

# Bulletin

Association of Electrical & Mechanical Trades

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## 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](http://www.aemt.co.uk/news)



## GES, Northern Ireland Invest £300K In Growth

**Grants Electrical Services (NI) Ltd. (GES Group), which has operations in Ballymena and Mallusk, has announced that it is investing over £300,000 in growth, including taking on 10 new staff.**

The investment in marketing and job creation is being supported by Invest Northern Ireland, which has offered £47,800 of support.

GES Group provides power and energy solutions for small businesses and large multi-nationals across a range of industries including tyre manufacturers, wind farms, food & drinks manufacturers, engineering specialists, ship building and aerospace manufacturing.

The company currently employs 80, and as well as taking on new staff it is investing over £44,000

to develop new markets and customers.

Commenting on the expansion, Grainne McVeigh, Invest NI's Director of Life Sciences, Electronics and Consumer Products, said: "Grants Electrical Services is an excellent example of a local company that is continuously pursuing new opportunities and evolving to meet changing customer demands.

*This investment will allow GES to seek out new customers through market visits, attending exhibitions and creating new promotional material, while the new staff at Mallusk and Ballymena will ensure the capacity to service its expanding customer base."*

The 10 new staff, supported through this project and which are already in place, include five trainee apprentices.

David Moore, GES Group Managing Director said: "GES Group has enjoyed significant growth and development in 2013-14, having been awarded numerous large scale tenders and projects. We are now targeting new markets with the aim of becoming an industry leader and gaining increased market share in Northern Ireland, in the UK and Republic of Ireland.

*To do this we intend to develop new products and services and target sales in the renewable sector. We have developed a comprehensive marketing plan, and are increasing staff numbers to ensure we have the skills to deliver.*

*Invest NI's support for the marketing activity and the new jobs will help us to achieve our growth objectives."* ■



Pole connection damage on the Tata Steel Machine.

## Quartzelec Mobilised For Major Stator Failures

**Agility and collaboration win the day when Tata's vital Stand 3 machine in the Cold Mill at its Port Talbot works failed - Quartzelec worked 24/7 to get it operational**

When Quartzelec's Swansea facility received an emergency call from Tata Steel Mill in Port Talbot, its emergency 'electrical' services team immediately swung into action and an intense period to resolve the problem ensued. Initial inspection identified that pole connections had fractured and more significant damage may have been sustained.

As the repair could not easily be dealt with on-site, Quartzelec arranged for the 7MW, 36 tonnes machine to be immediately transported to its Rugby facility. On arrival later that night, work started on removing the damaged rotor. Closer inspection and further testing confirmed that two poles required replacing and the necessary spares were made

available free issue from Tata. A further and more serious fault was also identified; a cap head bolt had sheared inside the machine causing significant damage to the stator core and windings.

While the initial damage could have been sorted within a few days, this additional problem could mean extensive down time at the cold mill for Tata. Quartzelec, looked for a solution that would result in the site standing still for the minimum time possible.

The full inspection identified seven stator bars required replacing. Copper was ordered, existing schedules resequenced; and the bespoke bars were manufactured in Quartzcoil – Quartzelec's independent coil manufacturing facility. Detailed work was carried out on the core which involved physically separating damaged laminations and replacing failed top coils sides, elements were re-brazed and as

soon as the new bars became available these were spliced back into the existing bars.

The machine was then reassembled and core flux tests completed to demonstrate the core heating was at a level that would not prejudice the winding in the short term. The repaired winding was also subjected to a minimal impulse inter-turn and HV withstand tests to confirm suitability for limited further service until Tata could source a replacement motor.

By working round the clock on the machine and with the total commitment from the Quartzelec workforce, the total process took less than three weeks to complete. The repaired unit was then shipped back to Tata and the Swansea team were again on hand to assist with its reinstallation and alignment. On completion the Tata plant was returned to its operational capacity – a major achievement

*"This was a 'TEAM EFFORT' utilising our people in Rugby and Swansea and clearly demonstrates what Quartzelec can do to help keep the wheels of industry turning..."*

considering the level of overall damage sustained.

Since the installation, the machine has run faultlessly. The Tata maintenance team commented: *"The refitted stand 3 motor was back in service just hours after being returned and we have since been running at full speed with no more restrictions than before. When our team at Port Talbot first saw the stator damage we were pessimistic about the possibility of repairing the machine, but as time went on the Quartzelec team filled us with confidence and once again we saw what a class team of engineers we were able to access."*

Keith Evans, Quartzelec Swansea's General Manager added: *"This was a 'TEAM EFFORT' utilising our people in Rugby and Swansea and clearly demonstrates what Quartzelec can do to help keep the wheels of industry turning. Our engineering knowledge produced a workable solution to ensure our client was operational as quickly as possible; our turnaround was fantastic. We pulled out all the stops right across the business and as a result have another satisfied customer."*



## Sulzer Global Maintenance Network Now Open To Franz Wölfer Customers

**In a landmark agreement, operators of three-phase asynchronous motors manufactured by Franz Wölfer Elektromaschinenfabrik can now call upon the global resources of Sulzer to help ensure their assets remain in peak operating condition.**

Working in harsh outdoor operating conditions both inland and out at sea, Wölfer motors are manufactured to meet demanding quality and performance standards. Many are designed specifically to fit custom applications where the motor forms part of a larger machine or structure. Used widely in hoists and marine power applications, motor performance specifications are extremely precise while windings can also be highly specialized; all of which requires specialist expertise to service. Klaus Sprekelmeyer, Head of Sales of Franz Wölfer Elektromaschinenfabrik GmbH comments, "We design and manufacture premium products that customers rely upon for use in critical applications. The challenge for us was to find a

service partner that not only had the global reach and capacity, but the electro-mechanical knowledge and experience to provide a service standard that matched the quality of our original motors. I am pleased to announce that we have achieved exactly that in signing an agreement with Sulzer."

Franz Wölfer Elektromaschinenfabrik has been developing and manufacturing electric motors for use in hoisting equipment, on ships and in general mechanical engineering for over 60 years. As a specialist in manufacturing large bespoke motors the company has a huge installed base around the globe. Looking after this legacy equipment is extremely important to both the company and its customers.

President of Rotating Equipment Services at Sulzer, Peter Alexander adds, "We have worked hard to establish a network of service centers at strategic locations around the globe where we can service any large motor or generator. These specialist manufacturing, engineering and

test facilities are supported by highly trained installation and commissioning teams that can provide service onsite anywhere around the globe, including during active service out at sea. This agreement with Wölfer is a great opportunity to benefit all their customers."

When quality motors reach the outer limits of their design life, while still reliable, they can benefit from timely maintenance and overhaul in order to extend operating life. Unforeseen circumstances can also cause damage and premature failure, especially in unpredictable environments such as being out at sea; these emergency repair situations are the real test of a service supplier. Sulzer is able to respond extremely quickly to both routine and emergency repair situations and because the organization is focused on response time, as well as guaranteeing quality, it makes an ideal service partner for an OEM manufacturer such as Franz Wölfer. ■

## SKF Certified Rebuilders gets EMIR Integration

As an AEMT member you'll know that modern, mobile computing is already used to record all aspects of the work from audit procedures, to asset tracking and repair status. These timesaving software applications save companies time by reducing the paper trail.

Jim Fowlie, the Global Manager of SKF Certified Programs explains "Creating an environment of best practice within a business is a complex layer of skills and procedures. We recognise that robust infrastructure support software forms a major part of a successful solution. SKF are delighted to be working with EMIR to integrate our existing systems to their market-leading product."

This integration complements the EMIR platform, which sits at the heart of the repair business. EMIR takes responsibility for the control of every internal operation creating a controlled and traceable working environment.

"The synergy between both companies is clear; software applications that complement each other and a shared customer base of forward thinking partners. We can rid any duplication and enhance the experience for the end user by creating a link where information can flow between applications," adds Gary Downes, Managing Director of Solutions in I.T., the home of EMIR software.

Tim Osman, SKF UK's Certified Programme Manager will present the new product and the interfaces available at the quarterly Certified Rebuilder meetings taking place at SKF Luton (UK) LTD. ■

# AEMT Visits GES in Northern Ireland

On a visit to Northern Ireland, AEMT took the opportunity to visit its members and see how they are progressing. Grants Electrical Services, part of GES Group, welcomed the visit and took the opportunity to showcase how they are growing.

Established in 1972, GES has grown into a flourishing business employing 80 staff over two locations in Northern Ireland. 2013-14 were exceptionally good years for them, allowing them to invest £300k in growth for 2015, with the help of NI Invest, as outlined on the front page.

## Mallusk Operation

The investment has allowed them to upgrade their Mallusk workshop from 11,000 sq. ft. to 26,000 sq. ft. with much more room to operate, expanding upon their HV, Switchgear and Automation services. On the 11th March they will be hosting their open day to launch the new facility. Tom Grant, CEO of GES Group is very happy with the progress and is looking forward to a prosperous future for the Group.

## Information Hubs

On touring round the facility GES have developed a brilliant way of managing information across their locations. They have installed information hubs – or Comms Centres, as they prefer to call them. Each hub has a computer, webcam, internet connection, document racks, safety information posters, technical posters and more. The hub is a total information and communication portal for research and problem solving.

Ray McHugh, workshop manager at the Mallusk branch explained, “As well as a good meeting point, the information hubs are fantastic for collaborating with the other workshops. By using the webcam we can problem solve across all our branches or with the client without having to step out of the workshop.”

“It’s also brilliant for managing our paper trail, when a technician is researching information on a particular piece of equipment and finds any useful documentation, it can immediately be linked to and recorded with the job worksheet.”

## Ballymena Operation

Ballymena’s Workshop Manager, Ronnie Moore, has been a regular at the AEMT Member meeting in 2014 - visiting Parsons Peebles in Scotland, Quartzelec’s new HQ in Rugby and also making the AEMT conference on Motor Energy Efficiency in July. What he picks up from the visits he’s been able to bring back to GES and integrate with the growth they are going through at the moment. ■



1. Inside GES Mallusk.
2. Tom Grant, CEO and Ray McHugh Mallusk Workshop Manager.
3. GES Comms Centre.
4. HV Stator in Mallusk Workshop.
5. HV Rotor lifted in Mallusk Workshop,

# Global VSD Market To Grow By 28.8% By 2018

According to a new report from BSRIA, the size of the global market for Variable Speed Drives (VSD) in 2013 was \$839.4 million. With the market driven by legislation and increasing awareness of energy efficiency, it is forecast to grow to be \$1081.2 million in 2018.

In 2013 the largest region was Europe with a total sales figure of \$304.2 million. Despite already being the largest region, Europe is forecast to grow to around \$390 million by 2018, driven by an EU Directive on Energy Efficient fans. Europe will remain the largest

region despite a general slowing down in the HVACR market. The route to market in Europe is also likely to change as the market develops with a move towards the OEM channel.

The highest growth rate will be witnessed in Latin America due to the current small market combined with a higher growth rate in the economy driving a growth in the HVACR markets. Although the penetration rate in the market may suffer as there is no legislation to drive growth, it is anticipated that there will be a large energy retrofit demand.

The BSRIA report forecasts that growth in the Asia Pacific will slow in line with a reducing growth in the construction industry in the region, with the total sales growing from \$198.3 million to a forecast figure of around \$245 million by 2018.

The North American market is forecast to see a CAGR of 5.7% between 2013 – 2018. The market in 2013 recorded sales of \$278.3m. The market currently sees the majority of the product sold direct, however like Europe there will be an increasing trend towards the OEM channel. With

an established property market in the North American market there will be a large energy retrofit demand.

The BSRIA report identifies Danfoss as leading the market and taking advantage of being the first mover into the market, although ABB have shorter history their wide distribution network has seen them grow to the second largest player in the market followed by Schneider Electric. ■



Ron Sinclair and Adam Crowe.

## New General Manager for SGS Baseefa

After nearly four decades in the business, and over 10 years at the helm of one of Buxton's leading technology-based companies, SGS Baseefa's general manager Ron Sinclair MBE is stepping sideways to take up a new role as Technical Manager.

Taking his place as Operations Manager is 42-year-old Adam Crowe from Didsbury, Manchester, who joined the company last year from a position as Technical Sales Executive with Eurofins Product Testing in Altrincham. Adam has 15 years' experience in the laboratory and testing sectors in the UK, Europe and the Middle East.

Adam said: "I am delighted to take over from Ron and to join SGS Baseefa, whose worldwide reputation in the field of the certification of hazardous area

equipment and related services is unmatched. Ron will be a very hard act to follow, but I am very pleased that he will continue to be on hand to manage the technical side of the business.

"I have known about Baseefa for some time, and to join a group of professionals like these, where everyone is absolutely the best at what they do, is a real privilege."

London-born Adam is no stranger to Buxton, as his fiancée Charlotte is from the town. When he's not at work, Adam is a keen supporter of Manchester City FC and a fair weather biker.

While Adam takes on the day-to-day management of the company, Ron will continue as Technical Manager on a part-time basis. This will include his work in international Certification and

Standardisation of hazardous areas and equipment. He is chairman of BSI Committee EXL/31, responsible for the UK input to both European and International standards for Electrical Equipment for use in potentially explosive atmospheres, and until recently, chaired EXTAG, the Test and Assessment Group of the IECEx International Certification Scheme. He remains one of the vice-chairs of the European Notified Bodies Group for ATEX. Ron was awarded an MBE in the 2011 New Year Honours List for services to Certification and Standardisation. He commented: "It's been a long and exciting journey since Baseefa was formed as an independent company in March, 2002 after EECS (the Electrical Equipment Certification Service) was closed by the Health and Safety Executive.

*"Adam brings a wealth of the experience and enthusiasm needed for the future development of the company as I move into a hopefully very active semi-retirement."*

*"We had been encouraged by many of our customers to set up on our own, and it has been a wonderful experience to lead the company to its present position as a world leader in hazardous area product certification."*

*"Adam brings a wealth of the experience and enthusiasm needed for the future development of the company as I move into a hopefully very active semi-retirement."*

Baseefa joined the SGS group of companies in December 2011. ■

## Job Positions Available

### Invincible Rewinds

#### Motor Rewinder/Fitter

Location: West Midlands

Experienced in AC / DC and HV Motor Rewinding. Brake coils and Transformers, All aspects of fitting including Motor, Pump and gearbox repair / overhaul.

Willing to work with an on-call rota for emergency work. Computer literacy would be beneficial.

#### Contact Details:

Please apply, in strictest confidence, and in writing, to Phil Baker, enclosing your full CV in writing or on-line to phil@invinciblerewinds.co.uk

### RE Field Services Ltd

#### High Voltage (HV) Test Engineer

Location: Yorkshire & Humberside

#### Key Responsibilities

- Perform an extensive range of electrical tests to approved safe procedures and relevant standards on a large range of electrical machines.
- Accurate recording and analysis of results.
- Writing of clear and concise technical reports including conclusions and recommendations.
- Liaison with customers over technical queries.
- Fault finding and emergency call out site support.
- Supporting multidiscipline teams of field service engineers during site projects.
- Supporting technical assessments of customer machines in works.
- Maintaining test and equipment records.
- Assisting with the further development and expansion of test facilities and equipment.

#### Key Qualifications and Experience

- Proven track record of conducting diagnostic testing including IR/PI, Tanδ, Hi Pot, PD, ELCID, RSO & HF within a similar motor/generator service or manufacturing environment.
- Educated to minimum HNC/HND level in a relevant engineering or technical discipline.
- Have practical experience in high voltage electrical testing of large electrical machines.
- Knowledge and experience of working to standards.
- Self-motivated with a high regard for safety and quality.
- Fluent English speaking with good verbal, computer and written skills.
- Highly organised and able to work with minimal supervision or within multi-skilled team.
- Familiarity with Automatic Voltage Regulators, Excitation Systems, Generator Protection Schemes and I & C circuitry would be an advantage.

#### Contact Details:

Interested applicants can apply via email with a covering letter and sent to: kerry.patrick@refieldservices.com. Enclose a full CV and any additional information you may feel is relevant to your application for the post.

### EMR Silverthorn Ltd

#### Electrical And Mechanical Fitter

Location: Greater London

- The candidate must be familiar with all aspects of AC motors ,pump and fan repair and installation.
- Qualifications would be an advantage but experience and problem solving attitude will count towards a successful application.
- The role will be based at our repair facility in which is within walking distance of Alperton tube station, but if required the role will require some on site work and so a clean driving licence is required.
- Pay is commensurate with experience and skills and there is scope for progression for the right person.

#### Contact Details:

If you think you would like to be part of a team in a long established but forward looking company please submit your CV with a covering letter outlining your expectations to.

Chris Fletcher

EMR Silverthorn Ltd  
Unit 1 Manor House Business Park  
97 Manor Farm Road  
Wembley  
HA0 1BN  
chris@emrsilverthorn.co.uk

## Equipment Wanted



### GES Group, Northern Ireland

#### Item:

Pyrolysis Oven – 2x2x3 meters in dimension

#### Summary:

Grant's Electrical Services are looking for a used Pyrolysis Oven, dimensions 2x2 meters, 3 meters in depth. If you have an unwanted oven, or thinking of upgrading your current oven, then this is a perfect opportunity to trade.

#### Contact:

Please contact David Moore on 028 256 56406 or by email at dmoore@grantselectrical.co.uk

### Elite Solutions

#### Item:

Used Coil Winding Machine

#### Contact:

Rob Fox on 01782 834829

# New AEMT Members

## International Member:

**H.F. Schroeder (W.A.) Ltd**  
 Plot 3, Block D, Apapa-Oshodi Expressway, Amuwo Odofin Lagos, Nigeria  
**Telephone:** 00234 8030520150  
**Email:** mrhfschroeder@gmail.com or dan.schroeder26@yahoo.com  
**Website:** www.hrschroeder.com  
**Contact:** Daniel Dawang (Assistant General Manager)

## BRANCH

**H.F. Schroeder (W.A.) Ltd**  
 Plot 477, Trans-Amadi Industrial Layout Port Harcourt, Rivers State, Nigeria  
**Email:** infoh@hfschroeder.com

## Hazardous Area Member:

**Northern Ireland Water**  
 40 Old Westland Road, Belfast BT14 6TE  
**Telephone:** 08457 440088  
**Email:** Adrian.atkinson@niwater.com  
**Website:** www.niwater.com  
 Contact: Adrian Atkinson (M&E Area Manager)

## Any Changes?

Please check your company profile page(s), by searching for your company name from the homepage. If there are holes, gaps or things missing that you expected to see on the page please let us know what needs adding/removing.

Contact [admin@aemt.co.uk](mailto:admin@aemt.co.uk) or call 00 44 (0)1904 674 899

[www.aemt.co.uk/search](http://www.aemt.co.uk/search)

# AEMT Training Calendar

\*Alteration

2015			
March 3-4th	Loughborough	Ex Theory Course	Mod 1
March 5-6th	Loughborough	Ex Hands-on Course	Mod 2
*March 9-10th	Loughborough	Ex Hands-on Refresher	Mod 3
March 16-17th	Indonesia	Ex Theory Course	Mod 1
March 18-19th	Indonesia	Ex Hands-on & Refresher	Mod 2R
*April 13-14th	Dubai	Ex Theory Course	Mod 1
*April 15-16th	Dubai	Ex Hands-on & Refresher	Mod 2R
April 20-21st	Amsterdam	Ex Theory Course	Mod 1
April 22-23rd	Amsterdam	Ex Hands-on & Refresher	Mod 2R
April 28-30th	Loughborough	Maintenance & Inspection	Mod 5
May 12-13th	Loughborough	Ex Theory Course	Mod 1
May 14-15th	Loughborough	Ex Hands-on Course	Mod 2
May 19-20th	Loughborough	Ex Hands-on Refresher	Mod 3
June 1-2nd	Malaysia, KL	Ex Theory Course	Mod 1
June 3-4th	Malaysia, KL	Ex Hands-on Course	Mod 2
June 15-16th	Aberdeen	Ex Theory Course	Mod 1
June 17-18th	Aberdeen	Ex Hands-on & Refresher	Mod 2R
*June 15-16th	Cape Town TBC	Ex Theory Course	Mod 1
*June 17-18th	Cape Town TBC	Ex Hands-on & Refresher	Mod 2R
June 29-30th	Isle of Man	Ex Hands-on Refresher	Mod 2R
September 8-9th	Loughborough	Ex Theory Course	Mod 1
September 10-11th	Loughborough	Ex Hands-on Course	Mod 2
September 15-16th	Loughborough	Ex Hands-on Refresher	Mod 3
September 28-29th	Thailand	Ex Theory Course	Mod 1
September 30-1st	Thailand	Ex Hands-on & Refresher	Mod 2R
October 13-14th	Loughborough	Ex Hands-on Refresher	Mod 3
October 19-20th	Singapore	Ex Theory Course	Mod 1
October 21-22nd	Singapore	Ex Hands-on & Refresher	Mod 2R
November 2-3rd	Aberdeen	Ex Theory Course	Mod 1
*November 2-3rd	Aberdeen	Ex Hands-on Refresher	Mod 3
November 4-5th	Aberdeen	Ex Hands-on Course	Mod 2
November 16-17th	Qatar	Ex Theory Course	Mod 1
November 18-19th	Qatar	Ex Hands-on Course	Mod 2
November 23-24th	Qatar	Ex Hands-on Refresher	Mod 3
December 1-2nd	Loughborough	Ex Theory Course	Mod 1
December 3-4th	Loughborough	Ex Hands-on Course	Mod 2
December 8-9th	Loughborough	Ex Hands-on Refresher	Mod 3



**Wednesday, 11<sup>th</sup> March 2015**  
**AEMT Meeting - ORE Catapult, NAREC**

SUPPORTING ENGINEERING EXCELLENCE

**Call 01904 674 899 to Book**

or alternatively visit [www.aemt.co.uk](http://www.aemt.co.uk) to find out more and fill in the booking form. Book before 28<sup>th</sup> February to benefit from a 20% discount on the ticket price of £35 plus VAT. You can also email us in the office at [admin@aemt.co.uk](mailto:admin@aemt.co.uk).