO Box 1219, Al-Ain  
Tel: +971 3 7824440  
Fax: +971 3 7825220  
E-mail: alaasgrp@eim.ae

**HIMOINSA Middle East**

PO Box 18515  
Warehouse: RA07AA03  
Jebel Ali Free Zone  
Dubai  
Tel: +971 4 8873315  
Fax: +971 4 8873318  
Web: www.himoinsa.com  
E-mail: kwebb@himoinsa.ae

**IGEL Electric Dubai**

Dubai Creek Tower  
22nd Floor, Dubai  
Tel: +971 4 2945605  
Fax: +971 4 2945610  
Web: www.igeelectric.de  
E-mail: vertrieb@  
igeelectric.de

**Inma Gulf Development & Construction LLC (Hatz)**

Al Ramoul Industrial Area  
Area 215, Street 17, Bldg. 34  
Dubai  
Tel: +971 4 2857272  
Fax: +971 4 2857512  
Web: www.inmagulf.com  
E-mail: inmauae@  
inmagulf.com

**KDU Worldwide Technical Services FZC**

PO Box 9567, D6-171 Saif Zone  
Sharjah International Airport  
Sharjah  
Tel: +971 6 55754801  
Fax: +971 6 55754901  
Web: www.kduworld.com  
E-mail: vinoth@kduworld.com

**Leroy-Somer Electric Power Generation**

PO Box 17034  
Jebel Ali Free zone, Dubai  
Tel: +971 4 8118100  
Web: www.leroy-somer.com  
E-mail:  
ContactLeroySomer.IALS@  
Emerson.com

**LG Electronics Gulf FZE**

PO Box 61445, Shatha Tower,  
Office No.3403, 34th Floor,  
Road No.82, TECOM  
Al Sofouh 2nd, Media City  
Tel: +971 4 3509906/50  
8018789  
Web: www.lg.com/ae  
E-mail: sajeev.pazhoor@  
lge.com

**LG Electronics Middle East and Africa**

PO Box 61445  
Shatha Tower  
Office No.3403  
34th Floor  
Road No.82, TECOM  
Al Sofouh 2nd, Media City  
Tel: +971 56 6837425  
Web: www.lg.com/ae  
E-mail: dharmesh.sawant@  
lge.com

**Lucy Middle East**

PO Box 17335, Jebel Ali  
Dubai  
Tel: +971 4 8129999  
Fax: +971 4 8129900  
Web: www.lucyswitchgear.com

**M.A.H.Y. Khoory & Co.**

PO Box 41  
Dubai  
Tel: +971 4 2666300  
Fax: +971 4 2661642  
Web: www.mahykhooory.com  
E-mail: sales@  
mahykhooory.com

**MAN Diesel & Turbo Middle East LLC**

Maritime Business Center, 9  
Floor Dubai Maritime City  
Dubai  
Tel: +971 4 4237733  
E-mail: powersalesregion-  
mena@mandieselturbo.com

**MSS Electrical LLC**

PO Box 83608, Dubai  
Tel: +971 4 2691775  
Fax: +971 4 2659767

**Natheer Technical Services**

PO Box 85186  
Plot No. 246-198  
B561  
Industrial Area No. 3  
Al Ghusais  
Tel: +971 4 2674450  
Fax: +971 4 2674451  
E-mail: natheer@  
emirates.net.ae

**Obaid Humaid Al Tayer - Engineering Division**

Garhoud Atrium  
Al Tayer Showroom  
Garhoud  
Deira  
Dubai  
Tel: +971 4 2011272  
Fax: +971 4 2825008  
Web: www.altayer.com  
E-mail: bkrishnan@  
altayer-eng.com

**Power Systems Gulf LLC**

PO Box 290  
Dubai  
Tel: +971 4 3378400/50  
6562514  
Fax: +971 4 33736600  
Web: www.psgulf.com  
E-mail: krishna.warrier@  
psgulf.com

**Powertech Electrical Distribution Boards Manufacturing LLC**

Al Qusais Industrial Area  
Dubai  
Tel: +971 4 2676886  
Fax: +971 4 2676456  
Web:  
www.powertechswitchgear.com  
E-mail: peddubai@eim.ae

**Robert Bosch Middle East FZE**

PO-Box 54307  
Office 535  
DAFZA West Wing 6B  
Dubai  
Tel: +971 5 4558501/21237  
Fax: +971 4 212 3388  
E-mail: SangeethKumar.Bojja@  
ae.bosch.com

**Rotork Middle East FZE**

PO Box 262903  
RA 08 LC07  
Jebel Ali Free Zone  
Tel: +971 4 8876408  
Fax: +971 4 8876403  
Web: www.rotork.com  
E-mail: rme.sales@rotork.com

**Sai International FZCO**

PO Box 261468  
Jebel Ali  
Dubai  
Tel: +971 4 2225608/ 2214201  
Fax: +971 4 2214955  
E-mail: yash@emirates.net.ae

**Sakr Power Generation FZE**

Jebel Ali Free Zone  
Dubai  
Tel: +971 4 8862010  
Fax: +971 4 8862011  
Web: www.sakr.com  
E-mail: uae@sakr.com

**Salwo Trading Ltd.**

PO Box 17372  
Blue Shed Area  
Jebel Ali Free Zone (North)  
Dubai  
Tel: +971 4 8810591  
Fax: +971 4 8810593  
E-mail: wspies@  
emirates.net.ae

**Salwo Trading Ltd.**

PO Box 17372  
Blue Shed Area  
Jebel Ali Free Zone (North)  
Dubai  
Tel: +971 4 8810591  
Fax: +971 4 8810593  
E-mail: wspies@  
emirates.net.ae

**Samsung Techwin Dubai Office**

Room 805  
8th Floor  
Arenco Tower  
Media City, Dubai  
Tel: +971 4 4478616  
Fax: +971 4 4478666  
Web: www.samsungcomp.com  
E-mail: kimjuwon@  
samsung.com

**SDMO Middle East**

Building EIB01  
Office 310  
Internet City  
Dubai  
Tel: +971 4 4587020  
Fax: +971 4 4586985  
Web: www.sdmo.com  
E-mail: laurent.bertheloux@  
sdmo.com

**SGS Gulf Ltd.**

PO Box 18556  
Jebel Ali Free Zone South  
Office S3A1SR01  
Dubai  
Tel: +971 4 8809393/ 249/248  
Fax: +971 4 8809008  
Web: www.sgs.com  
E-mail: sithara.hatim@  
sgs.com raj.arun@sgs.com

**SunPower Gen FZCO**

PO Box 262165  
S-10810  
Jebel Ali Free Zone  
Dubai  
Tel: +971 4 8861800  
Fax: +971 4 8862801  
Web: www.sunpower.ae  
E-mail: powersolutions@  
sunpower.ae

**Technor Middle East DMCC**

PO Box 392054  
Unit 2101  
Fortune Executive  
Towers  
Plot No. T1  
Jumeriah Lakes Towers  
Dubai  
Tel: +971 4 3621418  
Fax: +971 4 3621419  
E-mail: mail@technor.ae

**Tripp Lite Middle East**

PO Box 18030  
LOB #5  
Ground Floor #19  
Jebel Ali Free Zone  
Tel: +971 4 8871633  
Fax: +971 4 8871494  
Web: www.triplite.com

**TRIZAC Abu Dhabi Oilfield Supply and Services**

PO Box 4434  
Abu Dhabi  
Tel: +971 2 6330552  
Fax: +971 2 6330557  
Web: www.trizac.ae  
E-mail: ahmadq@trizac.ae

**UNA Trading FZE**

PO Box 18747  
Plot S 60525  
Jebel Ali Free Zone South  
Dubai  
Tel: +971 4 48074065  
Web: www.mantracpower  
systems.com  
E-mail: mkhalifa@  
mantracgroup.com

**United Entraco Trading company**

PO Box 14792, Al Ain  
Tel: 971 50 8110995/3  
7665699  
E-mail: yasin@uct.ae

**YEMEN****Abu Alrejal Trading Corporation**

PO Box 17024  
Zubeiry Street  
Sana'a  
Tel: +967 1 272519  
Fax: +967 1 279025  
Web: www.abualrejal.com  
E-mail: abualrejal@y.net.ye

**Bahaj**

PO Box 55811  
Gamal St. Taiz  
Tel: +967 4251245  
Fax: +967 4251246  
Web: www.bahaj-yemen.com  
E-mail: ali@bahaj-yemen.com

**SES SMART Energy Solutions**

Tel: +971 4 8862066  
Fax: +971 4 8862067  
Web: www.sesrent.com  
E-mail: sales@sesrent.com



ارتفعت ذروة أحمال الشركة السعودية للكهرباء بنسبة ١٠,٢ في المائة عام ٢٠١٥

وهونج كونج وسنغافورة بوصفها جهات معتمدة، مما يسمح لشركة إنترنتك بتوفير المزيد من الخدمات المحلية للعملاء الساعين لدخول السوق الخليجية. وبالرغم من أن الأنشطة تجري بوتيرة سريعة للغاية، فإن سوق تأجير الطاقة في المملكة العربية السعودية تظل قوية. وتتوقع مجموعة الأبحاث 6Wresearch أن يبلغ حجم النمو السنوي ١٢,٦ في المائة خلال الفترة من ٢٠١٥ وحتى ٢٠٢١ للمولدات الكهربائية. كما تشير إلى حجم الطلب في مجالات الإنشاء والتصنيع، وقطاع النفط والغاز، إلى جانب الحاجة لتزويد المناطق الخارجة عن نطاق الشبكة بالكهرباء. وبينما كان يتم الاعتماد على مولدات الديزل لتوفير الحصة الأكبر من الكهرباء لسوق تأجير الطاقة فيما مضى بسبب وفرة الوقود وانخفاض أسعاره، فقد أوضح المكتب الاستشاري أنه ربما يتم التحول إلى استخدام المولدات الهجينة والتي تعمل بالغاز. وسوف تشارك الحكومة في تحقيق ذلك عبر إطلاق مبادرات لتقليل انبعاثات الكربون. هذا هو عامل آخر محوري ذو تأثير على سياسة الطاقة السعودية، والتي ستشهد تعاضداً لدور مصادر الطاقة المتجددة حتى مع التعميم واسع النطاق لمولدات الأحمال الأساسية الجديدة القائمة على الطاقة الحرارية.

وهي تتنوع بين المساهمة في برنامج التعميم القومي وأنظمة التحكم والتدريب. وبطبيعة الحال أدى ذلك إلى جذب الاستثمارات في المناطق ذات الصلة، وتشمل خبرات في مجال المعايير القياسية والمصادقة. وقد أزاحت شركة إنترنتك. مؤخرًا. الستار عن قاعدة سعودية جديدة لاختبار والتصديق على المنتجات الكهربائية منخفضة الجهد ضمن خطة شارة المطابقة الخليجية. وكانت هيئة التقييس لدول مجلس التعاون الخليجي قد طورت شارة المطابقة الخليجية لضمان جودة وسلامة المعدات والأجهزة الكهربائية المباعة في المنطقة. وبدءاً من أول يوليو/تموز، سيكون لزاماً على جميع المنتجات الكهربائية منخفضة الجهد، والتي تُطرح في الأسواق، أن تحمل شارة المطابقة الخليجية.

وقد صرح بروس ماكجيل، نائب رئيس شركة إنترنتك المسؤولة عن منح الشهادات الدولية بقوله: «يمكننا الآن بهذا التعيين أن نساعد العملاء بسرعة وسهولة أكبر على الوصول إلى منطقة الخليج عبر تقديم الخدمات اللازمة للحصول على شارة المطابقة الخليجية». وكانت هيئة التقييس ومجلس التعاون الخليجي قد حولاً ثلاثة مواقع لشركة إنترنتك في الأمريكتين وثلاثة في أوروبا لتعيين الشارة. وتنضم هذه المختبرات لمرافق أخرى في شنغهاي

ويتطلب ذلك أيضاً ضخ استثمارات ضخمة في البنية التحتية الجديدة لنقل الطاقة.

## زيادة الطلب

كافة هذه الخيارات تكتسب أهمية كبيرة مع مواجهة المملكة العربية السعودية لتحديات توفير الكهرباء لعدد أكبر من الناس مع تزايد عدد السكان، وللتماشي مع زيادة الطلب عليها من قبل قطاع الصناعة. ويشمل ذلك توفير الطاقة المطلوبة للمشروعات الصناعية الكبرى، مثل مترو الرياض وقطار الحرمين. ومن المزمع أن توفر الشركة السعودية للكهرباء ٧٠٠ ميجاواط من الكهرباء لمشروع سكك حديدية، حسب قول الرئيس التنفيذي للشركة زياد بن محمد الشبيحة. ومن المقرر أن يستهلك مترو الرياض ٤٠٠ ميجاواط، بينما يستهلك قطار الحرمين ٣٠٠ ميجاواط. علماً بأن شركة سيمنز، عملاق الصناعة، سوف توفر نظام التشغيل الكهربائي بدون سائقين وأجهزة إرسال الإشارات والاتصالات وقطارات المترو لمشاريع النقل الاستراتيجية.

ولاشك أن مترو الرياض يعتبر. بالفعل. أحد أكبر مشاريع مترو الأنفاق في العالم. فهو يضم ستة خطوط ويبلغ الطول الإجمالي لمساره ١٧٥ كيلومتراً. حقيقة أن تعداد السكان قد تضاعف في المدينة ليبلغ خمسة ملايين نسمة منذ العام ١٩٩٠، لكن هناك شواهد أخرى على الإسراع في إنشاء شبكات التشغيل الكهربائي الجديدة في مختلف أنحاء المملكة وفي كل منطقة. ففي نجران، على سبيل المثال، بدأت الشركة السعودية للكهرباء إنشاء عدد من المشاريع وهناك مشاريع أخرى قيد التخطيط بتكلفة تبلغ ١,٨ مليار ريال سعودي (٤٨٠ مليون دولار) لمواكبة الزيادة السكانية والتوسع الحضري والاقتصادي السريع. ومن بين المشاريع الحالية تأسيس شبكات توزيع وتزويد القرى بالكهرباء، إلى جانب الربط بين المحطة الفرعية المركزية والمحطات الفرعية الجديدة في الشرفة والخالدية، وشرق مطار نجران وثار، مع شبكة نجران.

ومع مستوى النشاط الحالي، يتوفر الكثير من الفرص للشركات في مجموعة كبيرة من المناطق.

# السعودية تدعم قطاع الكهرباء

إزاء تزايد الطلب على الكهرباء في المملكة العربية السعودية، وكذلك على الأجهزة والخدمات والمستلزمات الكهربائية عالية الجودة، قال وزير المياه والكهرباء السعودي مؤخرًا إن الدولة تتوقع أن يتجاوز أقصى استهلاك للطاقة حاجز الـ ٩٠ ألف ميغاواط في عام ٢٠٢٢. علما بأن السعة الحالية للمملكة تبلغ ما يقرب من ٧٠ ألف ميغاواط، وهو ما يعني زيادة كبيرة مقبلة في الإنفاق على الاستثمارات.

ريال سعودي (٢ مليار دولار أمريكي).

## الاستراتيجية المتكاملة

وإلى جانب إنشاء محطة كبيرة واسعة النطاق لتعزيز توليد الطاقة، تحرص المملكة العربية السعودية أيضا على استغلال أية إمكانيات لتجميع الطاقة والربط بين الشبكات على المستوى الإقليمي. وهناك شبكة إقليمية تمتد لتشمل الكثير من مناطق دول مجلس التعاون الخليجي، غير أن حجم تجارة الكهرباء لا يزال ضئيلاً، على الأقل في وقتنا هذا. ويُتظر إلى زيادة تداول الطاقة تجارياً في منطقة الخليج باعتبارها وسيلة للدول لتلبية الزيادة الكبيرة المتوقعة في الطلب على الطاقة دون الحاجة لضخ استثمارات فردية في مساحات شاسعة بالبنية التحتية الجديدة. وينعقد الأمل أيضاً على تطوير الروابط الكهربائية مع الدول الأخرى خارج مجلس التعاون الخليجي، وتشمل مصر، حسبما ذكر الحصين الذي صرّح مؤخرًا بأنه سيتم توقيع عقود لبناء شبكة تربط الدولتين هذا العام، على أن يعمل المشروع بطاقته الكاملة قبل منتصف عام ٢٠١٩.

يتجه المرفق نحو التمويل الخاص لتمويل مشاريع أكبر حجماً. ويشمل ذلك المحطة متنوعة الدورات لتوليد الطاقة الكهربائية والمخطط لإنشائها في وعد الشمال، والتي تبلغ قدرتها الإجمالية ١٣٩٠ ميغاواط. وذكرت التقارير أن الشركة السعودية للكهرباء تسعى للحصول على قرض يبلغ مليار دولار لتمويل المحطة. كما يشمل المشروع أيضاً توليد ٥٠ ميغاواط من الطاقة الشمسية، مما يؤكد على سعي المرفق لزيادة الاعتماد على الطاقة المتجددة ضمن مصادر توليد الطاقة العديدة. وتأمل الشركة السعودية للكهرباء أن توفر الطاقة الشمسية ما يعادل أربعة ملايين برميل نفط خلال هذا المشروع. وقد وقعت الشركة، في مطلع هذا العام، اتفاقية للحصول على تسهيلات احتياطية ائتمانية بقيمة ١,٤ مليار دولار أمريكي مع سبعة بنوك دولية. وكانت الشركة قد وقعت اتفاقاً مماثلاً بقيمة أقل مع البنوك المحلية، البنك الأهلي التجاري ومجموعة «سامبا» المالية، بقيمة ٢,٥ مليار ريال سعودي (٦٦٦ مليون دولار)، لتبلغ القيمة الإجمالية للتسهيلات الائتمانية الدوارة حوالي ٧,٧٥ مليار

يتوقع وزير المياه والكهرباء، عبد الله الحصين، احتياج الدولة لأكثر من ١٣٠ مليار دولار لضخ استثمارات جديدة خلال السنوات العشر المقبلة، وذلك لمواجهة زيادة الطلب. وسوف يغطي ذلك كافة أوجه صناعة الطاقة، وتشمل توليد الكهرباء ونقلها وتوزيعها، من إنتاج الأحمال الأساسية حتى الطاقة المتجددة، ووحدات توليد الكهرباء. وذكر الحصين أيضاً أن القطاع الخاص سيلعب دوراً أساسياً في توفير أية حمولات جديدة.

## تعميم البنية التحتية

يجري الإعداد لتعميم البنية التحتية الجديدة منذ مدة طويلة من جانب الشركة السعودية للكهرباء، المملوكة للدولة، والتي صرحت ببلوغ الأحمال أعلى مستوياتها في أغسطس/آب ٢٠١٥ بفعل زيادة الطلب صيفاً. وقد ارتفعت ذروة الأحمال، بحسب الشركة السعودية للكهرباء، بنسبة ١٠,٢ في المائة لتصبح ٦٢,٢٦٠ ميغاواط بعد أن كانت ٥٦,٥٤٧ في العام المنصرم. ومع الأخذ في الاعتبار نطاق الاستثمارات المطلوب،

# inter solar

connecting solar business

MIDDLE EAST

25  
1991-2016  
YEARS OF INTERSOLAR

## The International Exhibition and Conference for the Solar Industry of the Middle East

- Access the fast growing MENA market at Intersolar Middle East
- Expose your brand by showcasing your products at a premium solar event
- Save time by connecting with current and potential clients over three days of the event

SEPT  
19-21  
2016

[www.intersolar.ae](http://www.intersolar.ae)



In conjunction with



Knowledge partner



For stand or sponsorship enquiries

Contact

Lucy Kamau

E: [lucykamau@dmgeventsme.com](mailto:lucykamau@dmgeventsme.com)

T: 971 4 438 0355

معرض تعليقه على التقرير وعلى دخول شركته سوق تكنولوجيا الطائرات بدون طيار: «نجري مناقشات حالياً مع كبرى الشركات من عدد كبير من القطاعات حول إمكانية استخدامها للطائرات بدون طيار من أجل تحسين عمليات الأعمال. وتقدر القيمة السوقية لتكنولوجيا الطائرات بدون طيار المستخدمة في التطبيقات التجارية بأكثر من ١٢٧ مليار دولار، وهي تشهد تحولاً من كونها عنصراً مبتكراً إلى أداة لا غنى عنها لإجراء العمل».

يهدف للتركيز على استخدام تكنولوجيا الطائرات بدون طيار، وتحليل البيانات في الأعمال. وسوف يوفر المركز، الذي يوجد مقره في بولندا، تحليل بيانات الطائرات بدون طيار، والبيانات الجغرافية المكانية لمساعدة العملاء في مختلف أنحاء أوروبا. وتعد بولندا أولى دول العالم التي تستخدم إطار كاملاً لعمل قانوني ينظم الاستخدام التجاري للطائرات بدون طيار. وقال ميكال مازور، رئيس برايس ووترهاوس كوبرز والشريك فيها في

## مفكرة رجال الأعمال

### يوليو/تموز:

١١ - ١٢ ..... القمة الإيرانية لصناعات المعادن والتعدين ..... طهران

### سبتمبر/أيلول:

٣ - ١ ..... معرض اسطنبول للمياه ..... اسطنبول  
١٩ - ٢١ ..... معرض ومؤتمر إنترسولار ..... دبي

### أكتوبر/تشرين الأول:

٤ - ٦ ..... معرض تكنولوجيا المياه والطاقة والبيئة - ويتكس ..... دبي  
٤ - ٦ ..... معرض دبي للطاقة الشمسية ..... دبي  
٩ - ١٣ ..... مؤتمر الطاقة الدولي ..... اسطنبول

### نوفمبر/تشرين الثاني:

٢٠ - ٢٤ ..... المعرض والمؤتمر الدولي العاشر للكيمياء ودورها في الصناعة - كيمندكس ..... المنامة  
٢١ - ٢٣ ..... معرض ومؤتمر المياه والكهرباء وتوليد الطاقة ..... الدمام  
٢١ - ٢٣ ..... المعرض السعودي للطباعة والتغليف والبلاستيك والصناعات البترولية ..... الدمام

## كاتربيلر تّدشن مركز تدريب إقليمي في دبي

الذي سيتلقونه في المركز الجديد في دبي على تعزيز مهاراتهم وخبراتهم المتعلقة بالمنتج، إلى جانب أحدث تكنولوجيا دعم المنتجات، حسبما أضافت مصادر الشركة.

وعلق نايجل لويس، نائب الرئيس المسؤول عن قسم التوزيع في أوروبا وأفريقيا والشرق الأوسط بأن «مركز تدريبنا في دبي هو جزء أساسي من خططنا للشرق الأوسط وأفريقيا، وسوف يضمن أن كاتربيلر ووكلاءنا يمكن الاعتماد عليهم لتوفير الدعم غير المسبوق لعملائنا. إنها منطقة مهمة بالنسبة لكاتربيلر ونتوقع أن يشهد عملاؤنا نمواً هائلاً ومتواصلاً، كما سنحقق نحن النمو لتوفير هذا الدعم».

يجدر بالذكر أن المركز سيضم أيضاً مختبراً لتحليل عينات النفط المقررة للمساعدة في تلبية وقت إنهاء المهام الحرج المطلوب لتحليل عينات الطوارئ وتقليل وقت التعتّل لمنتجات كاتربيلر في المنطقة.

افتتحت شركة كاتربيلر مركز تدريب إقليمياً لمنطقة الشرق الأوسط وأفريقيا في دولة الإمارات العربية المتحدة. وسوف يوفر هذا المركز التدريب الفني والتدريب على مبيعات الآلات وأنظمة الطاقة لوكلاء كاتربيلر وعملائها في منطقة الشرق الأوسط وشمال أفريقيا، حسب مصادر الشركة. ويوجد المركز في مركز توزيع قطع غيار منتجات كاتربيلر لمنطقة الشرق الأوسط ومكتب المبيعات والتسويق الإقليمي في جبل علي، ومن المتوقع أن يبدأ عمله في الربع الرابع من ٢٠١٦. وباستثمارات تزيد على ٧ ملايين دولار أمريكي، من المقرر أن يُوظف المركز، البالغة مساحته ١٧٠٠ متر مربع، حوالي ٤٠ شخصاً، أغلبهم من الموظفين الفنيين المحترفين الذين سيتم اختيارهم في الأساس من المنطقة.

علماً بأن أكثر من ٧ آلاف فني من كاتربيلر في منطقة الشرق وشمال أفريقيا يحظى بعلاقات مباشرة مع العملاء. وسوف يساعدهم التدريب،



إبراهيم محمد الجناحي، نائب المدير العام التنفيذي للشؤون التجارية للمنطقة الحرة بجبل علي (يسار) مع ديموند تشان، نائب رئيس قسم توزيع كاتربيلر في آسيا الباسيفيك وأفريقيا والشرق الأوسط



## «الربيعة والنصار» و «كابارول» تفتتحان صالة عرض في الرياض



رائد الربيعة ومارتن روزوخا في حفل افتتاح صالة العرض الجديدة

دشنت مجموعة الربيعة والنصار وشركة كابارول الألمانية صالة العرض الرئيسية في مدينة الرياض، وذلك في إطار الشراكة الاستراتيجية بين الشركتين. وشهد الحفل، إلى جانب ممثلي الشركتين، لفيثاً من رجال الأعمال وكبار الضيوف والعلماء والمهتمين بالمجال ممن يعولون على هذه الشراكة بالنهوض بهذا القطاع، وحظي الافتتاح بتغطية إعلامية متميزة.

وألقى المهندس رائد الربيعة، مدير عام مجموعة الربيعة والنصار، كلمة تناول فيها الشراكة الاستراتيجية بين الشركتين، مؤكداً على مسيرتهما الناجحة التي تحفز على مزيد من التطوير والذي سيتوج بإقامة مصنع لتصنيع دهانات كابارول في المملكة العربية السعودية، وذلك لنقل المعرفة والتقنية إليها. وأشار الربيعة في كلمته إلى المكانة الكبيرة التي تحتلها كابارول في أسواق الدهانات العالمية، مما يجعل دخولها الأسواق السعودية إضافة حقيقية لهذه الصناعة، متمنياً أن تتحقق، بفعل هذه الشراكة، جميع الأهداف التي خطت لها المجموعة. كذلك أكد مارتن روزوخا، مدير منطقة الشرق الأوسط وآسيا-كابارول، على أن هذا الافتتاح سيكون الخطوة الأولى لانطلاقته يخطط لها أن تكون متميزة في المملكة. وأشاد بالشراكة مع مجموعة الربيعة والنصار، والتي تعكس الوجه المشرق للمملكة. ولفت روزوخا إلى المكانة التي أصبحت المملكة تحتلها عالمياً بوصفها واحدة من أكبر الاقتصادات العالمية، إضافة إلى تنامي سوق الإنشاءات فيها مما يجعلها محط نظر شركات الدهانات والإنشاءات بشكل عام.

ويتوقع أن تكون صالة العرض الجديدة نقطة جذب للمهتمين والعاملين في المجال لما تتمتع به مجموعة الربيعة والنصار من ثقل وسمعة طيبة في سوق

الإنشاءات والمقاولات، وأيضاً للبريق الذي يميز اسم كابارول الألمانية كواحدة من أشهر شركات الدهانات العالمية. وتأتي هذه الخطوة في إطار الدور الهام الذي تلعبه مجموعة الربيعة والنصار في مجال الإنشاءات بوصفها إحدى أكبر شركات مقاولات الطرق والجسور. علماً بأن شركة كابارول، منذ بزوغ نجمها قبل أكثر من مائة وعشرين عاماً، تخطو بثقة في عوالم الدهانات والعزل الحراري حتى غدت ثالث أكبر الشركات الأوروبية في هذا المجال. ويعزى نجاح هذه الشركة خارج الأسواق الألمانية، بل والأوروبية، ودخولها مناطق آسيا والشرق الأوسط، إلى العلاقات القوية والفهم العميق لاحتياجات كل منطقة، وتكنولوجيات البحث المتطورة وتقنيات التصنيع التي يعاد توفيقها ومعايرتها حسب احتياجات المنطقة.

## السوق العالمية لتكنولوجيا الطائرات بدون طيار تُقدَّر بـ ١٢٧ مليار دولار

كشفت دراسة أجرتها برايس ووترهاوس كوبرز أو PWC عن أن حجم السوق العالمية الناشئة لخدمات الأعمال التي تستخدم الطائرات بدون طيار تُقدَّر بأكثر من ١٢٧ مليار دولار. ووفقاً للدراسة، من المقرر أن يكون للتطبيقات التجارية للطائرات بدون طيار تأثيراً هائلاً على عمليات الشركات في عدد كبير من قطاعات الصناعة التي تتنوع بين الزراعة وصناعة الأفلام. ومع انخفاض تكلفة هذه التكنولوجيا واتساع نطاق تطبيقاتها، يكون من المتوقع أن يتم استبدال نسبة كبيرة من خدمات وموظفي الأعمال الحاليين بالحلول المدعومة بالطائرات بدون طيار في المستقبل القريب.

وفقاً لمؤسسة «Clarity from Above»، وتقرير برايس ووترهاوس كوبرز، فإن المجال الذي يحظى بأفضل الفرص عند استخدام تطبيقات الطائرات بدون طيار هو تطوير البنية التحتية، بقيمة سوق متاحة إجمالية تبلغ ٤٥,٢ مليار دولار. ويأتي ذلك قطاعات الزراعة والنقل والأمن والإعلام.

وقد أسست برايس ووترهاوس كوبرز مؤخرًا مركز تميز عالمياً باسم Drone Powered Solutions (الحلول العاملة بطائرات بدون طيار)، وهو



من المنتظر أن تشهد صناعة البنية التحتية المزيد من استخدام الطائرات بدون طيار

# المحتويات

## القسم العربي أخبار

- كابارول تدشن صالة عرض في الرياض ..... ٤
- السوق العالمية لتكنولوجيا الطائرات بدون طيار تقدر بـ ١٢٧ مليار دولار ..... ٤
- كاتربيلر تدشن مركز تدريب إقليمياً في دبي ..... ٥

## تحليلات

- فرص استثمارات الطاقة في السعودية ..... ٧



## ملخص محتويات القسم الإنجليزي

التطورات: تطورات السوق.

تحليلات: البنائيات الخضراء.

خدمات لوجيستية: حلول مستودعات التخزين، التحكم في العمليات.

فعاليات: معرض الطاقة السعودي، المعرض الدولي للطاقة الشمسية، معرض مشروع قطر.

الدليل السنوي للمشتريين: معدات مواد كهربائية.

## النشرة التقنية abc

TECHNICAL REVIEW MIDDLE EAST

الشرق الأوسط

SERVING THE REGION'S BUSINESS SINCE 1984

في خدمة شركات المنطقة منذ ١٩٨٤

مدير التحرير: بسن واطس، بريد إلكتروني: trme@alaincharles.com

فريق التحرير والتصميم: بوب آدمز، هيريتي بايرو، أندرو كروف، راتجانا جي إس، براشانت إيه بي، زا تبيت، سندوجا بلاجي، رونيتا باتناك، توماس ديفيز، هيمانشو جوناك، توم مايكل، لي تيلوت.

الناشر: نك فوردهام

مديرة النشر: بلانتي باندي

مدير مبيعات المجلة: جراهام براون

هاتف: ٩٢٦٠ ٤٤٨ (٤) ٩٧١ +، فاكس: ٩٢٦١ ٤٤٨ (٤) ٩٧١ +، بريد إلكتروني: graham.brown@alaincharles.com

المكتب الرئيسي:

Alain Charles Publishing Ltd

University House, 11-13 Lower

Grosvenor Place

London SW1W 0EX UK

هاتف: ٢٠٧٨٤٦٧٦٦ (+٤٤)

فاكس: ٢٠٧٩٣٠٠٧٦ (+٤٤)

مكتب الشرق الأوسط الإقليمي:

Alain Charles Middle East FZ - LLC

Office 215, Loft 2A

مدينة دبي للإعلام

دبي - الإمارات العربية المتحدة - صندوق بريد: ٥٠٢٢٠٧

هاتف: ٤٤٨ ٩٢٦٠ (٤) ٩٧١ +

فاكس: ٤٤٨ ٩٢٦١ (٤) ٩٧١ +

المترجم: عزالدين م. علي، ezzeddin@movistar.es

التصميم والإخراج الفني: محمد مسلم النجار، alnajjar722@gmail.com

الطباعة: مطبعة الإمارات - دبي

Country	Representative	Telephone	Fax	Email
India	Tanmay Mishra	(91) 80 65684483	(91) 8040600791	tanmay.mishra@alaincharles.com
Nigeria	Bola Olowo	(234) 8034349299	-	bola.olowo@alaincharles.com
South Africa	Annabel Marx	(27) 218519017	(27) 466245931	annabel.marx@alaincharles.com
UK	Steve Thomas	(44) 20 7834 7676	(44) 2079730076	stephen.thomas@alaincharles.com
USA	Michael Tomashefsky	(1) 203 226 2882	(1) 203 226 7447	michael.tomashefsky@alaincharles.com

الوكيل البريدي بالولايات المتحدة: النشرة التقنية - الشرق الأوسط Technical Review Middle East ISSN 0267 5307  
تنشرها ست مرات في العام، لقاء 99 دولاراً أمريكياً، شركة آلان تشارلز للنشر  
Alain Charles Publishing , University House, 11-13 Lower Grosvenor Place, London, SW1W 0EX, UK  
يتم سداد ثمن المجلات لدى: Rahway, NJ.

مدير البريد: أرسل التصحيحات إلى: Alain Charles Publishing Ltd, c/o Mercury  
Airfreight International Ltd, 365 Blair Road, Avenel, NJ 07001. US  
Agent: Pronto Mailers International, 200 Wood Avenue, Middlesex, NJ 08846

الإنتاج: دوناتيللا مورانيللي، ناتانيل كومار، صوفيا هويت، نيكيثا جين، برينكا تشرنوتري.  
بريد إلكتروني: production@alaincharles.com  
الإشتراكات: بريد إلكتروني: circulation@alaincharles.com

رئيس مجلس الإدارة: دريك فوردهام



Serving the world of business

© Technical Review Middle East ISSN: 0267-5307

## ADVERTISER INDEX

Company	Page
Aggreko (Middle East) Ltd	31
Aksa Jenerator Sanayi AS	3
Ansaldo Energia S.p.A.	45
BAUR GmbH	56
COELMO Spa	27
CompAir	26
Deep Sea Electronics Plc	47
DMG World Media Dubai Ltd (Intersolar 2016)	71
ElectroMech FZE	49
FG Wilson Engineering Ltd	11
Galva Coat for Galvanizing & Lighting Poles	58
Hellermann Tyton GmbH	59
Helukabel GmbH	33
Himoinsa, S.L.	7
IGEL Electric GmbH	52
IIR Exhibitions	32
Inmarco FZC	30
Inmesol SL	35
International Trade Solutions (FZE)	39
JCB Power Products Ltd	21
Jeremias Middle East	57
John Deere Power Systems	13
Kaeser Kompressoren FZE	75
Kirloskar Oil Engines Ltd.	9
LG Electronics Gulf FZE	2
Lovato Electric S.p.A.	44
Lucy Middle East FZE	37
Man Diesel & Turbo	23
Mecc Alte UK Ltd	43
Megger Limited	15
Mohammad Al-Ojaimi Contracting Est.	19
National Instruments India	41
Omicron Electronics Middle East	51
Ortea S.p.A.	33
Powertech Switchgear Industries FZE	29
Ranco Group	25
Rchemie international FZC	44
SES Smart Energy Solutions FZCO	29
Sullivan-Palatek, Inc.	17
Teksan Generator Electric Sanayi ve Ticaret AS	61
Volvo Penta, AB (VPEN)	5

**DSDX.3 Series with energy saving SIGMA PROFILE **

# The next generation

The next generation of DSDX series rotary screw compressors is now available for free air deliveries from 25 to 31 m<sup>3</sup>/min. Together with a range of other enhancements, new SIGMA compressor airends and IE4 motors now combine to deliver up to five percent improved specific power compared to previous models – which translates into significant energy cost savings.



**Kaeser Kompressoren FZE**

P.O. Box 17485 – Jebel Ali Free Zone – Dubai – United Arab Emirates  
Tel: +971 4 805 0000 – Fax: +971 4 805 0077 – E-Mail: info.dubai@kaeser.com – www.kaeser.com

**[www.kaeser.com](http://www.kaeser.com)**

التقرير السنوي للطاقة ٢٠٢٦

TECHNICAL REVIEW MIDDLE EAST

SERVING THE REGION'S BUSINESS SINCE 1984

# النشرة التقنية

UK £10, USA \$16.50

في خدمة شركات المنطقة منذ 1984

الشرق الأوسط

## زيادة مشروعات الطاقة في السعودية

النشاط الهائل  
مع الاستثمارات  
الضخمة في قطاع  
الطاقة بالمملكة  
العربية السعودية،  
يتيحان مزيداً من  
الفرص أمام  
شركات تزويد  
المعدات والخدمات  
الكهربائية.