AEMT
August 2016

Bulletin

Association of Electrical & Mechanical Trades

Dr. Martin Killeen joins AEMT as Lead Lecturer and Technical Specialist

After retiring from his role as Head of Advanced Manufacturing and Technology at Loughborough College earlier this year, Dr. Killeen will be joining the AEMT as Lead Lecturer and technical specialist this September.

Martin started his career with an apprenticeship at Brush Electrical Machines, becoming a design engineer for Turbo Alternators. He then became their senior design engineer for the traction division. Via Loughborough College he has been involved with the AEMT Hazardous Area Courses for 20 years. He has built up a tremendous knowledge of IECEx standards with regards to Hazardous Areas, and has trained a large

Dr. Martin Killeen at the AEMT Conference 2015.

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number of engineers and technicians involved with Hazardous Area Equipment Repair.

The AEMT are very pleased to welcome Martin on board as an integral part of the secretariat. He brings with him a vast pool of experience when dealing with educational bodies and an advanced understanding of training. He will help the AEMT develop further training, apprenticeships and educational courses.

Martin explains, "After many years working with the AEMT at Loughborough College, I have got to know the association and its members very well. When I had a chance to lecture for the AEMT, I enjoyed the opportunity very much. It is the logical next step after saying goodbye to many good years at Loughborough College to join the AEMT and I look forward to now putting my full attention to developing areas of the association."

Tim Marks, Secretary of the AEMT adds, "I am very excited to have Martin working with the AEMT. We have worked very closely with Martin at Loughborough College for 20 years, and it will be a boon for the AEMT to have him oversee the future of the association's training courses. Not only that, but he will represent the AEMT on many international standards committees whilst also offering his technical expertise to members."

Martin's first job will be to work closely with the Training Committee to establish how the AEMT's future training courses will be formed and presented. The Committee has already recognised the need for training in many areas. He has the expertise to develop new formats for courses both online, and others better suited to a more personal environment. ■

Send us your News!

Please remember to keep us informed of your news so that we may publish it in our Bulletins.

Let us help. Even if you have some news to tell us, but nothing written.

admin@aemt.co.uk

AEMT Website

All the news found in this newsletter is also available to read on the new website.

Follow us on our social networks, or visit the site regularly for news updates.

www.theaemt.com/news

AEMT Conference 2016

Click Here for more detials and book
or
Call 01904 674 899

Location: Dunchurch Park Hotel, Rugby
Dinner: £65*
Tickets: Free
Stand space: Free for members.

Wednesday, 28th September

The Conference will start with the AEMT annual dinner and entertainment. *Early Birds get a 10% discount for bookings **before 12th September.**

The AEMT Conference will host an impressive line up of speakers and be supported by exhibitor stands of motor manufacturers, distributors and other AEMT suppliers.

Speakers will focus on repair, refurbishment and efficiency of rotating electrical machines such as motors, drives, pumps and gearboxes as well as other items of interest. ■

Only the best for Columbian generator repair

Designing and manufacturing high voltage coils for large generators and motors requires precision, experience and sometimes, a little assistance from a similarly skilled company. So, when a Columbian coil manufacturer needed to outsource a complete set of new windings it approached Sulzer. The redesigned coils received the greatest compliment and the customer stated that they were the best quality coils they had ever seen and installed.

M&M Bobinados Industriales has over 45 years' experience in providing a complete refurbishment service for generators and electric motors, including the replacement and subsequent testing of new windings. Based in Valle del Cauca, Columbia, the company offers a complete service for generator and motor repairs including balancing and electrical testing.

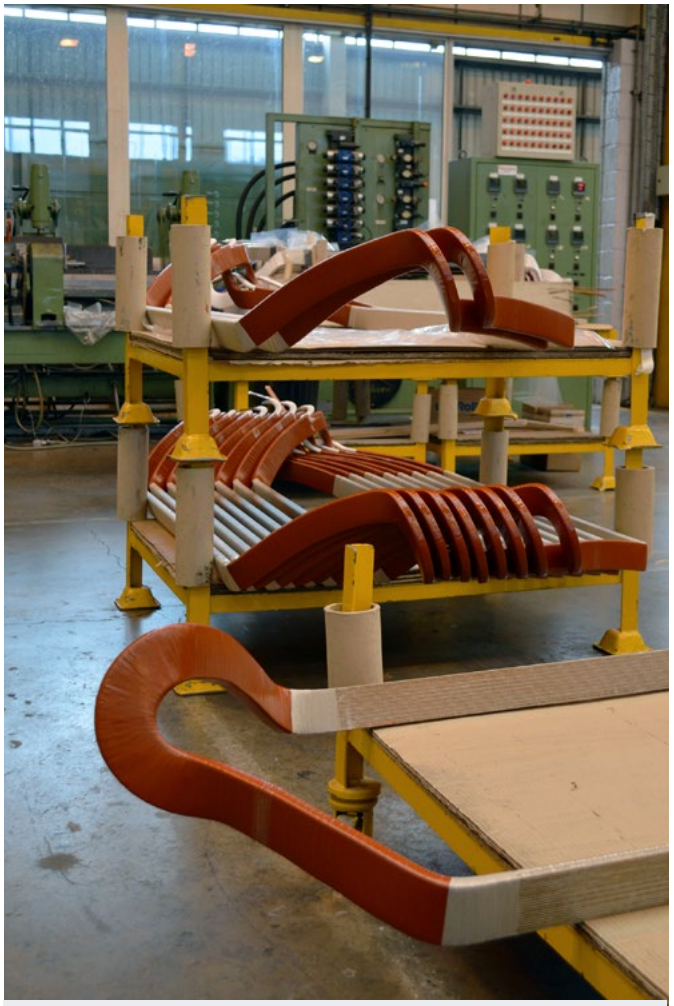
As part of a recent project, M&M called on the design and manufacturing expertise of Sulzer's Service Center in Birmingham, UK, to produce 160 new, large coils for an 11,000 kVA generator.

Benny Hinchliffe, Head of International Operations at Sulzer UK, explains: "Our coil shop is supported by an expert design team that can analyze the original coil design and apply the latest insulation technology to produce a much more efficient coil. In this case M&M completed one of our datasheets and also sent one of the original coils to the UK so we could double-check every dimension."

Having ascertained the required dimensions of the finished coil, Sulzer's designers created a 3D computer model of the coil and, by introducing the latest insulation materials, were able to redesign the coil while increasing the volume of copper by 12%. This increase in copper effectively improved the efficiency of the generator by a similar figure. The new design was also created for a 'best-fit' which would eliminate the need for side packers in the stator slots, making installation quicker and easier.

The coil shop uses its own in-house facilities to draw and anneal the base copper before manufacturing the insulated copper strips. This enables very short production schedules, especially since the shop runs 24 hour shifts, if necessary, and new coils are air-freighted to the customer after passing all of the inspections and electrical tests.

Danny Fox, Business Manager, Formed Coil Manufacturing at Sulzer, explains: "The new coils



The looping and shaping machines in Sulzer's coil shop have the capacity to produce 5 meter long diamond coils and also have the capacity to press slot sections of up to 6 meters in length on our half bars, meaning the entire bar length can be anything up to 7-8 meters including their overhangs.

Sulzer's coil shop is supported by an expert design team that can analyze the original coil design and apply the latest insulation technology to produce a much more efficient coil.

for M&M were created by looping the copper strip to form a full size coil. It was then carefully shaped to the exact dimensions of the stator. Our looping machines have the capacity to produce 5 meter long diamond coils and we also have the capacity to press slot sections of up to 6 meters in length on our half bars, meaning the entire bar length can be anything up to 7-8 meters including their overhangs."

"A high degree of automation and the continuous quality control checks throughout the processes ensure that each and every coil is formed to exactly the right size and shape. The design also includes a precision-built mock-up of a section of the stator, which is used to double-check the final fit of every coil before it is shipped to the client."

Ulises Osuna, Technical Manager for M&M Bobinados Industriales, commented: "We have been involved with the manufacture and installation of high voltage coils for over 45 years and the coils we received from Sulzer were the best coils we have ever installed. The improvements in the design have certainly reduced the installation time as well as improving the efficiency of the generator, which makes the coils very cost effective for the client."

Following this project, Sulzer is hoping to work closely with M&M and provide technical expertise as well as manufacturing capacity to the Columbian market. At last year's ACOLGEN exhibition, which was organized by the Columbian Association of Electric Power Generators, Sulzer and M&M shared a stand in order to promote the benefits of this partnership. In this way, it is anticipated that other clients can also benefit from the turnkey services offered by both Sulzer and M&M, including faster delivery times. ■

Further developments at Houghton International strengthen their position internationally.

With a new AutoCoil Design Software introduced, a new Head of HV Coils, an expansion into a fourth site and a new finance director on board; Houghton International have strengthened their position as an international player for High Speed Train power packs and alternator overhauls to large one off electric motor repair and rewinds from power generators and off shore vessels.

AutoCoil Design Software

Earlier this year in April Houghton International introduced a new AutoCoil design software. It utilises the latest technology to offer 3D coil design and slot build drawings for improved design and accurate fit.

AutoCoil extrapolates data sheet information into 3D drawings which can be supplied alongside the quotation to illustrate the design and present a projection view of the cross section of the slot build. The 3D model supports the design process by allowing customers to visualise their coil requirements. It improves the communication with the end user and supports quote acceptance.

Stuart Whitfield, Technical Account Manager at Houghton International, commented: "The AutoCoil design software brings the coil design and slot build to life. Clearly illustrating the coil and slot set up, customers can be sure we have fully understood their requirements and are providing the best solution to meet their needs.

"It also allows us to examine the design in more detail and consider any improvements that could be made, the software makes it simple to tweak the design variables by changing the wire size or spacers to optimise the coils and improve the fit.

"Customers can also use the drawings to support their offer to the end user, using a visual and sophisticated 3D drawing to present their solution to give the end customer confidence in their proposal. Feedback from customers has been great so far and we plan to roll this out with all full data quotes moving forward."

Head of HV Coils Appointed

Shortly after implementing the AutoCoil software, Gary Miller was appointed the new head of its high voltage coils division. Working as part of the senior management team, Gary takes

Gary Miller, Head of HV Coil Division.

the lead on all coil manufacturing activities, responsible for managing the company's state of the art facility and multi skilled workforce.

Having worked in the engineering industry for 25 years at leading companies such as Rolls Royce and Michell Bearings, Gary brings a wealth of management experience to the role. Following recent investments in a new coil press and other manufacturing machines, Gary has been challenged with improving process flow and planning to enable Houghton International to offer faster lead times in order to meet

CEO Michael Mitten in new large machine repair shop.

international demand for its range of innovative insulations systems.

Michael Mitten, CEO of Houghton International, commented: “We are delighted to have Gary on board and I’m confident that he will continue to develop our staff and processes in order to maintain our reputation as a leading coil manufacturing facility.

“We have been manufacturing coils from our base in Newcastle for over 30 years and as such have a very experienced and knowledgeable team. As a motor repairer ourselves we understand the value that high quality coils bring to a job and are continuing to invest in our range to ensure we continue to supply good value, superior quality coils.”

Gary added: “Houghton International has a fantastic reputation for quality and innovation in HV coils and customers speak highly of our product performance and responsive customer service. It’s my job to ensure we continue to deliver this level of service and exceed expectations going forward by increasing our capacity and improving our lead-times to meet demand.”

Expansion into fourth site

Following on from a series of contract wins, the company expanded into a fourth operational site in May. The site situated in Byker, Newcastle will increase both operational capacity and the scale of repairs they carry out with increased head room and up to 40 tonne cranage,

The 10,000 square foot building is based on Shields Road and will act as their large machine repair shop. Work carried out there will range from contracted High Speed Train power pack and alternator overhauls to large one off electric motor repair and rewinds from power generators and off shore vessels.

Michael Mitten, CEO of Houghton International, commented: “We have been steadily growing for a number of years now and our customers have long had a demand for larger repairs and dynamic testing that previously we couldn’t

service. The new large machine repair shop ticks all the boxes and complements our existing HV repair capability enabling us to deliver a fully comprehensive offering to the market.

“The site is ideally located just 10 minutes from our existing facilities and provides a wider scope of space. It allows us to be even more flexible and take on a larger range of motors and specialist projects. We have plans for further growth and have already identified a fifth site to provide further capacity when required.”

The new building supplements our existing three sites and field services team and is part of the company’s growth strategy to expand its range of electro mechanical engineering solutions to a wider market.

Finance Director Appointed

Following the recent expansion, Jack Dunning has been appointed as finance director to oversee the company’s finances and support the business during its sustained growth as it prepares for further expansion in the North East and internationally.

As a qualified Chartered Accountant, Jack spent ten years working for the audit and assurance practice of Deloitte in London and New York and holds a degree in Economics from the University of Leeds. More recently in 2010 Jack joined the BVCA, the industry body and public policy advocate for the private equity and venture capital industry in the UK, and spent five years there as Finance Director and Chief Operating Officer.

Michael Mitten, CEO of Houghton International, commented: “Jack brings with him a wealth of professional and operational experience. He is ideally placed to support our continued growth. As the business grows we will face a range of challenges and I’m confident that Jack has the skills and expertise required to enable Houghton International to thrive both now and into the future.”

“Jack’s appointment completes and strengthens our senior management team, alongside myself and the other company directors he will ensure that the company delivers our ambitious growth strategy, project 2020.”

Jack will lead the internal support service teams to facilitate their expansion and prepare for future growth regionally, nationally and internationally to ensure the company is financially positioned to maximise all available opportunities.

Jack Dunning, added: “I have been watching

Jack Dunning appointed as Finance Director.

Houghton International steadily grow for a number of years now and I’m excited to be joining the business at such a critical stage in its development.”

“Following a string of new contract wins and with project work lined up to 2020 and beyond, Houghton International is now in a position for growth, expansion of its offerings, and increase the territories in which it operates. I’m looking forward to working with the team and helping to accelerate this development.” ■

Mobile drill rig uses electric drive for fume-free operation

Kostal's Inveor inverters are designed to be mounted directly onto the motors they are controlling, in place of the motor's usual terminal box.

Redevelopment of city centre locations can require drilling of deep bore holes to check the suitability of the soil and bed rock for supporting new buildings. If a site requires a comprehensive geological survey it may be necessary to drill inside existing buildings. However, most drills are diesel driven, meaning the exhaust fumes have to be extracted to the outside, a task that is difficult, time consuming, expensive and often not entirely successful.

A new type of drilling rig, developed with the help of electric motor company Exico, can be used indoors without the risk of filling the building with diesel exhaust fumes.

Planning the redevelopment of London's New Covent Garden fruit, vegetable and flower market has required a comprehensive geological survey to be commissioned, right down to a depth of 50m. So a specialist drilling company was brought in to collect soil and rock samples from multiple deep drillings across the 57 acre site.

New Covent Garden market, in Nine Elms on the south side of the River Thames, has been in operation since 1974 when the old site was closed to make way for retail and leisure businesses. It is home to the 200-plus independent traders that supply London with nearly all of its fruit, vegetables and flowers.

The redevelopment of New Covent Garden is scheduled to take 10 years and cost £2bn. It will see the market facilities modernised to make them more efficient and free up 20 acres of land for nearly 3,000 homes and 115,000 sq ft of commercial accommodation. There are several equally ambitious building projects nearby, including the new US Embassy and the long-awaited redevelopment of the redundant Battersea Power Station into a cutting edge mixed use facility.

Jerry Hodek of Exico explains that the geological survey has to be thorough and requires many of the exploratory bores to be drilled inside existing buildings. This work was undertaken by D.J. Drilling Ltd, a specialist company that does a lot of work in London and the South East, as well as further afield. Based on the Isle of Wight, the company offer a number of services beyond general drilling, including dynamic probing for land quality assessments, window sampling to assess soil variation across a site and comprehensive site investigations

The new type of drilling rig, developed with the help of electric motor company Exico, can be used indoors without the risk of filling the building with diesel exhaust fumes.

Normally the drilling rigs used by geological surveyors are driven by diesel engines.

“This is fine if you are working out of doors and the exhaust fumes can dissipate on the wind,” says Jerry.

“However, if you attempt to use such equipment indoors the fumes quickly cause problems. It becomes necessary to use ducting and fans to extract the fumes. This can cause delays to the schedule, add costs and is often difficult to achieve.”

With so many holes to be drilled across the New Covent Garden site a solution was required that would effectively overcome the fume problem yet be quick to set up and easy to operate, and an electric motor drive provided the answer.

“The electric motor is fitted onto the rig in place of the diesel engine,” explains Jerry. “This can be driven from a three phase mains supply or a mobile diesel generator located outside the building, where fume build up is not a problem.”

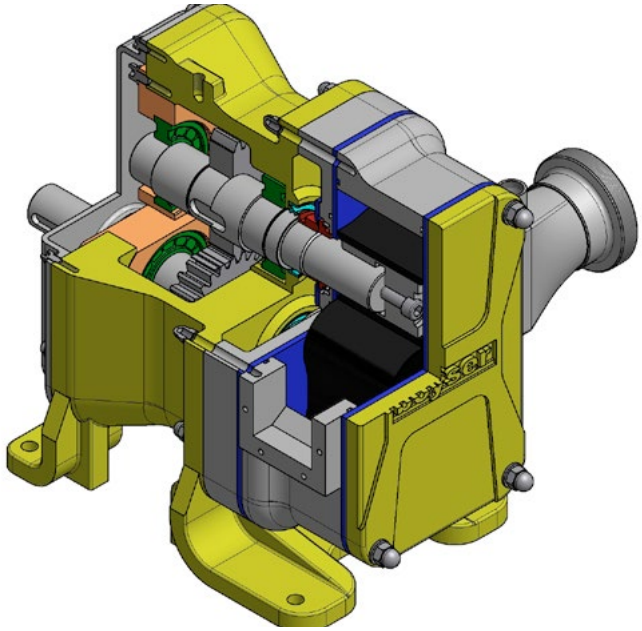
In fact the motor that Exico supplied is a four pole 18.5kW 400/690V 50Hz machine, fitted with an integral inverter to turn it into a variable speed unit. The inverter, made by Kostal was also supplied by Exico.

Kostal’s Inveor inverters are designed to be mounted directly onto the motors they are controlling, in place of the motor’s usual terminal box. Normally inverters are located in a separate, remote control cabinet, but this would be an impractical configuration for portable equipment such as on-site drilling rigs.

“Motor mounted inverters are subjected to significant levels of vibration and heat,” says Jerry. “The Kostal units are built to be so robust that they can cope with the vibration and also have a large heat sink, which in this case we have augmented with a cooling fan to provide a constant airflow over the unit.”

The variable speed, electrically driven drilling rig is proving its worth on the New Covent Garden project, reliably drilling bores to precise depths and helping the surveyors keep to a strict schedule. ■

AxFlow launches range of elastomer coated rotary lobe pumps



AxFlow has extended its range of positive displacement pumps with the introduction of the LB suite of elastomer coated rotary lobe pumps for flows of between 5m³/hr to 130m³/hr.

The LB pump has been designed from scratch following an assessment of products currently on the market with a view to producing a process quality pump, positioned above the more agricultural designs yet without attracting

the high costs of high end products.

The LB range offers a combination of innovative features. Ergonomic rotors designed in conjunction with Universitat Autonoma in Barcelona, maximise the sealing face while allowing the passage of particles up to 50mm in size. The rotors can be coated in NBR (FDA), EPDM and Viton or supplied in AISI-431 stainless steel. Also to be noted is the unique intermediate chamber that isolates the pump head from the gear box, therefore avoiding any kind of cross contamination.

The pumps utilise robust, high precision gears with self-aligned roller bearings that ensure that the rotary lobes deliver exceptionally high levels of accuracy and efficiency and use a range of process quality mechanical seals.

Lastly, stainless steel axial liners incorporated in the pump chamber protect the pump casing, help to maintain the pump's performance and are easy to replace, thereby significantly increasing pump life.

AxFlow believes that the LB range represents the most sensibly priced process quality range of rotary lobe pumps on the market. ■

AxFlow grows with strategic acquisition in Sweden

Leading specialist in positive displacement pumps, fluid handling systems and related services, AxFlow, extends its product portfolio and Swedish market coverage with the acquisition of Esspump AB.

With 570 employees and sales of 175 Million Euros, AxFlow is the largest distributor of high quality industrial fluid handling equipment in Europe and South Africa. The addition of Swedish Esspump is strategically important.

"Both AxFlow and Esspump are known for their products technology and application knowledge. Our expertise and strong customer and supplier relations give us a strong market position in Sweden. The two companies complement each other well. Together we will be able to offer our customers a much wider range of products and more extensive services and technical solutions", says Fred Lindecrantz, Managing Director of AxFlow AB in Sweden.

"AxFlow represents a number of leading pump manufacturers including Mono, Nash, Waukesha, Hermetic, Blackmer and Maag. With the addition of Esspump, our product range is extended to also include equipment from Wilden, Almatec, OBL, Mouvex, System One and Quattroflow", continues Fred Lindecrantz.

Niklas Holmstedt, Managing Director of Esspump, is equally as enthusiastic about the acquisition commenting: "The synergy of complimentary products, strong technical and application knowledge resulting from this acquisition and the international resources available from AxFlow will bring considerable benefits for our customers and new business prospects."

AxFlow AB, Sweden was established in 1991. Since then it has established itself as a major force in the chemical, mining, pulp and paper and water and wastewater, food and pharmaceuticals industries. The acquisition of Esspump AB makes AxFlow AB one of the largest distributors of positive displacement pumps in Sweden. ■

Whitelegg's New Electrical Safety Tester

The GLP1 provides a cost-effective, fully featured solution for testing the safety and function of a wide variety of electrical products. It is predominantly designed for OEMs and suppliers of electrical goods. The Whitelegg GLP series is a simple to use, fast and effective tool for benchtop or production testing.

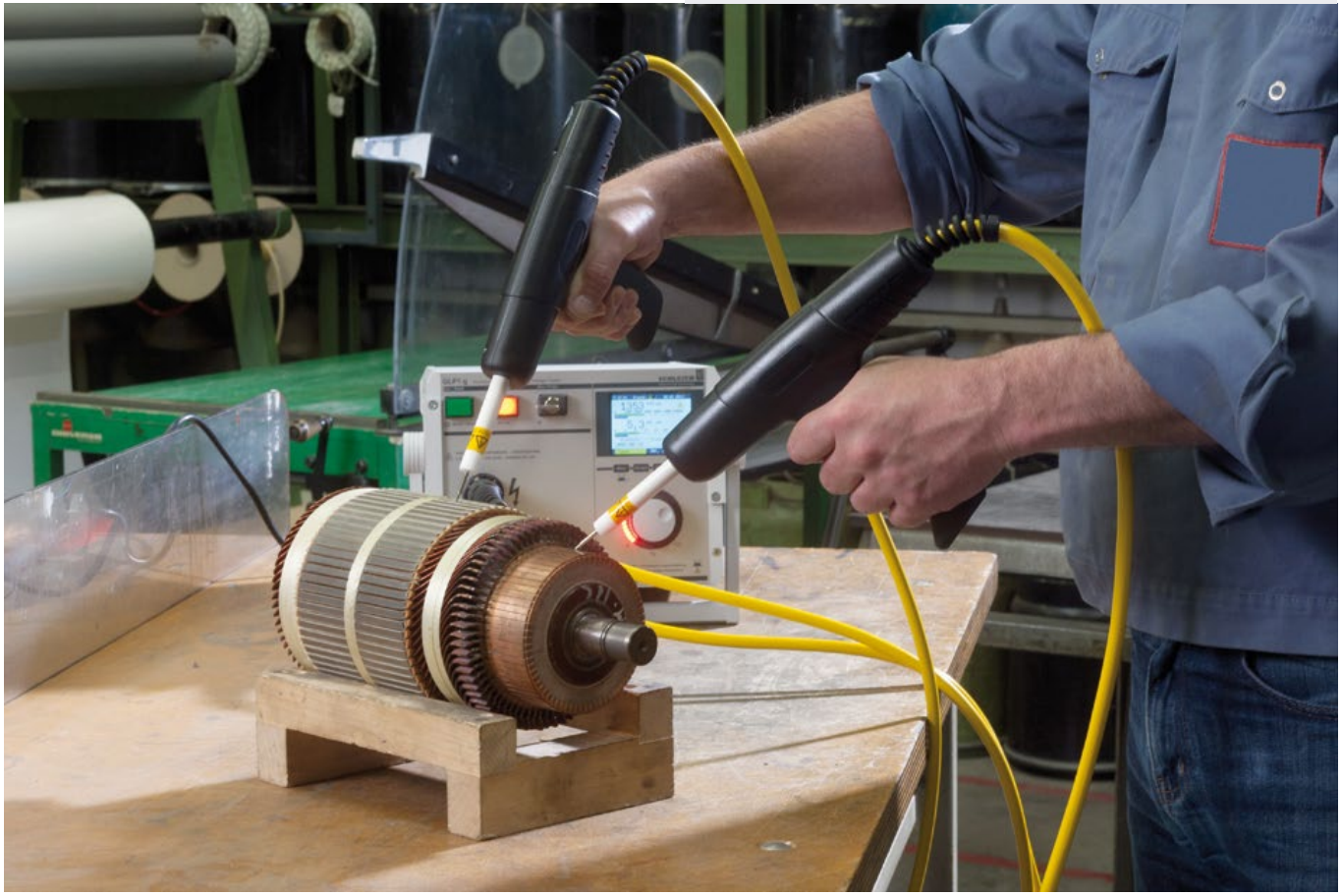
To meet the expanding variety of electrical regulations, the tests demands a highly versatile and accurate instrument. The Whitelegg GLP series is designed to be easy to use and incorporates a range of pre-set and configurable test plans for brown and white goods including luminaries. It is perfectly suited for production, lab, test bench, QA and automation procedures. Test results can be stored, downloaded, or printed to labels.

The GLP is considered the easiest to programme on the market and has been proven in use across the EU and further afield. Unskilled staff can quickly get up to speed with the technology using the simple-to-use, interactive touch screen.

The incorporation of 21 tests in one instrument, at this price point, is unique. These include resistance, insulation, high voltage DC/AC, function, leakage, continuity and short circuit.

A extensive product range with a wide choice of accessories covers all possible industry requirements. ■

FLP1 HV with hand proves



Smart Engineers enable Smart Site Technology

Maintaining a large number of London's key buildings and Leisure centres is Essex based specialist Pumps and Motors (UK) Ltd, a veteran service company of over 37 years. Supporting office and site based contract managers, the Pumps and Motors helpdesk team offer a 24 hour emergency breakdown service and preventative maintenance programme.

"Unlike other maintenance companies, we have a fully equipped workshop including welding, prefabrication, lathe turning and milling workshop. Our mechanical and electrical engineers are multi-skilled and can manufacture most obsolete and non-manufactured parts." David Dunn, UK Contracts Manager.

The question is, how does such a successful company handle the man-power and resources that keeps customers coming back for more?

Dawn Stephenson, Pumps and Motors' Administration Manager replies: "When a customer calls you need all of their information to hand. If you don't have the answers they need they can quickly become dissatisfied with your service and ringing them back doubles your effort. We needed to make life easier for everyone and changing from a manual system to software was the way forward. Everything you want to know about a job is in EMIR for everyone to see."

Pumps and Motors chose EMIR, a dedicated business management system designed for the electro-mechanical industry back in the 1990's. As early adopters of ERP they have always benefited from a system that is designed around their key needs and industry requirements and a lot has changed in the last 20 years. EMIR is a product that has been continually developed since its inception with the majority of its features created from the power of customer feedback.

As an organisation, Pumps and Motors were like many other businesses, relying on printed paper to transfer information back to the office from remote locations detailing engineer reports, customer sign off sheets, timesheets and materials taken from stock. Such documents then had to be manually typed into EMIR as a separate administration task. Information collected in this way can obviously be subject to delay, lost, incomplete or inaccurate and due to the duplication of effort involved, never timely or efficiently available.

Well now Pumps and Motors are getting smart, Smart Site to be precise. Every engineer carries a phone or tablet device and they are intuitive and easy to use. So now their engineers know where to go, what to do, and all the relevant job info is now easily available from their mobile device direct from the EMIR office management system.

Of course, it doesn't stop there! With each job are options for: recording of time, mileage activities along with materials used; the completion of safety & service checklists that can be defined in EMIR; taking photographs of the work before and after the job; and finally a signature of the customer's approval before completing the job. All this activity is performed straight into their phones. Within seconds, the information is then back in EMIR and job costing and invoicing can be taking place. Even when an engineer is working on site with no phone signal, they can still update the job ready for when WiFi or a data phone signal is reconnected and then press 'Sync'. The important thing is that all of the collected data, costs, photographs and signatures are all in one place, the EMIR system.

Gary Downes, Director of EMIR Software. "iPhones and Android phones are no longer new

technology, they are essential data devices for everyone. Pumps and Motors are an established, but forward-thinking customer, using EMIR and Smart Site to realise the instant benefits of a paperless environment and that can only mean a better service for their clients."

US Software house, Confluent

This year, the EMIR team are also pleased to announce collaboration with US software house, Confluent, specialists in tablet technology designed specifically for the motor rewind and repair industry. At this year's EMIR conference Managing Partners, Jake Farrell and Evan Chaki discussed how they have become key players in Microsoft's PowerApps architecture and how this technology is transforming and modernising the flow of jobs in workshops in the US.

Gary Downes, Director of EMIR Software. "Confluent are like us, a specialist producer of this type of technology for the industry, and I'm pleased to announce a partnership that not only makes this software available to our customer base, but a collaboration that has integrated this product into the very heart of EMIR."

Jake Farrell, Confluent adds, "Our product has been developed and well utilised by one of the largest and most influential organisations in the states and working with the EMIR team means that the benefits of tablet technology in the workshop will soon be realised here in the UK."

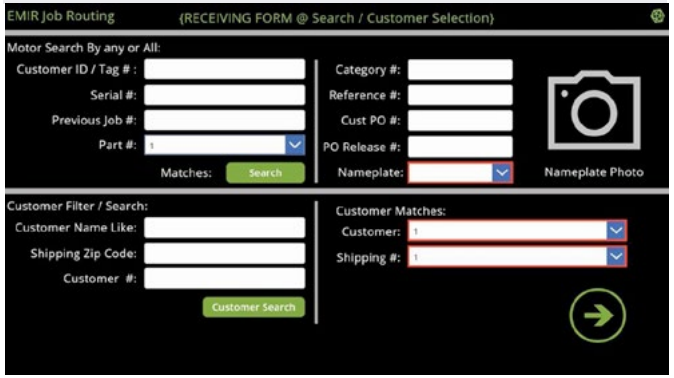
The new Extension, Workshop Routing, relays live information directly from an iPad, Android or Windows device located in the Workshop to the EMIR solution.

Consisting of a comprehensive series of product-specific electronic forms and integrated business logic, Workshop Routing eliminates the delays and inaccuracies of hand-written paperwork to follow items around the workshop. Each stage of the process is recorded and relayed live to the Visual Management dashboard ensuring that every stage of the process is accounted for in the process, live information that is constantly being updated as each task is completed.

"Our customers are demanding more from their software solution. If a business in this sector is looking for growth, improvements in efficiency and accuracy can be found in the processes that they currently employ. It is no longer desirable to print pages and pages of paperwork for each job or task and expect the internal team to make decisions from incomplete information. Workshop Routing takes away the clutter, makes the current situation very clear and gives managers the information they need." Gary Downes, Director of Solutions in I.T. Ltd, the authors of EMIR Software.

Shaun Sutton, Director, Central Group and another EMIR customer adds, "EMIR has always been a valuable system for us and takes care of the day-to-day running of our business. With Workshop Routing on-board we will extend that process across all areas of our business and ensure our data collection is instant and available." ■

From US Software house, Confluent. Left - Evan Chaki and Right, Jake Farrell spoke at the annual EMIR Software Conference about tablet integraion (screenshot below).

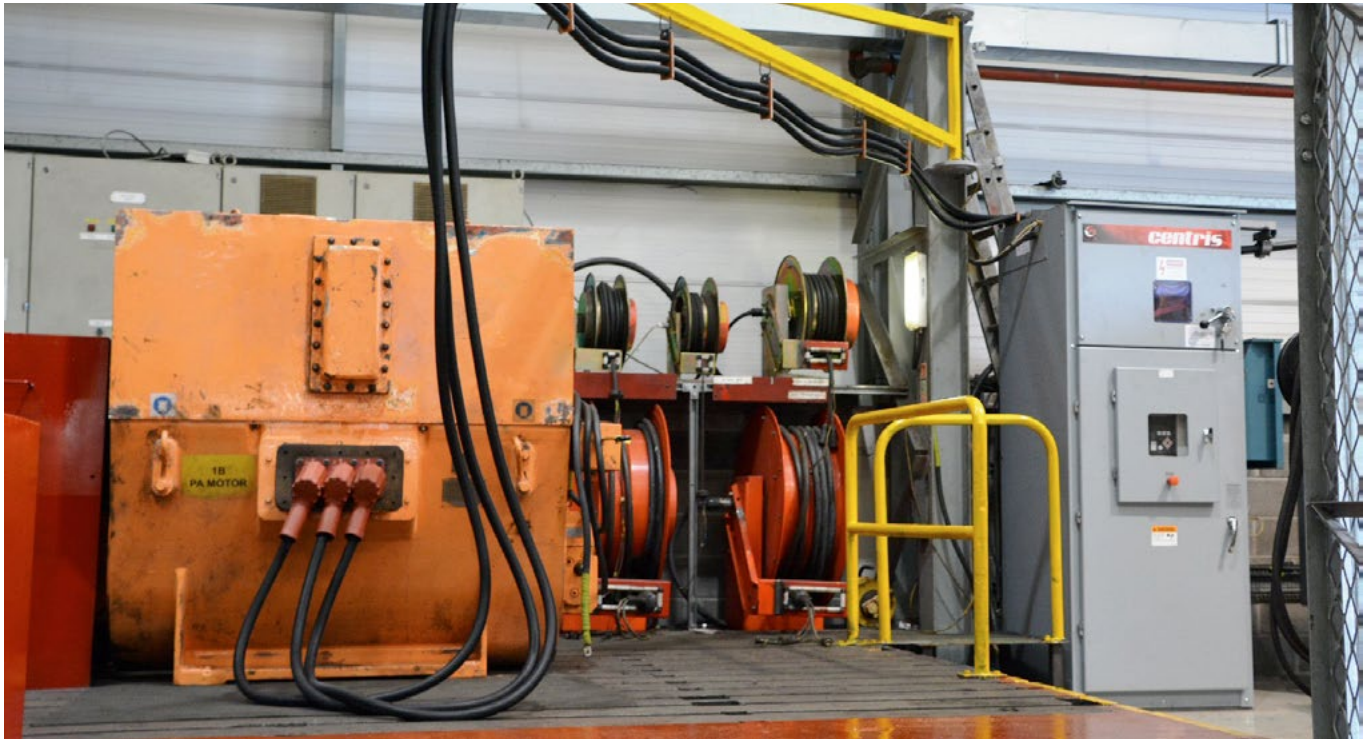


Quartzelec gears up to 'switch on' engineering in South Wales

New soft starter investment increases local test capability

Quartzelec has just invested over £40,000 in its Swansea workshop's test facility, ensuring high voltage rotating electrical machines can be tested locally.

The investment in a new soft-starter allows Quartzelec to now comfortably test machines rated up to 2MW at 3.3kV at its South Wales workshop; with the potential to test machines with a full-load starting current of 400A which equates to around 4MW. Previously, testing capabilities were limited to around a 500-600kW machine. Machines that exceeded this limit were internally transferred to Quartzelec's larger facility and head office in Rugby.



Test limitations were an inherent 'issue' imposed by the local energy provider when the Swansea workshop was purpose built for Quartzelec back in 2006.

Keith Evans, General Manager Quartzelec's Swansea operation states; "Engineering businesses in South Wales have been hit hard over recent months, most recently with the unfortunate TATA announcement (a key client for us) but we are confident that local industry will bounce back, hence our commitment to the region and this investment in our future."

The ability to work on and comprehensively test larger machines within the Swansea workshop, means that we can now offer a more responsive and cost effective service to our customers. Bypassing the need to use the Rugby head office has fully optimised the local workforce and saved significant transport costs.

The new Motortronics 'Centris' soft starter was supplied by Fairford Electronics from the USA, who provided expert advice in selecting the optimum specification required. The order was specifically fabricated, shipped and then commissioned at Quartzelec's workshop in mid-April.

The commissioning engineers used a 1460 HP

fan as the test motor which effortlessly ‘ran up’, controlled by a current of 92A from the new soft starter unit. On top of this, Quartzelec fabricated the necessary ancillary elements to optimise the installation, including the overhead ‘cable-tidy’ arm to reduce trip hazards and to avoid any health and safety issues.

“We predict that the investment should pay for itself in less than two years; plus having this added capability should now enable us to win additional high voltage motor and generator maintenance and repair contracts across the region,” continued Keith Evans.

“The installation went completely to plan and the unit is active and ready for use. We already have had several enquiries from potential new customers, aware of our plans to extend our local testing capabilities; so we’ve got off to a flying start."

"Being able to fully test electrical motors and generators at full operation speeds locally is a real advantage and means that our customers will no longer have to devote a whole day travelling up to our Rugby facility to witness the tests, as the reliability tests of all maintenance and overhaul work can now all be completed here.” ■

NTN-SNR gets Wilson Electric rolling with Bearing Box

Graham Brooker, MD of Wilson Electric (far left) with Samantha Turner of NTN-SNR, and Wilson Electric Engineers stand in front of the roaming NTN-SNR Bearing Box Van.

When AEMT member company Wilson Electric was on the look out for an affordable way to train their staff on best practise bearing installation and maintenance they contacted their supplier NTN-SNR Bearings for help.

Anthony Urion, MRO Sales Manager was pleased to offer them a bespoke training program, which could be provided on site free of charge.

Graham Brooker, MD of Wilson Motors, Pumps and Fans Group understood that the most critical element of any rotating piece of machinery will ultimately be the bearings; “They are the most common cause of equipment failure and can be the centre of some of the most expensive break downs we receive here in our Workshop” he explains.

Immense pressure is on repair companies these days to provide high quality repairs at low costs. Knowing how to both identify the root cause of bearing failure and repair the machine to a standard that is better than when it was originally made is the key to great service.

NTN-SNR have over a century’s experience as designers, developers and manufacturers of bearings, rotational and guidance systems. Worldwide they are the third largest supplier of bearings and spend approximately 4% of its turnover on research and development.

Anthony explains, “NTN-SNR’s Bearing Box is a purpose built training van used by the NTN-SNR training team to deliver bespoke training to service centres around the UK. The van contains all the necessary equipment to provide presentations on theoretical basics and move onto a full hands-on practical learning experience.”

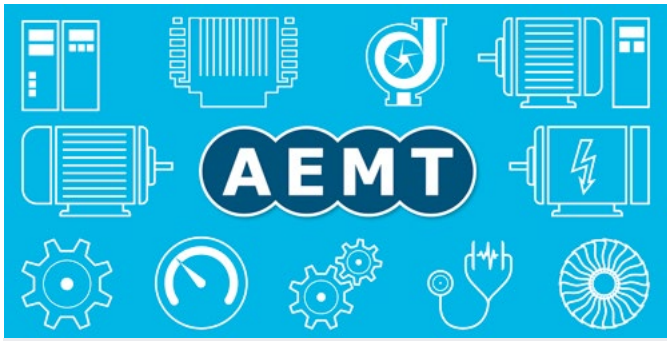
The van provides easy access to a bespoke training program on best practise bearing installation and removal for service centres across the UK. The UK team is made up of Lead Lecturer Robert Burley, MRO Sales Manager Anthony Urion and Samantha Turner Key Account Manager.

To accommodate the work schedule of Wilson Electric, staff training was delivered in several sessions over 2 days. The modules consisted of Bearing identification, including suffix and prefixes, failure modes and demonstrations of best practise for bearing fitting and removal using the latest technical tools.

Graham Brooker explicated, “NTN-SNR provided Wilson Electric with a first class training programme. Our engineers are now far better equipped to deliver high quality repairs.”

For more information on Bearing Box and all services that NTN-SNR can provide AEMT members contact Anthony Urion on 01543 445000. ■

AEMT Conference 2016



Click Here for more detials and book
or
Call 01904 674 899

Location: Dunchurch Park Hotel, Rugby
Dinner: £65*
Tickets: Free
Stand space: Free for members.

Wednesday, 28th September

The Conference will start with the AEMT annual dinner and entertainment. *Early Birds get a 10% discount for bookings **before 12th September.**

The AEMT Conference will host an impressive line up of speakers and be supported by exhibitor stands of motor manufacturers, distributors and other AEMT suppliers.

Speakers will focus on repair, refurbishment and efficiency of rotating electrical machines such as motors, drives, pumps and gearboxes as well as other items of interest. ■

SEW EURODRIVE Member Visit

AEMT Members were invited to join SEW at their purpose built Normanton head office for a unique opportunity to view their bespoke cutting edge assembly and distribution facility.

Mark Holmes, MD of SEW UK, welcomed members and gave a fascinating overview of the building project completed in 2013. Then followed other team members; Karl Rigg (UK Service Manager) who covered the service capabilities SEW provides, including a repair service for all manufacturers, not just their own products.

David Emery gave a quick overview of energy efficiency warming up for Adrian Mincher to introduce SEW's Movigear product.By simplifying the mechatronic drive system they can achieve a staggering 50% energy saving with some systems. Thanks to the speed setting range with constant, continuous torque and high overload torque, one variant can be used for multiple tasks. The simplified infrastructure combines power and communication into one cable thereby minimising installation costs and risk of error. Finally, by completely integrating all components into a compact design, less space is needed for installation.

Normanton covers a 10 acre site, servicing the demands of UK customers. They are setup to deliver 1'500 geared motors per week. The 20 tonne lifting capacity, 8m hook height cranes and 4m wide roller shutter doors means that even the largest of gearboxes can be handled with ease.

Also in the 1'800sqm service bay is room for a 320 tonne press capable of handling up to 2.5m diameters; a mechanical workshop, a 20 tonne test bed and 250amp test facility.

The Normanton HQ maintain stocks of over 5'100 different components, with a value in excess of £2m.

The workshop area is over 7'500sqm and holds over £2.5m worth of components ready for assembly on state of the art assembly cells.

The 500sqm electronics workshop and assembly area allows for programming, repair and assembly of inverters, servos and multi axis controllers. ■

1. David Emery presents to AEMT Members
2. Julian Webb from Webb Electric.
3. Paul Smalley of HG Rewinds
4. Chris Waterfall of MicroClutch Systems
5. David Ede of Kolmer Electric Motors
6. MD Mark Holmes gives members a tour of their new facility.
7. Andy Guest of Wilson Electric
8. SEW EURODRIVES head office in Normanton
9. Mike Edwards of Essex Hi-Wire
10. Kevin White with Simon Cattell of Mid Kent Electrical and Matt Flether of Fletcher Moorland.
11. Paul Hirst with Jason Thomson of P.A.R.

View all photos online here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SEW


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New AEMT Members

Member:

AIR COMPRESSORS & BLOWERS NORTH LTD
Unit 8 Ashfield Close, Whitehall Road Industrial Estate, Whitehall Road, Leeds. LS 12 5JB
Tel: 0113 863 0632
Email: myles.mander@acbnorth.com
Website: www.acbnorth.com
Contact Name: Myles Mander

CLENG LTD
Unit 10 Quarrybank Industrial Estate, Quarrybank Street, Birkenhead, Wirral, Merseyside CH41 2ZD
Tel: 0151 512 9825
Email: colin.leigh@cleng.co.uk
Website www.cleng.co.uk
Contact Name: Colin Leigh

EM DIAGNOSTICS LTD
20 Greystone Road, Alford, Aberdeenshire, AB33 8TY
Tel: 01975 562446
Email: mcsa@consultant.com
Website: www.mcsamotor.com
Contact Name: William Thomson

EATON ENGINEERING LTD
Hunts Farm, Chapel Road, Ridgewell, Essex CO9 4RU
Email: martin@eatonengineering.co.uk
Website: www.eatonuk.co.uk
Contact Name: Martin Eaton

PANKS ENGINEERS LTD
8 Heigham Street, Norwich, Norfolk NR2 4TE
Tel: 01603 620294
Email: enquiries@panks.co.uk
Website: www.panks.co.uk
Contact Name: Mark Jackson

A.D. REFFOLD (ELECTRICAL) LTD
7 Hessle Road, Hull, East Yorkshire HU3 2AA
Tel: 01482 320638
Email: adr@dreffold.co.uk
Website: www.adreffold.co.uk
Contact Name: Scott Baines

SIEMENS POWER GENERATION SERVICES
CA Parsons Works, Shields Road, Newcastle NE6 2YL
Tel: 0191 276 1188
Email: graham.hartley@siemens.com
Website: www.siemens.co.uk
Contact Name: Graham Hartley, Jim Spencer

International:

DAVIES & MILLS WLL
Building 1492 Road 5228, Ras Zuwayed, Kingdom of Bahrain
Tel: 00973 39725445
Email: martin.stratford@d-mills.com
Website: www.d-mills.com
Contact Name: Martin Stratford

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A2 ZiDong International Creativity Park, No.2 ZiDong Road, QiXia District, NanJing, JiangSu, China
Tel: 0086 25 85653020
Email: lushixin@dingyang.com
Website: www.dingyang.com
Contact Name: Lu Shixin

VENTURE GULF ENGINEERING WLL
St. 24 Gate 151, Salwa Industrial Area, Doha, Qatar
Tel: 00974 446 02121
Email: ermrs@vengulfoilgas.com
Website: www.alnasrholding.com
Contact Name: Harvey Durias

Hazardous Area Member:

ESSAR OIL (UK) LTD
5th Floor Administration Building, Stanlow Manufacturing Complex,
Ellesmere Port, Cheshire CH65 4HB
Tel: 0151 350 4111
Email: stuart.rigby@essar.com
Website: www.essar.com
Contact Name: John Bowness

Associate Member:

EXICO ELECTRIC MOTORS LTD

4 Stanton Close, Wellingborough, Northants
NN8 4HN
Tel: 01933 277930

Email: info@exico.co.uk

Website: www.exico.co.uk

Contact Name: Lucie Hodkova

TECO WESTINGHOUSE

Unit E1 Westbrook Park, Westbrook Road,
Trafford Park, Manchester M17 1AY
Tel: 0161 877 8025
Email: enquiries@teco-group.eu
Website: www.teco-group.eu

Contact Name: Stuart Nuttall

Jobs Positions Available

Quartzelec

Location: Sheffield

Quartzelec is a leading independent electrical engineering group delivering design, manufacturing, installation, maintenance and service solutions to customers across a broad range of industrial and commercial sectors. With multiple facilities around the UK as well globally, our service offering is more simply defined in terms of; Electrical Contracting and Rotating Machines.

The Quartzelec Sheffield business is currently looking for various positions:

General Manger (Senior Management Team)

Closing date - 30th August

Skilled Machinist

Closing date - 30th August

Electro-mechanical Fitter

Closing date - 30th August

Armature Winder

Closing date - 30th August

If you are interested in applying for these roles please find click the title to view the opportunity and the application process.

Deritend

Location: West Midlands

Deritend have several job opportunities for skilled Mechanical Fitters, Motor Rewinders and Machinists.

Mechanical Fitters, Motor Rewinders & Machinists

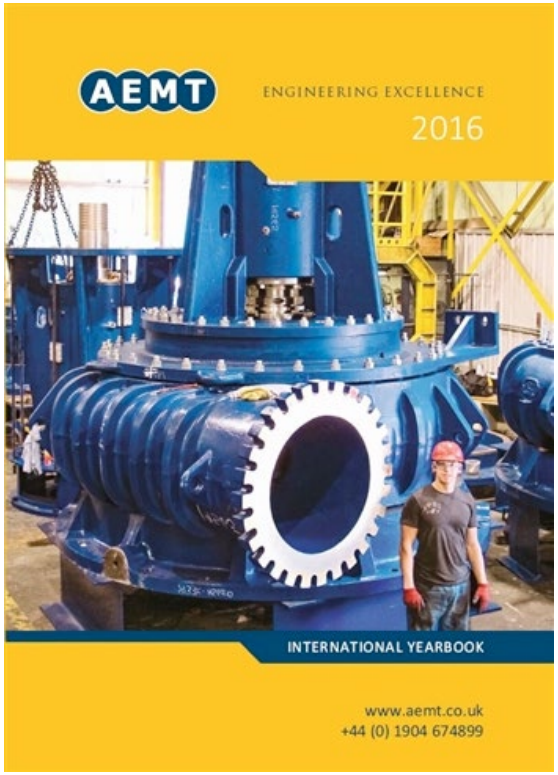
RE Field Services

Location: Yorkshire & Humberside

An excellent position for an experienced Business Development Manager has arisen due to growth at RE Field Services Ltd. The Business Development Manager will be covering essentially UK wide territory developing new business and growing existing client relationships. RE Field Services Ltd Head Office is located in Sheffield so the successful candidate will be expected to attend regular meetings here as well as travel predominantly throughout the UK to visit clients.

Business Development Manager

AEMT Yearbook Changes



Deadline 19th September

If you would like to change/update or add an entry to next years AEMT Yearbook please get in touch with Jane Garnett by email: admin@aemt.co.uk

All changes will be reflected on the aemt website directory also.

AEMT Training Calendar

2016			
September 6-7th	Loughborough	Ex Theory Course	Mod 1
September 8-9th	Loughborough	Ex Hands on	Mod 2
September 13-14th	Loughborough	Ex Hands on Refresher	Mod 3
September 19-20th	Thailand	Ex Theory Course	Mod 1
September 21-22nd	Thailand	Ex Hands-on/Refresher	Mod 2R
October 11-12th	Loughborough	Ex Hands-on Refresher	Mod 3
October 17-18th	Singapore	Ex Theory Course	Mod 1
October 19-20th	Singapore	Ex Hands-on/Refresher	Mod 2R
October 31-1st	Aberdeen	Ex Theory Course	Mod 1
November 2-3rd	Aberdeen	Ex Hands-on/Referesher	Mod 2R
November 21-22nd	Dubai	Ex Theory Course	Mod 1
November 23-24th	Dubai	Ex Hands-on/Referesher	Mod 2R
December 6-7th	Loughborough	Ex Theory Course	Mod 1
December 8-9th	Loughborough	Ex Hands on	Mod 2
December 13-14th	Loughborough	Ex Hands on Refresher	Mod 3

AEMT Dates for Diary

2016	
Sept 1st	**AEMT Council Meeting**
Sept 20-22nd	Powergen Asia Seoul
Sept 28th	**AEMT Conference**
Oct 11-12th	Motor Summit, Zurich
Oct 26th	**AEMT Member Meeting**
Nov 11-13th	CWEIME Bangalore
Dec 7th	**AEMT Council Meeting**

Send us your News!

Please remember to keep us informed of your news so that we may publish it in our Bulletins.

Let us help. Even if you have some news to tell us, but nothing written.

admin@aemt.co.uk

AEMT Website

All the news found in this newsletter is also available to read on the new website.

Follow us on our social networks, or visit the site regularly for news updates.

www.aemt.co.uk/news