

# PROGRAM

2<sup>nd</sup> TORSIONAL VIBRATION SYMPOSIUM  
May 17<sup>th</sup> – 19<sup>th</sup>, 2017

SALZBURG CONGRESS / AUSTRIA

In cooperation with

**GEISLINGER** 



**HASSE & WREDE**

Organized by

**VIBRA**  
**ASSOCIA**TION  
Schwingungstechnischer Verein

## Wednesday: May 17<sup>th</sup>, 2017

\* Program may be subject to change.

16:00	Salzburg City Tour (not included in the Symposium fee / Price: EUR 18,-)
18:00	<b>WELCOME RECEPTION</b> , Restaurant M32

## Thursday: May 18<sup>th</sup>, 2017

8:00	<b>Registration opens</b>
09:30	<b>Opening</b>
09:45	<b>KEYNOTE: Prof. Stefan Pischinger, FEV</b> President & CEO, FEV Group Holding GmbH Head of VKA – Institute for Combustion Engines, RWTH Aachen, Germany <b>Torsional vibration in powertrains as a challenge for performance and a driver for innovation</b>
10:30	Coffee break

	<b>Session 1A: Marine Propulsion - Responding to the latest Challenges</b>	<b>Session 1B: Simulation based System Design</b>
10:45	<b>Passing time through the barred speed range and fatigue life time of propulsion shafting</b> S. Persson MAN Diesel & Turbo	<b>Firing order selection for commercial engines with FEV Virtual Engine</b> K. Buczek, S. Lauer FEV Polska Sp. z o.o., FEV Europe GmbH
11:10	<b>Torsional loads during passage of barred speed ranges in 2-stroke marine installations: Aspects of simulation, estimation and evaluation</b> H. Keller Winterthur Gas & Diesel Ltd.	<b>Effect of engine ignition timing on crankshaft torsional vibrations</b> F. Bianciardi, K. Janssens Siemens / LMS
11:35	<b>Comparison of measured torsional stress and excitation for steady state condition and transient condition</b> A. Yamada, Mitsui Engineering & Shipbuilding Co., Ltd.	<b>Real time &amp; system simulation of large engine applications as a valuable contribution to CAE tasks concerning vibrations and durability</b> R. Strasser AVL List GmbH
12:00	Lunch	

	<b>Session 2A: Marine Propulsion - Design and Development</b>	<b>Session 2B: Noise and Vibration</b>
13:00	<b>Application of high strength steel to intermediate shaft and its effect on torsional vibration characteristic of shafting</b> M. Ota, Y. Iguchi, T. Ikegami, T. Arikawa, H. Takaoka, F. Tamura, Y. Hanawa, N. Fujitsuna Kobe Steel, LTD.	<b>Transient closed loop simulations as tool for analyzing noise in drive trains</b> H. Brandtstädter, L. Hübner Siemens AG
13:25	<b>Consequence of bearing support stiffness modelling into shaft performance prediction and system understanding in lateral</b> M. Zeid Caterpillar Propulsion	<b>Vibration isolation of large machinery</b> M. Heger, L. Kurtze Renk AG, Geislinger GmbH
13:50	<b>Engine x-mode vibration due to 2nd node torsional vibration on two stroke low speed diesel engines</b> D. Lee, J. Kim, J. Kim, R. D. Barro, Mokpo National Maritime University	<b>Torsional vibrations of inequidistant gears</b> P. Neubauer, J. Bös, T. Melz SAM, Technische Universität Darmstadt

14:15	Coffee break	
	<b>Session 3A: Simulation</b>	<b>Session 3B: Marine Propulsion - Navigating in Ice Conditions</b>
14:40	<b>Simulation and measurement of turbo-generator low pressure stage torsional vibration mode assembled by disc shrink fits</b> L. Gaul Technische Universität Stuttgart	<b>Ice induced propulsion shafting torsional vibration analysis issues and case studies</b> Y. Batrak, SKF
15:05	<b>Equivalent modeling of torsional vibration dampers in frequency and in time domain for a smooth transition between concept and design phases</b> T. Parikyan, Th. Resch, O. Knaus, Th. Philipp, AVL List GmbH and AVL Deutschland GmbH	<b>Proposal for the assessment of the ice loads based on IACS/ FSICR on the highly flexible rubber coupling</b> D. Hilbk, M. Dylla, R. Bauermeister VULKAN Couplings
15:30	<b>Transient and steady state torsional vibration analysis of large bore diesel engines</b> M. Taubert, P. Böhm, U. Waldenmaier MAN Diesel & Turbo SE, Augsburg	<b>Simulation of ice induced torsional vibrations on azimuth thruster</b> B. Schlecht, M. Kostial Technische Universität Dresden
15:55	<b>Efficient workflows for transient and steady-state analyses of powertrains in the time and frequency domain</b> C. Penndorf, S. Grützner, T. Hofmann ESI ITI GmbH	
16:20	Coffee break	

	<b>Session 4A: System Parameter Identification</b>	<b>Session 4B: Noise and Vibration - Active and passive Reduction</b>
16:45	<b>Measurement of hydrodynamic moment of inertia and damping of propellers</b> P. Orthmann MAN Diesel & Turbo	<b>A concept design of a rotational energy harvesting vibration absorber</b> S. Perfetto, F. Infante, S. Herold, D. Mayer Fraunhofer Institute LBF, Darmstadt
17:10	<b>Determination of model parameters for torsional vibration models of drivetrains by system measurements</b> B. Juretzki, F. Andary, M. Wegerhoff, G. Jacobs RWTH Aachen University	<b>Torsional vibration isolation for automotive clutch dampers using anti-resonance</b> Kim, Gi-Woo Nat. Univ. Korea
17:35	End of Thursday's sessions	

18:15	Transfer from Salzburg Congress to Gala Dinner
20:00	<b>GALA DINNER</b> , Kavalierhaus Klessheim

## Friday: May 19<sup>th</sup>, 2017

\* Program may be subject to change.

8:30	Registration opens	
	<b>Session 5A: Powertrain Components - Elastic Couplings</b>	<b>Session 5B: Measurement and Monitoring</b>
9:00	<b>Dynamic torsional stiffness of natural rubber in shear couplings under the influence of preload, amplitude, frequency, and rotational speed</b> M. Hasan, R. Zadoks Centa Antriebe Kirschev GmbH, Caterpillar Inc.	<b>Torsional vibration measurement and model-based monitoring in today's reality of power generation business</b> M. Golebiowski GE Power Steam Power Systems
9:25	<b>Torsional vibration calculations of rubber couplings by a master curve model</b> D. Hochlenert, M. Schuchardt MTU Friedrichshafen GmbH	<b>Torsional vibration excitation using axial shaker to determine dynamic properties of elastomeric flexible couplings</b> A. Albers, J. Matitschka, S. Ott Karlsruhe Institute for Technology
9:50	<b>How to provide customer benefit by selecting the "best fit" product for a specific application</b> G. Gödecke, R. D. Seiler VULKAN Couplings	<b>Torsional vibration measurement of an angle grinder in real applications</b> S. Matthiesen, T. Gwosch, A. Wettstein Karlsruhe Institute for Technology
10:15	<b>Influence of damping factors on coupling applications</b> C. Mühlberger Geislinger GmbH	<b>Field measurement techniques and instrumentation for torsional vibrations determination</b> C. Grislin, N. Péton, G. Cousin, N. Denisot, F. Palpacuer GE Oil & Gas, OROS
10:40	Coffee break	
	<b>Session 6A: Compressors Applications</b>	<b>Session 6B: Rules and Regulations</b>
11:05	<b>Electro-mechanical modelling of a reciprocating compression train driven by induction motor</b> A. Fusi, F. Grasso, A. Sambataro, A. Baylon, L. Pugi CST - Compression Service Technology, University of Florence	<b>Marine propulsion – Barred speed passing and shaft fatigue life assessments – A classification society's perspective</b> E. Brodin, G. M. Bakken, G. Dahler, S. Avanesov, D. Sideris, O. Deinboll DNV GL
11:30	<b>The crankshaft phasing consideration of the torsional vibration</b> W. Wang, J. Braun IDC Engineering	<b>New German grid code regulations and their relation to torsional vibrations</b> P. Stolze, P. Böhm MAN Diesel & Turbo SE, Augsburg
11:55	<b>Real-time torsional vibration measurement on VFD motor driven compressors in the oil and gas sector</b> C. Sleath, M. Cooper, C. Holmes Torquemeters Ltd.	<b>Marine propulsion – future challenges: Solutions with a proven history in classification</b> K. Banisoleiman, D. Hampson, P. Davies Lloyd's Register
12:20	Lunch	

	<b>Session 7A: Engine Development - Managing Vibrations at the Source</b>	<b>Session 7B: System Reliability - Case Studies</b>
13:25	<b>Not only torsional vibrations</b> W. Schiffer Winterthur Gas & Diesel Ltd.	<b>Coupling failures in VFD motor / Fan systems due to high torsional vibration</b> T. Feese Engineering Dynamics Inc.
13:50	<b>Review of the dimensioning calculation process in torsional vibration and evaluation of possible development directions</b> C. Pestelli, P. Sundström, M. Almerigogna, A. Pettiroso Wärtsilä Corporation	<b>Coupling failure in engine driven pipeline compressor system</b> T. Feese Engineering Dynamics Inc.
14:15	<b>Irregularity instead of harmony – Ways to improve torsional performance of a V20 engine</b> B. Mokdad, C. Henninger Liebherr	
14:40	Coffee break	
	<b>Session 8A: Engine Development - Future Concepts</b>	<b>Session 8B: System Evaluation</b>
15:05	<b>A procedure for calculation of the maximum allowed engine power under misfire conditions: Application to 12 and 14 V medium speed four stroke engines.</b> F. J. Jiménez-Espadafor, A. Lora, D. Guerrero, F. Fernández-Vacas Seville University	<b>Propulsion shafting alignment from analysis report to practical field, how to read and apply</b> M. Zeid Caterpillar Propulsion
15:30	<b>Future concepts and development trends relating to medium speed engines</b> M. Bierl MA-C-S Engineering	<b>Performance mapping of tuned type torsional vibration damper for automotive on-highway engine application</b> A. Khule Hodek Vibration Technologies Pvt Ltd.
	<b>Session 9: Closing Session</b>	
16:00	<b>Effects of engine and vessel operating conditions on torsional vibration dampers</b> K. Prenninger Geislinger GmbH	
16:25	Closing	
16:30	End	

## Saturday: May 20<sup>th</sup>, 2017

8:45	<b>Social Program: Berchtesgadener Land - Tour</b> (not included in the Symposium fee / Price: EUR 50,-)
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## GOAL

The Torsional Vibration Symposium Salzburg is a unique event for experts of all branches of Torsional Vibrations from all over the world

## ADVISORY BOARD

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## PARTICIPATION FEE

We would be delighted to welcome you to the 2<sup>nd</sup> Torsional Vibration Symposium 2017 in Salzburg

**Standard rate\*: EUR 990,-**

**Early bird rate\*: EUR 890,- (before January 31<sup>st</sup>, 2017)**

For registration please fill in the registration form at our website: [torsional-vibration-symposium.com/registration](http://torsional-vibration-symposium.com/registration)

*\* The participation fee includes welcome reception, gala dinner, program booklet, digital proceedings, coffee breaks and lunches*

## EXHIBITION & SPONSORING

We can also offer a limited number of exhibition stands and sponsoring opportunities

Exhibition floor space cost: EUR 395,- / m<sup>2</sup> (minimum 6m<sup>2</sup>)

## CONTACT

The organizer of the event is the Vibration Association (Schwingungstechnischer Verein)

E-mail: [info@torsional-vibration-symposium.com](mailto:info@torsional-vibration-symposium.com)

Tel.: +43 662 664146

Website: [torsional-vibration-symposium.com](http://torsional-vibration-symposium.com)

## SYMPOSIUM LOCATION

Salzburg Congress, Auerspergstraße 6, 5020 Salzburg/Austria