

Thursday: May 22nd, 2014

09:30	Opening
09:45	Keynote: Prof. Georg Wachtmeister TU München, Head of the Institute of Internal Combustion Engines Vibrations: A continuous challenge, a key for reliability, a chance for new features
Session 1: Torsional Vibration - Plenary Session	
11:00	Crankshaft Torsion as Influencing Factor for Cylinder Pressure Based Analysis (provisonal) Prof. A. Wimmer, J. Stadler TU Graz, Kistler Instrumente AG
11:25	Influence of emission regulations and fuel saving technologies on torsional vibrations in large engine applications T. Philipp Geislinger GmbH
11:50	Limiting values of dynamic loads in linear oscillators due to transient excitation Prof. H. Dresig TU Chemnitz

Session 2A: Powertrain Components		Session 2B: System Reliability	
13:30	Torsional vibrations stresses of alternators used in diesel-electric powertrains of locomotives against the background of increasing cylinder peak pressures P. Stürzl, M. Schuchardt MTU Friedrichshafen GmbH		Gear problems solved by the analysis of torsional vibrations A. Laschet, B. van den Heuvel ARLA Maschinentechnik GmbH, RWE Power AG
13:55	Modeling an electric vehicle powertrain and analysis of vibration characteristics R. Schelenz, M. Wegerhoff, O. Drichel IME, RWTH Aachen University		A full scale investigation of torsional vibration failure of a marine propulsion system intermediate shaft. P. Filcek, K. Banisoleiman, J. Stainsby, S. Mathieson Lloyd's Register, EMEA
14:20	Calculation of an elastic clutch with temperature-sensitive characteristics through system simulation in the time and frequency domains U. Schreiber, C. Spensberger ITI GmbH, Dresden University		Torsional vibration analysis of an emergency diesel generator (EDG-Set) B. Buchmeier TÜV SÜD Industrie Service GmbH
Session 3A: Simulation		Session 3B: Noise and Vibration	
15:20	Efficiency boost in product development processes through support by torsional vibration simulation in early development phases B. Juretzki, R. Schelenz, G. Jacobs IME, RWTH Aachen University		Noise and vibration challenges due to torsional excited gearbox vibrations P. Tellefsen, Kevin Cunningham Lloyd's Register Consulting
15:45	Influence of simulation model detail on determinable natural frequencies B. Schlecht, T. Rosenlöcher Institute of Machine Elements & Machine Design, TU Dresden		Reduced transfer of structure borne sound in couplings L. Kurtze, T. Philipp Geislinger GmbH
16:10	Analysis of dynamic interaction between crankshaft and connecting rod through the use of complex nonlinear calculations H. Roeser, C. Windelev		Vibration dynamics simulation of a diesel engine coupled system with flexible coupling under misfiring using physical and finite element modeling J. Holmberg, M. Hasan, H. Kirschev
Session 4A: Industrial Applications		Session 4B: Fundamental Engineering	
17:00	Linear and torsional vibration study for an engine driven compressor system W. Wang, J. Braun, R. Chundi, R. Khan IDC Technical Services		Introduction of the new torsional vibration guideline VDI 2039 under special consideration of damping F. Knopf, T. Philipp Hasse & Wrede GmbH, Geislinger GmbH
17:25	Lateral-torsional vibration coupling in reciprocating compressors F. Newman, T. Stephens, R. Harris Ariel Corporation		Fuel efficient propeller design and torsional vibrations in propulsion machinery G. Dahler, J. J. Ileskär, J. Holm DNV / GL
17:50	Experience with torsional vibration measurements and calculations of reciprocating compressors J. Lenz KÖTTER Consulting Engineers		Self-excited torsional vibration phenomenon on specialized vessel electric propulsion systems Prof. D. C. Lee, R. D. Barro Mokpo Maritime University, South Korea

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Session 5A: Ice Impact		Session 5B: Active Control	
08:50	Ice impact simulation for propulsion machinery S. Persson MAN Diesel & Turbo, Copenhagen		Active measures to reduce torsional vibrations M. Matthias Fraunhofer LBF, Darmstadt
09:15	Meeting ice impact analysis requirements through a unified Modeling for transient and frequency domain simulation A. Abel, U.Schreiber ITI GmbH		Active control of crankshaft vibrations M. Steidl, F. Knopf Hasse & Wrede GmbH
09:40	Simulation of torsional vibration responses in ship propulsion shafting system caused by ice impacts Yu. Batrak, A. Serdiuchenko, A. Tarasenko Intellectual Maritime Technologies, Ukraine		Control and correlation of mainshaft torsional modes on windturbines and off-axis loaded dynamometers W. L. Erdman DNV KEMA
Session 6A: Engine Development		Session 6B: Measurement and Testing	
10:20	Firing sequence optimization for a V20 cylinder diesel engine C. Henninger Liebherr Machines Bulle		Correlation of simulation to test for a flexibly coupled two-bearing generator system R. Zadoks, J. J. Ileskär, T. Utengen Caterpillar Inc., DNV GL
10:45	Firing order optimization in FEV virtual engine K. Buczek, S. Lauer FEV Krakow, FEV GmbH		Various torsional vibration measurement techniques for optimal trade-off between high accuracy and ease of instrumentation A. Palermo, L. Britte, K. Janssens Universita' della Calabria, Kath. Universiteit Leuven, LMS International
11:10	Cranktrain design using coupled calculations and multicriteria optimization Peter Böhm MAN Diesel & Turbo, Augsburg		Contactless method to determinate the rotation angle in torsional vibration based on video image correlation (VIC-3D) measuring system I. Száva, S. Vlase, B.P. Gálfi, P. Dani, I. Serban University of Brasov, Geislinger GmbH
11:35	Crank train torsional vibration optimization C. Priestner, T. Ovari, M. Brunner, F. Zieher AVL List GmbH		The comparison between measured and calculated torsional vibration loads in 2-stroke marine installations Martin Barraud, Philipp Bättig, R. Gläser Wärtsilä