

## DAMRC NEWSLETTER no. 3 - 2011

*This DAMRC newsletter can be forwarded to everyone interested in the DAMRC, but you are only allowed to quote from the newsletter in agreement with Chairman Ole Mørk Lauridsen [oml@damrc.com](mailto:oml@damrc.com) or Project Manager Klaus Bonde Ørskov [kbo@damrc.com](mailto:kbo@damrc.com)*

*In this newsletter you can among other things read about an exciting trip to Sheffield, with the participation of a number DAMRC members. You can also read about how the DAMRC in the forthcoming period intensifies its efforts to bring new technology into the Danish industry focusing on production optimization.*

### **Efficient Production - opportunities for your business**

Last year the DAMRC with great success implemented new technology to optimize the milling operations in the four Danish companies *Danish Aerotech, Multicut, Terma and Vestas*. The technology was brought to Denmark in collaboration with aerospace giant *Boeing* and *Sheffield University*. The DAMRC achieved in collaboration with *Unimerco* optimizations of milling operations in the range of 15 to 45% in the four companies. Now the technology's potential under Danish conditions is documented, and it is time to bring the technology out in the Danish manufacturing industry, and it happens through two different approaches.

#### ***Vibration analysis in your company***

DAMRC has launched a matchmaking phase, where visionary manufacturing companies are to be selected for collaborations with the purpose of optimization of milling operation in the companies. Optimization is carried out in a short term project where it will be clarified to the company what optimizations can be achieved at the company's milling applications in general, as well as optimization of selected milling operations will be carried out.

Interested? Contact project manager Klaus Bonde Ørskov at +45 3051 6085 / [kbo@damrc.com](mailto:kbo@damrc.com) for further information.



*"Tap-test" of a milling tool – part of the vibration analysis.*



Birk Centerpark 40 – 7400 Herning  
[www.damrc.com](http://www.damrc.com)

### **Course in vibration analysis**

In collaboration with AluCluster the DAMRC holds a course with focus on optimization of milling applications. The focal point of the course is aluminum processing, and participants will get insight into how vibration analysis works and what potential there is for optimization of milling processes using vibration analysis.

**The course is held on 21 and 22 June 2011 at Unimerco A/S in Sunds**

Interested? Contact project manager Klaus Bonde Ørskov at +45 3051 6085 / [kbo@damrc.com](mailto:kbo@damrc.com) for further information.

### **First results of development project**

As mentioned in the previous newsletter the DAMRC has a number of development projects going on in cooperation with various educational institutions. At Aarhus School of Engineering three engineering students have now completed a series of technical experiments and tests. The experiments were conducted with newly developed prototypes, and have yielded positive results. To the students these experiments form the base of their "bachelor thesis" and to the DAMRC the results provide verification of the prototypes functionality and thereby the basis for future of the project.

### **Sheffield – unique inspiration**

In May 2011 the DAMRC in cooperation with Enterprise Europe Network organized an inspiration and insight excursion for delegates from three universities, Centres of Excellence and three Danish production companies. The purpose of the excursion was to give the participants insight on the unique results obtained in Sheffield, England within industrial R&D and innovation. Results reached amongst others due to an extraordinary ability to create fruitful collaborations between universities and businesses. The effort has in particular been focused around the local manufacturing industry which today has achieved a striking and impressive competitive position in the global market.

At the first day of the excursion delegates visited the University "Sheffield Hallam University." Here, the delegation could see new technologies in machining and surface treatment. Subsequently, the delegation visited "The National Metals Technology Centre"- an organization dealing amongst others with offering market and industry analysis, courses and training targeted at the local manufacturing industry. The last visit of the day was at the metal company Tinsley Bridge Group. At Tinsley Bridge Group, the delegation had the chance for themselves to see how new technology developed by the company in cooperation with universities had contributed to the creation of new innovative and differentiated products.



*Participants in the course will work with technology and methods for the optimization of milling operations producing optimizations in the range of 15 to 45 %*



*The students in the Laboratory*



*The Delegation is shown the facilities of the university by Professor P. Hoysepain.*



*Manager of Tinsley Bridge Group talking about the advanced products of the company*



Birk Centerpark 40 – 7400 Herning  
[www.damrc.com](http://www.damrc.com)

On the second day of the excursion the delegation visited the AMRC (*Sheffield University Advanced Manufacturing Research Centre with Boeing*). Representatives from the AMRC could present various laboratory facilities for composite and metal machining and testing. Furthermore the delegation was presented with the impressive story on how the AMRC in 10 years have grown from 2 to 180 employees and generated significant results in the British manufacturing industry. Results have contributed to the creation and preservation of hundreds of British jobs.



*The impressive laboratory at the AMRC makes way for testing and developing new technology*

## **AMRC - Role model and Business partner**

The visit to the AMRC as described above gave the delegation an insight into how impressive results can be achieved in just 10 years, and the delegation agreed that AMRC is a unique source of inspiration for how the DAMRC may evolve in the coming years. In connection with the delegation's visit to the AMRC, the DAMRC's technical committee also had an opportunity to hold a meeting with representatives from the AMRC and Boeing about future collaborations between the DAMRC and the AMRC. At the meeting the DAMRC presented some of its current projects and project ideas. The AMRC expressed very positive thoughts about the projects, and expressed a desire to participate in several of the projects described. Thus the AMRC not only is a role model and a mentor for DAMRC, but also a business partner.



*The AMRC has with the expected expansion of their laboratory facilities and the creation of the Nuclear AMRC close to 20.000 sqm. of laboratory facilities.*

*(The DAMRC's technical committee formed by Carsten Risom, Project Development Manager Unimerco; Henry Espensen, Director of Design for Manufacturing Vestas; Professor Ole Mørk Lauridsen, CTO, Terma and Working Chairman the DAMRC and Klaus Bonde Ørskov, Project Manager the DAMRC)*

## **Registration and deregistration of newsletter**

If you receive this newsletter from a colleague and wish to register for future updates from DAMRC, simply send an email to [kbo@damrc.com](mailto:kbo@damrc.com) with the text "Sign up to DAMRC newsletter". If you receive the newsletter from us by mistake, you may also unsubscribe at the same mail with the text "Unsubscribe from DAMRC newsletter".

Kind regards

Ole Mørk Lauridsen  
Chairman, DAMRC

Klaus Bonde Ørskov  
Project Manager, DAMRC



Birk Centerpark 40 – 7400 Herning  
[www.damrc.com](http://www.damrc.com)