

**May 2016** Volume 57

# NEWSLETTER

Presidents Message & Contentious Corner **Affiliate Article** What's New What's New from our Members, Dates for you Diary & Training Schedule A closer look at precision of measuring and test equipment EASA International Convention 2016 Toronto, Canada Karsten Moholt Exceptional Achievement Award Application Form FREE advertising

# Prevent Costly Bearing Damage and Downtime

2

3

4

5

6

7

8

9







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## **Presidents Message**

#### Think Globally, Act Locally! If you want to go Fast, go alone, if you want to go Far, go Together!



## Dear EASA Members, Affiliates and Friends,

In less than one month, from the 11th of June to the 14th, EASA Members will meet again in Toronto at the largest convention in the world fully dedicated to the Motor/Rotating machines Systems Maintenance and Repair industry.

It is still possible to register and we highly recommend you do so. It is a great opportunity to combine very good technical and business sessions, to meet with some of the best experts in our industry, to visit the largest exhibition fully dedicated to our industry, and last but not least to connect with other Members from different parts of the world. Where else do you have that opportunity?

After the good partnerships we signed with ELR in Sweden and Repamotor in Denmark, end of April we had a very active spring council in Copenhagen. I want to thank again all of our Board Members for their very important contribution to EASA Region 9. We are making significant progresses to speak with one voice internationally, to Share best practice and contribue to the debates for improving reliability and energy efficiency of the drive system from power input to transmitted power included". EASA is very active, we are working on many important development for our Members, please do not hesitate to contact our General Manager,

Frederic Beghain, if you or someone from your company would like to be active in one of our important committees : Training and Education, Marketing, IEC EX Trainings, ...

Last but not least, at our next convention in Marseille, we will have the honor to reward again a young good professional. Please do not forget to consider one of your employee's for this reward. The process itself is already rewarding. More details available in our newsletter but also on: http://www.easa9.org/karstenmoholt-award/

Hope to see you at the next EASA conventions, All the Best

Mathis Menzel, President, EASA European and World Chapter

## **Contentious Corner**

We would like to hear from you about Industry 4.0. What's your perception on that development, what do you expect for your business, what will happen to the Service, do you see it as a disruptive technology, ...

Please contact us at secretary@easa9.org





## EMIR – Market Leading ERP Software for Electro Mechanical Sales, Manufacture, Service & Repair

With a development pedigree of over 22 years, EMIR continues to be the solution of choice for the electro-mechanical industry. EMIR, also known as "Electro-Mechanical Information Resource" is a modular environment that can be configured depending on the diversity of the business. As their client list attests, whether you are specialising in the sales & distribution of pumps, motors or other equipment, or the manufacture of complete solutions and assemblies, or if repair and service to a high standard is your goal, EMIR has a range of modules to meet those needs.

#### The Benefits of an Integrated EMIR Solution

We all use computers. We all realise the benefits of computerisation. The problem is we solve problems in our business lives by creating separate solutions. Count them in your office, perhaps a spread sheet to cost work, a Word document as a sales quote, an accounts package to do the invoicing, emails on phones and in Outlook, photographs of the work in hand taken on numerous devices, to name but a few, along with a paper trail that seems to be longer and more detailed as each year passes. Nothing is ever in one place!

Without integrated processing you do everything at least twice, or fail to capture all of the information due to the sheer amount of time it takes to record, file and store every bit of data in some sort of traceable, chronological order.

EMIR centralises everything! You always have complete traceability over every job, every hour, every spare part, every picture and importantly all of its costs! Every aspect of the work you do, current jobs, all of your work history, stock position and accounts liability is accessible from wherever you are working. The need for paperwork is diminished, if not eliminated within weeks of an Insulation.

#### EMIR caters for any Size of Business

Don't think you are too small or too large for EMIR! Many owner / operators use EMIR for the sheer simplicity of keeping all job records in one place, where larger operations make use of features to handle multiple locations and branches, trading in world currencies and complex management reporting. The price of the software and installation reflects the control you need.



#### An Installed Solution in a Fraction of the Time

...and unlike the heavy weight ERP solutions of the industrial world, EMIR imitates the language of electrical engineers, not computer geeks. Each area of the software is built and labelled in language your employees will understand which means that the burden of training is reduced and you are up and running in a fraction of the time.

#### Never Ending Innovation!

EMIR users, their clients and the industry never stand still and neither does EMIR. Each year the EMIR team open their doors to showcase what's new, innovation that is driven by the needs of similar organisations looking to improve service, retain more customers and close more sales.

This year the EMIR Open Day is on the 30th of June at the National Space Centre see the details here: <u>http://www.solutionsinit.com/news/emir-open-day-2016</u>

A full list of EMIR clients can be see here, along with full case studies and testimonials: http://www.solutionsinit.com/clients/who-uses-emir

Take a look at EMIR! - <u>www.emirsoftware.com</u> or call us for more detail 0845 009 4588

#### Thanks for this month's article goes to:-

Gary Downes Solutions in IT Limited E-mail info@solutionsinit.com Web: http://www.solutionsinit.com





## EASA 4 | European & World Chapter Limited

## What's New



#### WEG buys US motor producer, Bluffton Motor Works

WEG buys US motor producer, Bluffton Motor Works 01 April, 2016 The Brazilian motor-maker WEG is buying the US fractional horsepower motor manufacturer, Bluffton Motor Works, for an undisclosed sum. The Indiana-based business – formerly part of Franklin Electric – employs about 400 people and achieved revenues worth \$64m in 2015.

Bluffton, founded in 1944, produces motors, gearmotors and reducers in ratings from 0.05–5hp and Nema frame sizes 36,48 and 56. The portfolio includes open, enclosed and explosion-proof motors, and right-angle and parallel-shaft gearmotors. It also produces washdown-duty motors, including stainless-steel motors with encapsulated windings, and epoxy washdown motors.

Read More at: http://www.drivesncontrols.com/news/fullstory.php/aid/5079/WEG\_buys\_US\_motor\_producer, Bluffton\_Motor\_Works.html#sthash.tKbfOy2c.dpuf

#### Tata Steel sells Scunthorpe steel plant and invites bids for its other UK assets

Tata Steel has sold its plant in Scunthorpe and several other businesses to Greybull Capital, possibly saving up to 4,400 jobs in the UK and 400 in France. Greybull will take on the entirety of Tata's steelworks operations in Scunthorpe, as well as two mills in Teesside, an engineering workshop in Workington and a design consultancy in York along with a mill in Hayange, France.

The combined operations form Tata's Long Products Europe (LPE) business. Following completion of the deal, the steelworks business will trade under the brand name British Steel. The sale also includes the associated sales and distribution network.

Read More at: <u>http://www.hazardexonthenet.net/article/114723/Tata-Steel-sells-Scunthorpe-steel-plant-and-invites-bids-for-its-other-UK-assets.aspx</u>

#### Siemens and Airbus aim for an electric aircraft

Siemens and Airbus aim for an electric aircraft breakthrough 07 April, 2016 Siemens and Airbus have signed a long-term collaboration agreement aimed at demonstrating the technical feasibility of hybrid/electric propulsion systems for aircraft by 2020. They have set up a joint development team of around 200 people to drive innovation and the development of electrically powered aircraft in Europe.

The two companies plan to develop prototypes for various propulsion systems with power classes ranging from a few 100kW up to 10MW or more, for applications ranging from helicopters to short- and medium-range passenger aircraft.

Read More at: <u>http://www.drivesncontrols.com/news/fullstory.php/aid/5084/Siemens and Airbus aim for an electric air-craft breakthrough.html#sthash.NZI3nvsT.dpuf</u>

#### Low-cost modular motors cut delivery times 'by weeks'

ABB has announced a range of large modular induction motors with delivery times that, it claims, are several weeks shorter than those for more highly specified machines. The low-cost NMI motors, spanning ratings from 315kW to 8MW in frame sizes 400–630, are aimed at safe-area pump and fan applications that do not need highly specified motors.

The motors are said to pack more power per kilogram, allowing smaller frame sizes to be specified. For example, a four-pole, 3.5MW motor weighs eight tonnes – 20–25% lighter than most comparable motors. The motor's compact size and light weight reduce the installation space and the equipment needed to lift it on site.

Read More at: http://www.drivesncontrols.com/news/fullstory.php/aid/5081/Low-cost\_modular\_motors\_cut\_delivery\_times\_\_by\_weeks\_92.html#sthash.1kTzk9z4.dpuf

# **EASA** 5 | European & World Chapter Limited

## What's New From Our Members

#### Press Release - Houghton International introduces new AutoCoil design software

Specialist HV coil manufacturer Houghton International has introduced its new AutoCoil design software, utilising 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.

#### To View full article please visit:

http://www.houghton-international.com/new-autocoil-design-software/



#### Press Release - Houghton International welcomes new HVC head

Newcastle based electro mechanical engineering specialist Houghton International has welcomed Gary Miller as the new head of its high voltage coils division. Working as part of the senior manage-ment team, Gary takes the lead on all coil manufacturing activities, responsible for managing the company's state of the art facility and multi skilled workforce.

#### To View full article please visit:

http://www.houghton-international.com/houghton-international-welcomes-new-hvc-head/

#### Press Release - EMIR Customers generate huge interest at Drives & Controls

To View full article please visit: http://www.solutionsinit.com/news/drives-controls-2016

## Dates for your Diary

EASA International Convention - 12th - 14th June 2016 - Toronto, Canada EASA European & World Chapter AGM & Convention - 29th of September - 1st October 2016, Marseille, France 3 Year Refresher Ex. Atmosphere Equip - 21st & 22nd October 2015, Birmingham, England

Please contact EASA at <u>secretary@easa9.org</u> for any further information.

## **Training Schedule**

EASA Ex Training for the Repairs and Overhaul of Ex Equipment to IEC 60079-19 + Motor Energy Efficiency Requirements

Course No.	Туре	Training Duration (days)	Training Dates	Trainer	Venue	Available places	EASA Member Price (*)	Non- Member Price (*)
2_2DR	3 Year Refresher Managers & RPs Repar and Overhaul Ex. Atmosphere Equip.		21st & 22nd October 2015	John Allen	Birmingham, England	9	£630.00	£728.00

(\*): Prices guaranteed if more than 6 participants. All Training registrations have to be finalized 3 weeks before all courses

#### NOTE. WHERE THERE IS SPECIFIC SUFFICIENT DEMAND ADDITIONAL DATES & LOCATIONS CAN BE PROVIDED FOR ALL COURSES

# A closer look at precision of measuring and test equipment



This is the second article in a two-part series concerning the accuracy and precision of test and inspection measurements in the service center. The first part focused on accuracy, the degree to which a measured value agrees with the true value, and how accuracy is assessed through calibration. Once measuring & test equipment (M&TE) is determined to be accurate, precision can be assessed.

Precision can be described as the closeness of agreement between individual measurements or results (see Figure 1). In the figure, the graph on the left has a wide spread of measurements with roughly the same frequency or count. The graph on the right has a much tighter spread of measurements with most measurements being close to the true value. As accuracy and precision increase, measurement error decreases bringing measured values closer to the true value and enabling service center personnel to properly evaluate measured items.

Precision in a measurement system can be broken into two components: repeatability and reproducibility. When one operator measures the same item multiple times, the results will typically vary somewhat. Repeatability, also called equipment variation (EV), is the variation in multiple measurements by one operator using the same M&TE. This is a measure of how precise the M&TE is and it is also affected by the M&TE accuracy. Reproducibility, also called operator or appraiser variation (AV), is the variation in the same M&TE when it is used by different operators measuring the same items. This is a measure of how sensitive the measuring process is to use by different operators.



The total variation in a measurement system can be described as the sum of the process or item variation and the measurement variation. In order to effectively evaluate an item, we need to know the process or item variation. For this reason, understanding the significance of the measurement variation is of the utmost importance. The repeatability and reproducibility (R&R) study is a statistical analysis commonly used to assess measurement variation. In performing this analysis, the repeatability (equipment variation – EV) and the reproducibility (operator variation – AV) are found and used to calculate the overall R&R value which is given by:

$$R\&R = \sqrt{EV^2 + AV^2}$$

These three values are usually then expressed as a percentage of the total tolerance of the quality characteristic (e.g., length, temperature, voltage) being measured and evaluated as follows:

- Under 10% This rate is acceptable.
- 10% 30% This rate may be acceptable based on importance of the application, M&TE cost, repair cost, etc.
- Over 30% This rate is not acceptable and should be improved.

Before diving into the procedure – the math here looks much worse than it actually is, so do not be deterred. It is included for reference only; see the example for clarification. Also, no one sits and cranks these numbers out by hand as use of spreadsheets or statistical software simplifies data collection and analysis. There are a number of free spreadsheet templates on the web that require nothing more than data entry. Rather than list specific references here, perform a web search for "gauge R&R template spreadsheet" to locate such files. Some may use different statistical analyses than described here, but the end results of the evaluation should be similar.

Additionally, it is not suggested here that every service center conduct R&R studies for their M&TE. However, where it is of interest for the service center to evaluate the adequacy of critical measurement processes, the R&R study, while not the only tool available, can be a valuable resource.

#### Procedure

Note: Although this procedure can be tedious, it can be beneficial in

determining cause if the service center has been dealing with issues related to errors in precision measurements, such as for rolling element bearing journal and housing fits. Additionally, in some of the calculations, you will see use of the symbol  $\Sigma$  (upper case sigma), which is just compact notation for summing or adding values.

To read full article click on the following link:

http://www.easa.com/resources/article/closer-look-accuracy-measuring-and-test-equipment If you can not access that report, please contact: <u>secretary@easa9.org</u>

#### Article by By Mike Howell EASA Technical Support Specialist

## EASA International Convention 2016 Toronto, Canada

ORONTO, ONTARIO, CANADA • JUNE 12-14



# **EASA 2016 CONVENTION** Pre-Convention Education June 11 June 12-14

## Join fellow EASAns at the electromechanical industry's premier event this summer for all this and more!

## Outstanding trade show

Learn the latest product and service developments from the leading manufacturers and suppliers to the electromechanical sales and service industry. We are on pace to have one of EASA's biggest trade shows ever!

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- including Niagara Falls!

Excellent technical and sales/management sessions

## Multiple networking opportunities Network with fellow members and suppliers from

around the world!

## Terrific, fun social/networking events

Great spouse/guest program









Metro Toronto Convention Centre

Check out the schedule and make your hotel reservations now at www.easa.com/convention. Registration will be available in February.

## Karsten Moholt Exceptional Achievement Award "Recognize and motivate your young professionals who have demonstrated improvement in your company"

The Karsten Moholt Exceptional Achievement Award is made annually in the memory of Karsten Moholt and Karsten Aleksander Moholt who are past Presidents and Regional Director of EASA European & World Chapter.

Their exceptional guidance and leadership of our Chapter is remembered by awarding young people, under the age of 30, within our industry who have demonstrated improvements within their company up and above expectations.

A financial contribution will be made by the Chapter • to the winner of this award to visit other Member's facilities within our Chapter in order to extend their understanding of the industry and learn new ideas, methods and cultures.

The rules of the scheme are as follows:

- A nominee for the award must be employed by a Member firm Only a Member firm can make a nomination
- A Member can make more than 1 but not exceeding 3 nominations per year
- Nominations must include specific reasons why the nominee is thought to be worthy of the award
- All nominations must be accompanied by 2 corroborating letters of recommendation from other than the nominating firm
- All nominations must be submitted to the Secretary no later than 1st July each year
- A committee consisting of the current President, Immediate Past President and a Member of the Moholt family will decide the winner
- The award will be presented at the annual AGM by a Member of the Moholt family

#### Do you know of an Exceptional Member Individual? If so, nominate them for the Karsten Moholt Exceptional Achievement Award

Nominating Form
Nominee Name
Member Company
Address
Post Code
Phone: Email:
I make this nomination for the following reasons (attached additional information if necessary)
*All nominations shall automatically be re-entered into the pool of nominees for a period of 3 years after the nomi- nation is received
Name of person making the nomination
Company
Address
Post Code
Phone: Email:
Website:
Forms Available at http://www.easa9.org/karsten-moholt-award/ All Form to be Returned by July 1st Please attach corroborating letters of recommendation

## Free Advertising







## EASA REGION 9 NEWSLETTER

Contact Details: For information or to provide details for future Newsletters please contact our editor at secretary@easa9.org