Sixth WZL Gear Conference USA

Ann Arbor, Michigan USA
June 28, 2016

Hosted by

Members of the Gear Research Circle, January 2016
Monday, June 27, 2016
2 – 5 p.m. Welcome Reception and Registration
WZL Gear Software Demonstration Desk

Tuesday, June 28, 2016
08:30 a.m. Welcome Reception and Registration
09:00 a.m. Welcoming Remarks
Prof. Dr.-Ing. Dr.-Ing. E.h. Dr. h.c. Dr. h.c.
Fritz Klocke
Dr.-Ing. Hartmuth Müller, Klingelnberg
09:10 a.m. Gear Research Activities at WZL, RWTH Aachen
University
Dr.-Ing. Dipl.-Wirt.-Ing. Christoph Löpenhaus

Session I:
Chairman: Prof. Dr.-Ing. Christian Brecher
Gear Design and Operating Performance
09:30 a.m. Smart Machine Tools for Gear Production
Prof. Dr.-Ing. Christian Brecher
10:00 a.m. Optimal Flank Forms for Large Bevel Gears
Dr.-Ing. Hartmuth Müller, Klingelnberg
10:30 a.m. Coffee Break
11:00 a.m. Psychoacoustic Analysis of Ground Bevel Gears
Dipl.-Ing. Peter Knecht
11:30 a.m. Inclusion-based Bending Strength Calculation of
Gears
Jonas Pollaschek M.Sc.
12:00 noon Lunch
01:00 p.m. FE-based Approaches for Tip Relief Design
Philip Konowalczyk M.Sc.
01:30 p.m. Local Analysis of Contact Fatigue and Efficiency of
Cylindrical Gears
Dr.-Ing. Dipl.-Wirt.-Ing. Christoph Löpenhaus

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09:00 a.m. Gear Research Activities at WZL, RWTH Aachen
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Session II:
Chairman: Prof. Dr.-Ing. Christian Brecher
Manufacturing
02:00 p.m. Smart Manufacturing Systems for the Gear Industry
Prof. Dr.-Ing. Dr.-Ing. E.h. Dr. h.c. Dr. h.c.
Fritz Klocke
02:30 p.m. Coffee Break
03:00 p.m. Trends in Gear Manufacturing
Dr.-Ing. Dipl.-Wirt.-Ing. Christoph Löpenhaus
03:30 p.m. Surface Characteristics of Hobbed Gears
Dipl.-Ing. Markus Krömer
04:00 p.m. Performance of Gears Manufactured by 5-Axis Milling
Dipl.-Ing. Dipl.-Wirt.-Ing. Julian Staudt
04:30 p.m. Cutting at the Edge – Deburring and Chamfering
Dr.-Ing. Markus Brumm, Klingelnberg
05:00 p.m. Coffee Break
05:30 p.m. Force Modelling of Generating Gear Grinding
Dipl.-Ing. Matthias Ophey
06:00 p.m. Closing Remarks
Prof. Dr.-Ing. Christian Brecher
Dr.-Ing. Hartmuth Müller
07:30 p.m. Evening Reception
The guests are kindly invited by Klingelnberg
Further information will follow

During Lunch and Coffee Breaks:
Opportunity to visit WZL Gear Software Demonstration Desk

The WZL Gear Conference
For more than 50 years the annual WZL Gear Conference in Aachen, Germany, has been fostering technical collaboration and communication among the members of the WZL Gear Research Circle. The two-day conference is devoted exclusively to the presentation of the latest research in gear design, manufacturing and testing. Additionally, the software resources of the WZL Gear Research Circle are available for examination, including solutions for gear design and manufacturing process development. Participants of the conference are encouraged to tour the WZL laboratory with its shop floor and test rigs. Within this environment associations are formed and the exchange of knowledge among the members of the technical community is promoted. With up to 300 participants from Europe and overseas, the WZL Gear Conference is one of the largest annual events dedicated to gear technology in Europe.

The WZL Gear Conference in the USA
Eleven years ago exclusive contents of the Aachen gear conference were first presented in the USA. The Sixth WZL Gear Conference - USA is being hosted by Klingelnberg and will provide the opportunity for North American companies to connect with WZL and learn about current research activities.

For questions about the WZL Gear Research Circle, please contact:
gears@wzl.rwth-aachen.de and visit
http://www.wzl.rwth-aachen.de and
http://www.getriebekreis.de

To register for the conference, please contact
KLINGELNBERG America Inc., Saline, Michigan
WZL-Gear-Conference-USA@KLINGELNBERG.com
The conference fee is $260 per attendee.