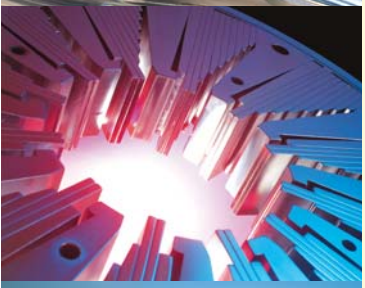
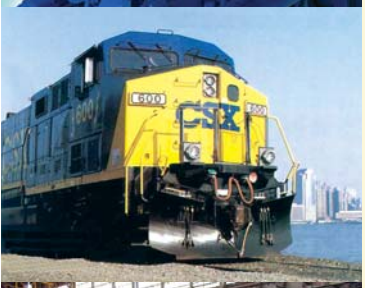








CIMAC

Congress 07

Vienna

25th CIMAC World Congress

on Combustion Engine Technology

for

Ship Propulsion

Power Generation

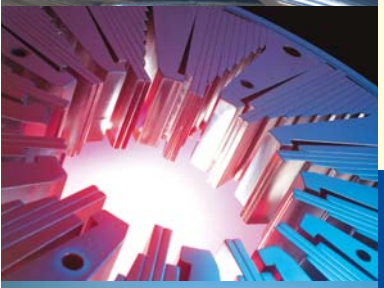
Rail Traction

PRELIMINARY PROGRAMME

May, 21–24, 2007 | Vienna – Austria

www.cimac.com

Contents




Congress 07

Come to Vienna, You'll be most welcome!
Dear Reader and CIMAC Friend

On behalf of CIMAC and the Austrian National CIMAC Committee we are delighted to invite you to the **25th CIMAC World Congress** to be held in Vienna from 21 — 24 May 2007. The Congress is being held at the Vienna Hofburg, one of the most beautiful historical congress venues in the world.

We are proud that CIMAC has chosen Austria for its Silver Jubilee event, which we all will celebrate at the end of the Congress.

The Congress is devoted to the presentation of papers in the fields of marine, power generation and locomotive engine engineering, covering state-of-the-art technologies as well as the application of such engines. Moreover, the event provides the unique opportunity to meet colleagues and customers from the industry around the world.

Vienna promises to stand out as one of the most successful CIMAC conferences. More than 270 papers have been submitted. This new record in interest guarantees the selection of papers of only the highest quality and the prospect of it therefore being an exceptionally profitable meeting.

Three panel discussions with outstanding keynote speakers will provide a stimulating forum for the exchange of ideas and an informed review of developments to be expected in the future.
An informative and comprehensive exhibition with integrated poster sessions will complement the Congress presentations. It will offer not only an overview of the latest product developments but also create a discussion platform for exhibitors and Congress participants.

Social events enabling you and your accompanying partner to experience Austrian culture and gain memorable impressions of Vienna will round off your stay in this beautiful city.

There are many reasons to come to Vienna. We look forward to seeing you at the Vienna Hofburg.

Karl M. Wojik
President of the 25th CIMAC World Congress

Congress 07

Introduction to CIMAC

What CIMAC is:

The International Council on Combustion Engines (Conseil International des Machines a Combustion — CIMAC) was founded in Paris in 1951. It is a worldwide non-profit association consisting of National Member Associations, National Member Groups and Corporate Members in 24 countries in America, Asia and Europe.

It brings together manufacturers of diesel engines and gas turbines, users such as shipowners, utilities and rail operators and also suppliers, oil companies, classification societies and scientists.

The Mission of CIMAC:

- Promote exchange of scientific and technical information via its Congresses, CIMAC Circles and local CIMAC events
- Improve understanding between engine manufacturers and users
- Improve understanding between manufacturers and suppliers
- Promote Working Group activities
- Focus upon and promote the work and activities of National Members Associations
- Issue publications and support work in the area of standardisation
- Collaborate with other international associations
- Inform regularly about CIMAC activities

CIMAC Working Groups:

All CIMAC Working Groups are established to find solutions to technical, commercial and market problems and to publish Recommendations as well as press articles worldwide.
CIMAC Working Groups are presently active in the following areas:

- Exhaust Emissions
- Users
- Fuels and Lubricants
- Engine Specification
- Classification

CIMAC Congress:

The CIMAC Congress represents the culmination point of all CIMAC activities and takes place every 2 to 3 years each time in a different member country.

CIMAC Executive Board 2004–2007	President	**Prof. Matti Kleimola,** *Wartsila Corporation*
	Past President	**Prof. Nikolaos P. Kyrtatos,** *National Technical University of Athens*
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Organizing Committee of the 25th CIMAC Congress	Congress President	**DI Karl Wojik,** *AVL List GmbH*
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	Secretary General of the Organizing Committee	**Johanna Spitzer,** *FMMI*
	Chairman of the Exhibition Committee	**Thomas Flauger,** *Kral AG*
	Chairman of the Technical Committee	**Markus Heseding,** *CIMAC/VDMA*
	General Manager of the hosting Association (FMMI)	**Dr. Berndt-Thomas Krafft**

Congress 07

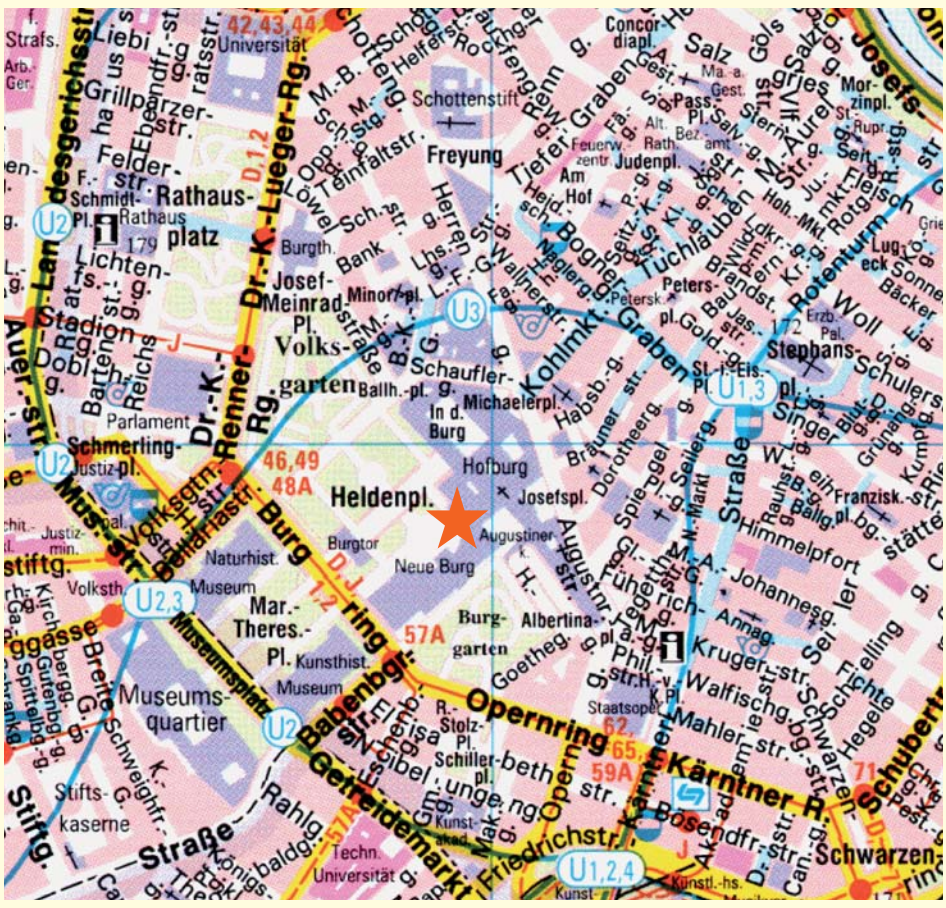
Conference Venue

The **Hofburg Congress Centre** occupies a unique position among the congress centers of the world. The state rooms of the Imperial Palace, the former residence of the Habsburgs, have maintained their original character despite being fitted out with the latest technical equipment. This impressive conference venue combines tradition with the requirements of a modern congress.

The Hofburg is situated in Vienna's city center. The most important museums are just down the street as are the Spanish Riding School, the Treasury, concert halls or Vienna's most elegant shopping streets. The close proximity to Vienna's inner city and its excellent infrastructure are the most important characteristics of this architecturally unique congress center.

With a concept combining flexibility, the most modern of congress technology and excellent service besides the luxurious ambiance, the Hofburg Vienna offers the right place for getting together, learn, meet and socialize in a special atmosphere.

Heldenplatz, A-1014 Vienna, ***www.hofburg.com***



★ Hofburg Congress Centre

CIMAC Congress 07

PRELIMINARY PROGRAMME

Time	Monday, 21st May 2007
08:00	Registration at Hofburg Congress Center
10:00	Opening Ceremony at Hofburg Congress Center
12:00	Lunch for participants & accompanying persons at Hofburg Congress Center

THE TECHNICAL PROGRAMME

The Technical Programme of the 25th CIMAC Congress will deal with diesel engines, gas engines and gas turbines, their components and systems, covering marine, stationary and rail applications, with a special focus on the role of engine users. The Technical Programme will be developed in the Technical Sessions and the Poster Sessions.

Technical Sessions

The high level Technical Sessions together with panels of technicians, top managers and users will enhance the communication to evaluate the impacts on the internal combustion engine industry. The topics will be:

Session 1: Product Development — Diesel Engines
Session 2: Fundamental Engineering — Piston Engines (Diesel & Gas)
Session 3: Environment, Fuel & Combustion — Diesel Engines
Session 4: Tribology — Diesel Engines
Session 5: Component & Maintenance Technology — Diesel Engines
Session 6: System Integration — Diesel Engines
Session 7: Product Development — Gas Engines
Session 8: Component & Maintenance Technology — Gas Engines
Session 9: Turbochargers
Session 10: Product Development & Fundamental Engineering — Gas Turbines
Session 11: Environment, Fuel & Combustion — Gas Turbines
Session 12: Integrated Systems — Piston Engines & Gas Turbines
Session 13: Users' Aspects — Marine Applications
Session 14: Users' Aspects — Land-based Applications (Power Generation, CHP, Oil & Gas, Rail etc.)

Poster Sessions

On Tuesday, Wednesday and Thursday, more than 45 interesting Papers will be presented in the poster area located in the exhibition area. Opening time is from 10:00 to 16:00. Make use of this opportunity to discuss your topics with the authors directly and without any time pressure. The authors will be awaiting you for explanation and discussion in their booths.

Note: This is the Preliminary Programme and subject to change!

TECHNICAL PROGRAMME MONDAY, 21st MAY 2007

Time	Room A	Room B	Room C	Room D
13:30	**(1–1)** 2-stroke slow-speed marine engines	**(3–1)** Diesel engines — Emission reduction methods 1	**(2–1)** Diesel engines — Combustion & performance	**(10)** Gas turbines — Product development & Fundamental engineering
	Chairman: T. Bouché, *AVL List GmbH, Austria*	Chairman: G. Wachtmeister, *Technical University of Munich, Germany*	Chairman: R. Beran, *AVL List GmbH, Austria*	Chairman: K. Takeishi, *Osaka University, Japan*
	43: The latest developments & technologies of the UE engines, *by H. Sakabe, Y. Yamazaki, Mitsubishi Heavy Industries, Ltd., Japan* **115: Latest developments of Wärtsilä low-speed engines to meet current & future customer demands,** *by K. Heim, Wärtsilä Switzerland Ltd., Switzerland* **68: Design of the new 2-stroke engines from MAN Diesel A/S,** *by T. S. Knudsen, C.-E. Egeberg, MAN Diesel A/S, Denmark*	**277: Engine manufacturers considerations on non-road mobile machinery legislation,** *by P. Scherm, P. Daskalopoulos, Euromot, M. Heseding, VDMA, Germany* **99: The influence of a SO_x abatement plant on diesel engine emissions,** *by F. Bak, MAN Diesel A/S, Denmark* **165: Taking the next steps in emissions reduction for large 2-stroke engines,** *by R. Holtbecker, G. Weisser, M. Amoser, Wärtsilä Switzerland Ltd., Switzerland* **29: New applications of direct water injection for marine diesel engines,** *by H. Tajima, K. Takasaki, Kyushu University, T. Takaishi, S. Murakami, Mitsubishi Heavy Industries, Ltd., Japan*	**31: The HERCULES Project: a major R&D effort for marine engines of high efficiency & low emissions,** *by N. P. Kyrtatos, ULEME E.E.I.G., Germany, M. Kleimola, Wärtsilä Corporation, Finland, R. Marquard, MAN Diesel SE, Germany* **163: The design & operation of the fully controllable medium-speed research engine EVE,** *by I. Kallio, P. Rantanen, M. Imperato, E. Antila, T. Sarjovaara, M. Larmi, Helsinki University of Technology, K. Huhtala, Tampere University of Technology, G. Liljenfeldt, Wärtsilä Finland Oy, Finland* **36: Turbocharging system for NO_x-optimised medium-speed diesel engines with high mean effective pressure,** *by J. Bucher, BBB, Germany*	**19: Re-coating of gas turbine superalloy blade after long-term service,** *by Y. Uemura, Mitsubishi Heavy Industries, Ltd., Japan* **168: Gas turbine 500 MW range,** *by H. Jericha, Technical University of Graz, Austria* **189: Investigation of compressor surge during emerge stop of auxiliary power unit,** *by S.-Y. Kim, D.-S. Kim, V. Goldenberg, Korea Institute of Machinery & Materials, Korea* **237: Optimising the thermo-oxidation stability of gas turbine oils,** *by F. Novotny-Farkas, K. Baumann, OMV Refining & Marketing, Austria*
15:00	30 minutes coffee break			

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TECHNICAL PROGRAMME MONDAY, 21st MAY 2007

Time	Room A	Room B	Room C	Room D
15:30	**(1–2)** 4-stroke medium-speed engines 1	**(3–2)** Diesel engines — Emission reduction methods 2	**(2–2)** Gas engines — Combustion & performance	**(9–1)** Turbochargers — Emission reduction & consequences for charging systems
	Chairman: C. Teetz, *MTU Friedrichshafen GmbH, Germany*	Chairman: R. Holtbecker, *Wärtsilä Switzerland Ltd., Switzerland*	Chairman: T. J. Callahan, *Southwest Research Institute (SwRI), USA*	Chairman: A. Rippl, *MAN Diesel SE, Germany*
	104: The new MAN 32/44 CR — efficient, clean & compact, *by C. Vogel, G. Heider, S. Haas, M. Bierl, A. Marzinek, MAN Diesel SE, Germany* **27: Development of Niigata 4-stroke engines,** *by Y. Itoh, M. Kawakami, Y. Mouri, S. Goto, Niigata Power Systems Co., Ltd., Japan* **164: Development of HiMSEN H32/40 medium-speed diesel engine,** *by J. S. Kim, J. T. Kim, O. S. Kwon, Hyundai Heavy Industries Co., Ltd., Korea* **243: Latest developments in Wärtsilä 4-stroke engine portfolio,** *by J. Kytölä, Wärtsilä Finland Oy, Finland, K. Heim, Wärtsilä Switzerland Ltd., Switzerland*	**148: Combustion system development for IMO Tier 2,** *by G. Tinschmann, MAN Diesel SE, Germany* **32: The environment friendly medium-speed engine,** *by U. Schlemmer-Kelling, Caterpillar Motoren GmbH & Co. KG, Germany* **28: Environmental contribution with Niigata marine diesel engines,** *by M. Kawakami, T. Mimura, N. Nakamaru, T. Takai, Niigata Power Systems Co., Ltd., Japan* **258: Compliance strategy for future medium-speed large diesel engine exhaust emission regulations,** *by A. Ludu, AVL List GmbH, Austria*	**112: The combustion improvement technologies for large natural gas engine by in-cylinder observation & prediction,** *by S. Nakai, S. Morimoto, H. Yamawaki, The Japan Gas Association, R. Nakano, Mitsubishi Heavy Industries, Ltd., Japan* **125: The combustion phenomena in the pre-combustion chamber of micro-pilot gas engine,** *by T. Hirose, T. Yamada, Ishikawajima-Harima Heavy Industries Co., Ltd., H. Furutani, National Institute of Advanced Industrial Science and Technology, S. Goto, Niigata Power Systems Co., Ltd., Japan* **178: Combustion characteristics & performance of supercharged pyrolysis gas engine with micro-pilot ignition,** *by E. Tomita, N. Fukatani, N. Kawahara, K. Maruyama, Okayama University, T. Komoda, Mitsui Engineering & Shipbuilding, Co., Ltd. Japan* **171: Combustion characteristics of HCCI engines fuelled with natural gas & DME,** *by M. Ishida, S. Jung, H. Ueki, D. Sakaguchi, Nagasaki University, Japan*	**101: Utilisation of 2-stage turbo charging as an emission reduction mean on a Wärtsilä 4-stroke medium-speed diesel engine,** *by C. Wik, Wärtsilä Italia S.p.a., Italy, B. Hallback, Wärtsilä Finland Oy, Finland* **245: Emissions – A new challenge for turbocharging,** *by E. Codan, C. Mathey, ABB Turbo Systems Ltd., Switzerland* **22: Smokeless transient loading of medium/high-speed engines using a controlled turbocharging system,** *by G. Papalambrou, N. Alexandrakis, N. P. Kyrtatos, National Technical University of Athens, Greece, E. Codan, I. Vlaskos, ABB Turbo Systems Ltd., Switzerland, V. Pawils, Germanischer Lloyd AG, Germany, R. Boom, Woodward Governor Nederland B.V., The Netherlands* **25: Simulation of a sequential turbocharging system transient behaviour including compressor surging,** *by Wang Weicai, Wang Yinyan, Feng Yongming, Harbin Engineering University, PR China*
17:00	End of Technical Sessions for Monday			
18:30	**Welcome Reception**			

TECHNICAL PROGRAMME TUESDAY, 22nd MAY 2007

Time	Room A	Room B	Room C	Room D
08:30	**(1–3)** 4-stroke medium-speed engines 2	**(3–3)** Diesel engines — Calculation models & measurements	**(2–3)** Piston engines — Injection & combustion	**(11)** Gas turbines — Environment, fuel & combustion
	Chairman: J. Kytölä, *Wärtsilä Corporation, Finland*	Chairman: P. Hupperich, *FEV Engine Technology, Inc., USA*	Chairman: S. Pischinger, *FEV Motorentechnik GmbH, Germany*	Chairman: M. Sato, *Central Research Institute of Electric Power Industry, Japan*
	96: Development of 1.25 MW DME diesel engine, *by K. Masuda, T. Sakai, T. Bando, H. Kondo, Daihatsu Diesel Mfg. Co., Ltd., A. Shimizu, JFE Engineering Corporation, Japan* **153: Development of the high-speed diesel engine 20V 8000 M71,** *by N. Veser, A. Schneemann, W. Kasper, MTU Friedrichshafen GmbH, Germany* **53: Development of the DLoco DL240ZJ engine to comply with current & future emissions regulations,** *by L. M. Nerheim, M. J. Graddage, Ricardo UK Ltd., UK, An J., Liang S., Dalian Locomotive and Rolling Stock Works Co. Ltd., PR China*	**151: An investigation into the effects of ambient condition on nitrogen oxide emission levels from marine diesel engines,** *by S. K. Nanda, A. P. Roskilly, University of Newcastle upon Tyne, UK* **13: Individual cylinder ultra-fast NO measurement for marine diesel engines,** *by M. Ioannou, N. Alexandrakis, N. P. Kyrtatos, National Technical University of Athens, Greece* **230: Developments on exhaust emission modelling for large 2-stroke diesel engines — some comparisons with measured data & an update on the latest emission reduction techniques,** *by N. Kjemtrup, K. Aabo, T. S. Knudsen, MAN Diesel A/S, Denmark* **140: Numerical investigations of fuel-water emulsion combustion in DI-diesel engines,** *by P. Eckert, A. Velji, U. Spicher, Technical University of Karlsruhe, Germany*	**147: Numerical & experimental investigation of the gas flow, mixture formation & combustion to optimise soot emissions in medium-speed marine common rail diesel engines,** *by M. Frobenius, I. Thiele, AVL Deutschland GmbH, U. Schlemmer-Kelling, Caterpillar Motoren GmbH & Co. KG, Germany* **128: A comparison of characteristic timescale & flame area evolution combustion models in medium-speed diesel engines,** *by O. Kaario, M. Larmi, Helsinki University of Technology, L. O. Liavag, Wärtsilä Finland Oy, Finland* **24: Numerical simulation & improvement of a locomotive diesel nozzle,** *by Li Minghai, Zhang Xiaokun, Dalian Jiaotong University, PR China* **55: Effects of ultra-high injection pressure & bump ring combustion chamber on fuel spray behaves,** *by Su Wanhua, Tianjin University, PR China*	**40: The effects of hydrogen addition on methane combustion in plug flow reactor using detailed & skeletal mechanism,** *by A. Beheshti, Vehicle Fuel Environment Research Institute, Tehran University, H. Ebrahimi, A. Ghafourian, Sharif University of Technology, Iran* **39: Development of dual-fuel gas turbine combustor of liquid and digester gas,** *by M. Koyama, Niigata Power Systems Co., Ltd., Japan* **10: Experiences with wood particles as regenerative fuel for directly fired gas turbines of the small power range,** *by F. Wingelhofer, Vienna University of Technology, Austria*
10:00	30 minutes coffee break			

TECHNICAL PROGRAMME TUESDAY, 22nd MAY 2007

Time	Room A	Room B	Room C	Room D
10:30	**(1–4)** High-speed diesel engines	**(3–4)** Diesel engines — Fuels	**(2–4)** Piston engines — Structural mechanics	**(9–2)** Turbochargers — Applications & field experiences
	Chairman: A. Ludu, *AVL List GmbH, Austria*	Chairman: C. Van Geeteruyen, *Chevron Technology Gent, Belgium*	Chairman: H. S. Soyhan, *Sakarya University, Turkey*	Chairman: C. Roduner, *ABB Turbo Systems Ltd., Switzerland*
	156: Future potential of series 4000 marine engines, *by L. Czerny, I. Wintruff, U. Schmid, J. Baumgarten, MTU Friedrichshafen GmbH, Germany* **50: Utilising multiple injections for optimised performance & exhaust emissions with the MTU series 2000 common rail marine engines,** *by G. Stiesch, H. Baumann, V. Wachter, J. Schmitz, C. Teetz, MTU Friedrichshafen GmbH, Germany* **60: Development & field introduction of the high-speed 4-stroke diesel engine MAN RK280,** *by F. Koch, T. Seidl, MAN Diesel SE, Germany, R. Dean, S. Johnson, J. Floyd, MAN Diesel Ltd., UK*	**198: The effects of a changing oil industry on marine fuel quality & how new & old analytical techniques can be used to ensure predictable performance in marine diesel engines,** *by K. Steernberg, Shell Global Solutions International B.V., The Netherlands, S. Forget, Shell Marine Products Ltd., UK* **234: Alternative fuels experiences for medium-speed diesel engines,** *by R. Ollus, K. Juoperi, Wärtsilä Finland Oy, Finland* **196: Application study of waste-vegetable oils as a bio-fuel for diesel engine by high-density cavitation,** *by T. Ohgawara, Toshiba Plant Systems & Services Co., H. Okada, T. Tsukamoto, K. Iwasawa, K. Ohe, Tokyo University of Marine Science and Technology, Japan* **107: A model for ignition & combustion quality of heavy fuel oil,** *by L. Goldsworthy, Australian Maritime College, Australia, H. Tajima, Kyushu University, Japan*	**251: Prediction of stress, strain & fatigue of combustion engines in the high & low cycle domain,** *by H. Dannbauer, B. Unger, MAGNA POWERTRAIN, Engineering Center Steyr GmbH & Co. KG, M. Maderboeck, G. Herdin, GE Jenbacher GmbH & Co. OHG, Austria* **249: Dynamic fatigue analysis of power train components,** *by S. Trampert, D. Besselink, FEV Motorentechnik GmbH, Germany* **159: A study on dynamic response analysis of diesel engine block assembly,** *by Wu Hong, Shanghai Marine Diesel Engine Research Institute, PR China* **207: Thermo-mechanical stress analysis & life assessment of cylinder head in medium-speed heavy duty diesel engine,** *by H. R. Chamani, Y. Rezalou, A. Malekizadi, Iran Heavy Diesel Mfg. Co., I. Sattari-Far, M. Aghdam, Amirkabir University of Technology, Iran*	**176: Contamination — a challenge for turbochargers in HFO operation,** *by W. Gizzi, M. Jung, P. Cellbrot, V. Haueisen, ABB Turbo Systems Ltd., Switzerland* **221: Application & field experience of the new MAN Diesel turbocharger series TCR,** *by H. Schmuttermair, L. Hilgenfeld, K. Bartholomae, S. Kneip, MAN Diesel SE, Germany* **30: Development & application of MET-MA turbochargers,** *by K. Shiraishi, M. Kimura, T. Teshima, Mitsubishi Heavy Industries, Ltd., Japan* **102: HPR range in series use — ongoing development of KBB radial turbine type turbochargers,** *by I. Lehmann, K. Buchmann, S. Kaeseberg, Kompressorenbau Bannewitz GmbH, Germany*
12:00	Lunch break			

TECHNICAL PROGRAMME TUESDAY, 22nd MAY 2007

Time	Room A	Room B	Room C	Room D
13:30	**(7–1)** Gas engines — Product development	**(3–5)** Diesel engines — Combustion	**(2–5)** 2-stroke engines — Fundamental engineering	**(9–3)** Turbochargers — Compressor design
	Chairman: L. M. Nerheim, *Ricardo UK Ltd., UK*	Chairman: N. P. Kyrtatos, *National Technical University of Athens, Greece*	Chairman: P. S. Pedersen, *MAN Diesel SE, Germany*	Chairman: V. Haueisen, *ABB Turbo Systems Ltd., Switzerland*
	86: The evolution of MACH-30G toward the more efficient gas engine, *by M. Katsumi, R. Nakano, T. Yamamoto, S. Yotsuji, Mitsubishi Heavy Industries, Ltd., N. Fukatani, H. Kameyama, K. Ishibashi, The Japan Gas Association, Japan* **111: Study of high adaptability in 1 to 3 MW class micro pilot gas engine for co-generation field through its development work & field experience,** *by S. Goto, T. Hashimoto, Y. Nishi, Niigata Power Systems Co., Ltd., Japan* **167: New gas engines from MAN Diesel SE,** *by A. Hanenkamp, N. Boeckhoff, S. Terbeck, S. Koebler, MAN Diesel SE, Germany* **239: Field experience with the Wärtsilä 50DF dual-fuel engine,** *by I. Nylund, Wärtsilä Corporation, Finland*	**98: Development of a reference experiment for large diesel engine combustion system optimisation,** *by K. Herrmann, Swiss Federal Institute of Technology (ETH) Zurich, R. Schulz, G. Weisser, Wärtsilä Switzerland Ltd, Switzerland* **177: Experimental analysis on the combustion rate due to interference of the burned gas in slow-speed diesel engine with a side fuel injection nozzle system,** *by T. Imahashi, E. Tomita, T. Kimoto, Okayama University, Japan* **139: Bench test techniques to assess the efficacy of marine fuel additives to improve combustion,** *by M. Vermeire, Chevron Technology Gent, Belgium, J. Spencer, W. Ang, Infineum International Ltd., UK* **199: The ignition & the combustion quality by FIA (Fuel Ignition Analyser) of actual MFO & the counter-measure against the MFO with inferior quality,** *by A. Takeda, H. Miyano, Nippon Yuka Kogyo Co., Ltd., H. Nakatani, E. Shimizu, T. Ura, T. Kato, D. Suzuki, NYK Line, Japan*	**262: Effect of nozzle flow & cavitation structures on spray development in low-speed 2-stroke diesel engines,** *by M. Gavaises, A. Andriotis, M. Spathopoulou, The City University, UK* **279: Evaluation of combustability of bunker fuel oil using Optic Combustion Analyser (OCA),** *by E. Tomita, T. Imahashi, Y. Maeda, Okayama University, H. Morinaka, Eiwa-Giken Japan* **18: Performance monitoring of slow-speed diesel engines by dynamic exhaust gas temperature measurement & oxygen concentration measurement of blow down exhaust gas,** *by S. Nandam, A. P. Roskilly, University of Newcastle upon Tyne, UK*	**200: Design of radial compressor wheels by usage of simplified, discrete exitation functions,** *by T. Winter, G. Rieder, F. Werdecker, J. Woyke, MAN Diesel SE, Germany* **166: Development of the wide operating range turbocharger compressor with low solidity vaned diffuser,** *by S. Ibaraki, H. Ogita, T. Yamada, Mitsubishi Heavy Industries, Ltd., Japan* **121: Study on axial-radial turbocharger with pressure ratio 4.5,** *by Zhang Junyue, China North Engine Research Institute, PR China* **190: Detailed study on transonic compressor for turbocharger,** *by H. Higashimori, Mitsubishi Heavy Industries, Ltd., Japan*
15:00	30 minutes coffee break			

TECHNICAL PROGRAMME TUESDAY, 22nd MAY 2007

Time	Room A	Room B	Room C	Room D
15:30	**(7–2)** Gas engine developments	**(3–6)** Diesel engines — Particulates	**(2–6)** Piston engines — Dynamics & vibration	**(9–4)** Turbochargers — Product development & future trends
	Chairman: D. Chvatal, *GE Jenbacher GmbH & Co. OHG, Austria*	Chairman: C. Beiner, *MTU Friedrichshafen GmbH, Germany*	Chairman: J.-F. P. Chapuy, *S.E.M.T. Pielstick, France*	Chairman: T. Winter, *MAN Diesel SE, Germany*
	270 Advances in engine technology as a part of the Advanced Reciprocating Engine System (ARES) program at the Oak Ridge National Laboratory (ORNL), *by T. Theiss, J. Parks, R. Wagner, H. T. Lin, M. Brady, K. D. Edwards, Oak Ridge National Laboratory (ORNL), USA* **248: Development of new DAIHATSU 2 MW class gas engine,** *by T. Yamada, S. Shimomura, Daihatsu Diesel Mfg. Co. Ltd., Japan* **135: Development of the 1,000 kW-class gas engine (MD20G),** *by M. Kondo, A. Sakane, Mitsui Engineering & Shipbuilding Co., Ltd., Japan* **278: The first new gas engine to come from Korea,** *by J. T. Kim, J. S. Kim, Hyundai Heavy Industries Co., Ltd., Korea, T. Baufeld, AVL List GmbH, Austria, S. G. Dexter, Consultant, UK*	**129: Measures to reduce smoke & particulate emissions from marine diesel engines using compact common rail injectors,** *by B. Buchholz, M. Niendorf, University of Rostock, R. Pittermann, WTZ Rosslau GmbH, Germany* **56: Particulate emissions of residual fuel operated diesel engines — background, particulate size distributions, measurement methods & potential abatement measures,** *by G. Hellén, Wärtsilä Finland Oy, Finland* **59: Physical characteristics of particulate matter emission from medium-speed marine diesel engine,** *by S. Okada, K. Tsujimoto, K. Kitagawa, Yanmar Co., Ltd., J. Senda, Doshisha University, Japan*	**143: Diesel engine design — virtual product development with focus on NVH,** *by C. Steffens, FEV Motorentechnik GmbH, Germany* **264: Numerical investigation in the dynamic behaviour of engine & transmission of a ship & transfer of the vibration to the ship structure,** *by T. Resch, AVL List GmbH, Austria, N. Naranca, AVL-AST d.o.o. Zagreb, Croatia, B. Bohlmann, Flensburger Schiffbau-Gesellschaft mbH & Co. KG (FSG), Germany* **92: New optimisation method of uneven crankangle arrangement for the lowered vibration of piston engines,** *by K. Ito, N. Sato, K. Kosuge, Mitsubishi Heavy Industries, Ltd., Japan* **82: Increased speed of container vessels in case of one cylinder misfiring,** *by P. Rønnedal, M. Rogild, MAN Diesel A/S, Denmark, S. Kajihara, Mitsui Engineering & Shipbuilding Co, Ltd., Japan*	**123: Utilisation of excessive turbocharger efficiency,** *by M. Ohtsu, K. Shimada, Mitsui Engineering & Shipbuilding Co., Ltd., Japan* **51: The role of CFD in turbocharger performance improvement,** *by P. Roach, Siemens Industrial Turbo-machinery Ltd., UK* **49: A study on precise analysis of the turbocharger rotor,** *by Wu Chang-hua, Lu Yu-zhen, Liao Ai-hua, Dalian University of Technology, PR China*
17:00	End of Technical Sessions for Tuesday			

POSTER SESSION FOR TUESDAY, 22nd MAY 2007

Session 2

66: Modeling of pressure waves in the inlet & exhaust systems of internal combustion engine, *by D. Chalet, Ecole Centrale Nantes, France*

174: Transient heat transfer simulation for coupling 3-D moving component system within internal combustion chamber, *by Liu Zhien, Huazhong University of Science and Technology, PR China*

181: Torsional vibration of marine diesel main engine on a condition of partial cylinder misfiring, *by Wei, Wei-Min, National Taiwan Ocean University, Chang, Ming-Shiung, China Corporation Register of Shipping, PR China*

185: New progress in heat rejection management in heavy diesel engines, *by S. A. Jazayeri, M. Bazargan, K. Ebrahimi, K.N. Toosi University of Technology, Iran*

210: Review of life prediction using damage models for SG iron cylinder head in medium-speed heavy diesel engines, *by Y. Rezalou, A. Malekizadi, H. R. Chamani, Iran Heavy Diesel Mfg. Co., Iran*

228: CFD analysis of combustion & emissions to study the effect of compression ratio & hydrogen substitution in a diesel engine with experimental verification, *by M. Masood, I Mirzana, A. S. Reddy, Muffakham Jah College Of Engg & Technology, India*

267: A torsional vibration analysis methodology for large-scale 2-stroke diesel engines used for power generation, *by V. Lamaris, E. Karangelos, D. Hountalas, National Technical University of Athens, Greece*

271: Modeling & optimisation of a high performance diesel engine for marine applications, *by G. Derrico, A. Onorati, T. Lucchini, Politecnico di Milano, M. Mazuran, Seatek SpA, Italy*

Session 3

15: Effects of injection systems on the exhaust particle number & size distributions of non-road diesel engines, *by S. A. Niemi, H. Nenonen, T. P. J. Paanu, M. Lauren, K. Ekman, T. Karhu, Turku University of Applied Sciences, Finland*

20: Stability of heavy petroleum stock formulations — a case study, *by A. A. Gupta, Indian Oil Corporation Ltd., India*

52: Development of a fuel injector test rig for diesel engine & fuel spray analysis of different fuels, *by J. Shibuk, National Institute of Technology, India*

90: Fundamental study on heavy fuel reformulation through sonochemistry & chemical thermodynamics, *by J. Senda, K. Ueda, S. Hanada, Y. Watanabe, Doshisha University, S. Okada, Yanmar Co., Ltd., Japan*

108: Acceptable region on FIA characteristic in marine heavy oil, *by T. Kurosawa, H. Shiihara, Nippon Kaiji Kyokai (Class NK), Japan*

120: Preliminary thermal & catalytic fuel treatment in a diesel engine injector, *by O. Klyus, Maritime Academy of Szczecin, Poland, I. Vasilev, Vladimir Dal East Ukrainian National University, Ukraine*

131: Combustion characteristics analysis considering the effect of fuel injection conditions for the marine 4-stroke D. I. diesel engine, *by I. S. Choi, STX Engine Co., Ltd., Korea*

158: Characteristics of HCCI engine operation for additives, EGR & intake charge temperature while using iso-octane as a fuel, *by Lu Xingcai, Shanghai Jiaotong University, PR China*

183: The effect of cylinder process variation on total nitrogen oxides emission for large bore slow-speed marine engines, *by T. Borkowski, Maritime University Szczecin, Poland*

192: Homogenous charge compression ignition (HCCI) engines in electrical power generating systems, *by S. A. Jazayeri, M. Keshavarz, N. Shahangian, K.N. Toosi University of Technology, Iran*

193: Experimental study on water particles action in the combustion of marine 4-stroke diesel engine operated with emulsified fuels, *by Zhang Tao, Mitsubishi Heavy Industries Ltd., PR China, H. Okada, T. Tsukamoto, K. Ohe, Tokyo University of Marine Science & Technology, Japan*

19:00	**ABB Evening**

CIMAC Congress 07

TECHNICAL PROGRAMME WEDNESDAY, 23rd MAY 2007

Time	Room A	Room B	Room C	Room D
08:30	**(13–1)** User aspects marine — Predictive maintenance	**(3–7)** Diesel engines — Aftertreatment	**(2–7)** Diesel engines — Fundamentals & materials	**(6–1)** Electronic control systems & monitoring
	Chairman: F. Stadelmann, *MTU Friedrichshafen GmbH, Germany*	Chairman: M. Kawakami, *Niigata Power Systems Co., Ltd., Japan*	Chairman: J. C. Hedrick, *Southwest Research Institute (SwRI), USA*	Chairman: C.-E. Rösgren, *Wärtsilä Corporation, Finland*
	64: From condition monitoring via condition based maintenance to condition based survey, *by J. Rebel, Germanischer Lloyd AG, H. P. Behrens, Dr. E. Horn GmbH, K. Langer, Peter Doehle Schiffahrts-KG, K. Wehner, EUB-Institut, Germany, N. H. Nojgaard, MAN Diesel A/S, Denmark* **21: A practical fact driven approach to solve & prevent damages, excessive wear & non-conformity to specifications of propulsion systems by a combination of metallurgical damage investigations, field measurements & advanced calculations,** *by P. Kloppenburg, Techno Fysica B.V., The Netherlands* **275: Precise real-time fuel consumption measurement,** *by M. Schrittwieser, C. Schneider, KRAL AG, Austria* **161: The differences of commercial cylinder oil performances for marine low-speed diesel engine between 70BN & 40BN for low sulphur content marine fuel oil,** *by T. Sasaki, Mitsui O.S.K. Lines, Ltd., Japan*	**222: Comparative diesel particulate trap performance assessment: impact of catalyst loading & feed gas characteristics in a modern CI engine,** *by A. Sappok, V. Wong, Massachusetts Institute of Technology, Y. Choi, Süd-Chemie Inc., USA* **122: Development of a charge air moisturiser system for NO_x reduction of a medium-speed diesel engine,** *by H. K. Park, J. S. Ha, S. H. Ghal, B. S. Kim, K. H. An, Hyundai Heavy Industries Co., Ltd., Korea* **95: A comparative study of mixed oxides catalysts to improve SCR efficiency at low temperature,** *by Y. Xiao, P. Zhou, University of Strathclyde, UK, Zhang Wenping, Liu Zhigang, Harbin Engineering University, PR China*	**263: A study into the spatial dispersion characteristics of the third generation conical spray,** *by Long Wu-qiang, Leng Xian-yin, Dalian University of Technology, PR China* **76: Fretting fatigue in diesel engineering,** *by R. Rabb, Wärtsilä Finland Oy, P. Hautala, Helsinki University of Technology, A. Lehtovaara, Tampere University of Technology, Finland* **184: An innovative glass coating provides corrosion resistance & a thermal barrier for highly loaded engine components,** *by T. Gross, Märkisches Werk GmbH, Germany* **105: Study of inlet air parameter effects on variation of peak cylinder bulk temperature of compression-ignition engine,** *by G. Chen, Gannon University, UK*	**142: Reliable & economical diesel engine installation operation by utilising CBM (Condition Based Maintenance),** *by B. Stärkle, Wärtsilä France s.a.s., France, I. Ahlqvist, J. Pellas, Wärtsilä Finland Oy, Finland* **71: Online services,** *by M. Diessner, A. Marzinek, MAN Diesel SE, Germany* **106: EFI-system for redundant engine control of single engine main propulsion installations,** *by I. Bach, H. Hans, M.-T. Heller, J. Nutto, A. Jaufmann, HEINZMANN GmbH & Co. KG, Germany* **187: Engine management & automation, keeping pace with changes,** *by S. Fankhauser, Wärtsilä Switzerland Ltd., Switzerland*
10:00	30 minutes coffee break			

TECHNICAL PROGRAMME WEDNESDAY, 23rd MAY 2007

Time	Room A	Room B	Room C	Room D
10:30	**(13–2)** User aspects marine — Field experiences	**(7–3)** Gas engine technology	**(12)** Integrated systems — Piston engines & turbines	**(5–2)** Components — Crankshaft & bearings
	Chairman: H. Niven, *Humphrey Niven Engines Ltd., UK*	Chairman: S. Laiminger, *GE Jenbacher GmbH & Co. OHG, Austria*	Chairman: H. Pleimling, *FEV Motorentechnik GmbH, Germany*	Chairman: R. Aufischer, *MIBA Gleitlager GmbH, Austria*
	57: Service experience of MAN 2-stroke diesel engines, *by S. B. Jakobsen, C.-E. Egeberg, MAN Diesel A/S, Denmark* **274: Some common field experience with large bore 2-stroke engines,** *by Ø. Toft, Bergesen Worldwide Gas ASA, Norway, J. Thomsen, A.P. Møller, Denmark,* **240: Field experiences with MTU 20V 8000 engines in various marine applications,** *by S. Müller, MTU Friedrichshafen GmbH, Germany* **259: Enhanced classification requirements for engine safety,** *by N. Rattenbury, Lloyds Register, UK*	**162: Potential of HCCI for large natural gas fuelled engines,** *by A. Wimmer, G. Kogler, E. Schnessl, H. Winter, LEC — Large Engines Competence Center, Austria* **173: Investigation on the combustion characteristics of the compression ignition divided chamber combustion system of the natural gas engine,** *by Zhang Huiming, Zhang Defu, Zhent Qingping, Tianjin University, PR China* **214: Optimised utilisation of each individual cylinder of a multi port injected gas engine achieved by using intelligent software algorithms,** *by L. Andersson, T. Ryckenberg, L. Haraldsson, Wärtsilä Sweden AB, Sweden* **261: Gas fuelled ships,** *by P. M. Einang, MARINTEK — Norwegian Marine Technology Research Institute, Norway*	**63: New application fields for marine waste heat systems by analysing the main design parameters,** *by Z. Hou, K. Fusstetter, M. Kahi, P. Neuenschwander, ABB Turbo Systems Ltd., Switzerland* **72: High efficient combination of 2-stroke direct propulsion drives with diesel-electric drives via recovery of thermal energy,** *by K. Tigges, Siemens AG, Germany* **78: Combined power, heat & cooling plants for air conditioning in mines,** *by J. Schöer, A. Hümbert, STEAG Saar Energie AG, Germany* **170: Isoengine test experience & proposed design improvements,** *by K. Sugiura, M. Kunimitsu, Mitsui Engineering & Shipbuilding Co., Ltd., Japan, M. Coney, RWE npower, UK*	**42: Accurate measurement of oil film thickness using LIF method to improve load carrying capacity of crosshead bearings,** *by T. Kitahara, Kyushu University, D. Nakahara, Daido Metal Co., Ltd., Japan* **110: Experimental study on the effectiveness of monitoring techniques for main bearings of marine diesel engines,** *by Y. Song, H. Shiihara, Y. Nagayama, D. Shiraki, Nippon Kaiji Kyokai (Class NK), Japan* **138: A study considering the influence of the connecting rod structure on big end bearing performance,** *by M. Fooks, J. Harrison, Daido Industrial Bearings Europe Limited, D. Bell, Ricardo Software, H. Govett, Ricardo UK Ltd., UK* **127: Reliability assessment of cast steel crankshaft for stationary engine,** *by E. Otsuki, Y. Hanawa, T. Hamada, H. Kubo, Kobe Steel, Ltd., S. Kajihara, Mitsui Engineering & Shipbuilding Co., Ltd., Japan*
12:00	Lunch break			

CIMAC Congress 07

TECHNICAL PROGRAMME WEDNESDAY, 23rd MAY 2007

Time	Room A	Room B	Room C	Room D
13:30	**(13–3)** User aspects marine — Fuels & oils	**(8)** Gas engines — Component technology	**(4)** Tribology — Diesel engines	**(5–3)** Components — Injection
	Chairman: Ø. Toft, *Bergesen Worldwide Gas ASA, Norway*	Chairman: E. Gust, *ZOLLERN BHW Gleitlager GmbH & Co. KG, Germany*	Chairman: H. Gehring, *MAN Diesel SE, Germany*	Chairman: Y. Itoh, *Niigata Power Systems Co., Ltd., Japan*
	276: Consequences of fuel oil variations on marine booster pumps, *by C. Schneider, T. Flauger, KRAL AG, Austria* **213: Drip oil analysis for marine diesel engines — resume from two years of experience,** *by S. Bots, Wearcheck GmbH, Germany* **74: Problem in the near future — low sulphur & low grade bunker fuel,** *by K. Takasaki, H. Tajima, Kyushu University, J. Hirata, Japanese Marine Equipment Association, K. Sugiura, Mitsui Engineering & Shipbuilding Co., Ltd., T. Kurosawa, T. Hashimoto, Nippon Kaiji Kyokai (Class NK), H. Miyano, A. Takeda, Nippon Yuka Kogyo Co., Ltd., D. Suzuki, NYK Line, T. Hayashi, Nippon Oil Corporation, Japan* **149: The assured safe reduction of cylinder oil feed rates,** *by J. Smythe, G. Hitchings, Infineum International Ltd., UK*	**114: MAHLE piston designs for state of the art gas engines,** *by R. Schmidt, MAHLE GmbH, Germany* **7: High temperature- & intelligent pressure sensors based on thin film technology including modular electronic concept of data acquisition & processing for closed loop control on gas engines,** *by S. Neumann, IMES GmbH, Germany* **179: Engine control system development using rapid prototyping hardware & software,** *by M. Flory, J. Hiltner, Hiltner Combustion Systems, USA*	**61: Advanced applied research unravelling the fundamentals of 2-stroke engine cylinder lubrication — an innovative on-line measurement method based on the use of radio-active tracers,** *by V. Doyen TOTAL France, France, R. K. Drijfholt, Wärtsilä Switzerland Ltd., Switzerland, T. Delvigne, Delta Services Industriels (DSi), Belgium* **91: Base oil trend creates challenge for trunk piston engine oil additive technology,** *by C. H. M. Boons, Chevron Oronite LLC, USA, D. J. E. Vrolijk, W. P. A. van Houten, Chevron Oronite Technology b.v., The Netherlands* **145: Safe engine operation using a single TBN cylinder lubricant with high & low sulphur content fuels,** *by T. Garner, Infineum International Ltd., UK, L. Voss, Hapag-Lloyd Container Linie GmbH, Germany, C. Røjgaard, MAN Diesel A/S, Denmark* **246: Application oriented bearing testing,** *by C. Forstner, G. Mairhofer, Miba Gleitlager GmbH, Austria*	**137: Advanced technology for HFO injection systems developed for medium-speed engines,** *by C. Senghaas, O. Altmann, M. Schwalbe, L'Orange GmbH, Germany, D. Jay, K. Lehtonen, Wärtsilä Corporation, Finland* **23: Durability & longtime stability in operation of EFI systems for diesel, HFO & gas engines,** *by M. Stöckli, P. Affolter, H. O. Geisser, DUAP AG, Switzerland* **70: New common rail systems suited for diesel engines from 1 to 5 MW: modeling simulations & hardware results,** *by M. Ganser, U. Moser, L. Hauger, Ganser CRS AG, Switzerland*
15:00	30 minutes coffee break			
15:30	**Panel: "Mean time between overhauls (MTBO)"** Chairman: Ø. Toft, *Bergesen Worldwide Gas ASA, Norway* *Panelists to be announced*		**Panel: "Alternative fuels & gas quality — the main parameters on emissions & reliability"** Chairman: L. M. Nerheim, *Ricardo UK Ltd., UK* *Panelists to be announced*	
17:00	End of Technical Sessions for Wednesday			

POSTER SESSION FOR WEDNESDAY, 23rd MAY 2007

Session 3 (continued)

195: Simulation of premixed turbulent combustion with the peninsula-fractal combustion model, *by Liu Zhien, Huazhong University of Science and Technology, PR China*

253: Fuel filtration — concepts to meet the requirement, *by S. Schmitz, T. Vogel, Boll & Kirch Filterbau GmbH, Germany*

266: Combustion & emissions performance of marine heavy fuels, *by F. Kremer, S. Wolkan, Petróleo Brasileiro S. A. (PETROBRAS), Brazil, P. M. Einang, MARINTEK — Norwegian Marine Technology Research Institute, Norway*

Session 4

117: A study of wear phenomenon of piston rings & cylinder liners of large bore low-speed marine diesel engines, *by Y. Saito, H. Ukai, T. Yamada, Ishikawajima-Harima Heavy Industries Co., Ltd., T. Nakashima, Diesel United Co., Ltd., Japan*

144: Meeting the challenge of new base fluids for the lubrication of medium-speed marine engines — an additive approach, *by P. Watts, D. Adams, J. Dodd, P. Dowding, A. Doyle, Infineum International Ltd., UK*

150: Use of on-line sensor technology for oil & machinery condition monitoring — case studies on real world applications & their use to predict machinery failure & extend oil change interval, *by I. Lamont, Kittiwake Developments Ltd., UK*

155: Oil stress factor in practice: field experience in a range of medium-speed engines, *by J. Spencer, W. Ang, Infineum International Ltd., UK*

186: Investigation of cylinder liner lacquers in the North Sea & Norwegian Sea regions, *by Ø. Buhaug, MARINTEK — Norwegian Marine Technology Research Institute, Norway*

220: Studies on tribology of valve trains & engine oils in diesel engines, *by M. Soejima, Y. Wakuri, Kyushu Sangyo University, T. Hamatake, Oita University, Japan*

254: Aluminium-base bearings – performance, limitations, new developments, *by R. Mergen, G. Gumpoldsberger, Miba Gleitlager GmbH, F. Gruen, I. Godor, University of Leoben, Austria*

281: Analysis based solutions for engine bearing related problems, *by V. Fridman, Technical Mechanics and Electronics, I. Piraner, C. Musolff, Cummins, Inc., USA*

Session 5

12: New crankshaft lathe for small 2-stroke engines, *by D. Weiss, Waldrich Siegen Werkzeugmaschinen GmbH, Germany*

16: Requirements to condition monitoring systems in condition based maintenance environments, *by O. Dossing, Rovsing Dynamics A/S, Denmark*

46: Improved wear & friction characteristics of surface coatings on piston grooves of large slow-speed engines, *by S. Kanungo, S. Dixit, Tolani Maritime Institute, A. Khanna, Indian Institute Of Technology, India*

54: Study on crankshaft strength of engines with multi-academic subjects, *by Sun Jun, Gui Changlin, Hefei University of Technology, PR China*

79: Cylinder pressure measurement via indicating cock, *by R. Turunen, O. Kaario, VTT, G. Liljenfeldt, Wärtsilä Finland Oy, Finland*

113: Effect of microstructural characteristics on the mechanical & wear properties of grey cast iron cylinder liner for marine diesel engine, *by J.-H. Hwang, Hyundai Heavy Industries Co., Ltd., Korea*

191: Effects of rounding-off inlet hole in fuel nozzle on spray & combustion characteristics under high-pressure & high-temperature, *by T. N. Tuan, H. Okada, T. Tsukamoto, K. Ohe, K. Iwasawa, Tokyo University of Marine Science and Technology, Japan*

CIMAC Congress 07

TECHNICAL PROGRAMME THURSDAY, 24th MAY 2007

Time	Room A	Room B	Room C	Room D
08:30	**(14–1)** User aspects land based applications — Power generation	**(5–4)** Components — Shaft alignment	**(5–5)** Components — Monitoring	**(6–2)** Electronic control systems — Low-speed engines
	Chairman: G. Hellén, *Wärtsilä Corporation, Finland*	Chairman: F.-G. Cantow, *Federal Mogul Burscheid GmbH, Germany*	Chairman: S. Fritz, *Southwest Research Institute (SwRI), USA*	Chairman: T. Tanaka, *Mitsui Engineering & Shipbuilding Co., Ltd., Japan*
	205: Recent experience operating two large diesel power barges in Central America, *by T. Giron, Prisma Energy International, Guatemala, A. Killinger, MPR Associates, Inc., USA* **211: Availability analysis of CHP systems & its application to electrical power generation,** *by G. Javadirad, Iran Heavy Diesel Engine Mfg. Co., M. Mirsalim, Amirkabir University of Technology, Iran* **265: Optimisation of supercharged lean mixture gas Otto engines for mains & independent operation,** *by R. Henn, DEUTZ Power Systems GmbH & Co. KG, Germany* **255: Conversion of diesel engines to gas-diesel operation: an analysis,** *by J. Klimstra, R. Bosma, J. H. Broersma, Wärtsilä Nederland B.V., The Netherlands*	**94: The importance of alignment for an engine builder,** *by W. Schiffer, Wärtsilä Switzerland Ltd., Switzerland* **160: Optimisation of both engine & shaft alignment for hull deflection,** *by I. Sugimoto, Hitachi Zosen Corporation, T. Nakao, Hitachi Zosen Diesel & Engineering Co., Ltd., Japan* **236: Effect of the hull deflections on propulsion system bearing loading,** *by D. Sverko, American Bureau of Shipping (ABS), Canada* **244: Contamination & consumption of crank case system oil in slow-speed engines,** *by U. Müller, MT Sealing Technology, Inc., Switzerland*	**169: Engine monitoring & safety — field experience of BeCOMS Bearing Condition Online Monitoring System — damage localisation & advanced data analysis for comprehensive engine protection,** *by W. Kuhn, Schaller & Dr. Kuhn EMS GmbH, Germany* **172: Evaluation of complete support system for maintenance in an engine room,** *by Y. Isozaki, K. Imai, Mitsui Engineering & Shipbuilding Co., Ltd., M. Kaibara, Daihatsu Diesel Mfg.Co. Ltd., Japan* **215: Self-learning torsional vibration monitoring system for detection of misfiring & malfunction in diesel engine plants,** *by J.-G. Park, S.-P. Seo, K.-S. Oh, STX Engine Co., Ltd., Korea*	**209: Status & future of the ECS of the ME engine,** *by P. Sørensen, T. S. Knudsen, MAN Diesel A/S, Denmark* **77: Common rail Wärtsilä 2-stroke engines in practice,** *by H. Brunner, M. Betschart, Wärtsilä Switzerland Ltd., Switzerland* **75: Creating a whole range of benefits with the MITSUBISHI UEC eco-engine,** *by M. Sugihara, K. Edo, T. Tanida, Mitsubishi Heavy Industries, Ltd., Japan* **44: Electronic engine control for ice operation of tankers,** *by G. Livanos, G. Papalambrou, N. P. Kyrtatos, A. Christou, National Technical University of Athens, Greece*
10:00	30 minutes coffee break			

TECHNICAL PROGRAMME THURSDAY, 24th MAY 2007

Time	Room A	Room B	Room C	Room D
10:30	**(14–2)** User aspects land based applications — Emissions & lubricants	**(5–6)** Components — Noise & vibration	**(5–1)** Components — Design	**(6–3)** Electronic control systems — Medium & high-speed engines
	Chairman: D. Plohberger, *DEUTZ Power Systems GmbH & Co. KG, Germany*	Chairman: K. Sugiura, *Mitsui Engineering & Shipbuilding Co., Ltd., Japan*	Chairman: F. Koch, *MAN Diesel SE, Germany*	Chairman: K. Heim, *Wärtsilä Switzerland Ltd., Switzerland*
	73: Plume visibility & emission management in a large size heavy fuel oil fired diesel engine power station in Macau, *by J. F. P. Amorim, J. J. Valente, Companhia Electricidade de Macau (CEM), PR China* **41: Fuel consumption & exhaust emissions from a 1,500 KW hybrid road-switcher locomotive,** *by S. Fritz, J. Hedrick, R. Honc, Southwest Research Institute (SwRI), A. Bennett, M. Schell, A. Tarnow, Railpower Hybrid Technologies, Inc., USA* **146: A holistic evaluation of multi function fuel additives in powergen engines running on heavy fuels — a CIMAC INDIA task force report,** *by S. S. V. Ramakumar, R. K. Malhotra, B. M. Bansal, Indian Oil Corporation Ltd., R. Sarin, A. Shah, Wärtsilä India Ltd., India* **141: A field test comparison of two engine oils in North American railroad service,** *by F. W. Girshick, Infineum USA, L.P., USA*	**88: An experimental study of engine body vibration excited by torsional vibration on the diesel power plant,** *by D. Lee, Mokpo Maritime University, Y. Bae, Korea Electric Power Corporation, Korea* **130: Parameter identification of torsional vibration dampers by modern measurement & calculation methods,** *by T. Philipp, Geislinger GmbH, Austria* **203: Engine dynamics & vibration control,** *by H. Tienhaara, H. Mikonaho, Wärtsilä Finland Oy, Finland* **257: Anti-vibration design system for HiMSEN engines,** *by S.-M. Lee, W.-H. Kim, H.-S. Kim, J.-G. Bae, Hyundai Heavy Industries Co., Ltd., Korea*	**83: Progressive development of 2-stroke engine tribology,** *by K. Räss, Wärtsilä Switzerland Ltd., Switzerland* **247: Integration & modularisation in engine design,** *by M. Vaarasto, Wärtsilä Finland Oy, Finland* **84: Development of a novel 2-stroke exhaust valve with a mechanical valve rotator to achieve three-year TBO's,** *by H. Fellmann, R. Stanglmaier, Märkisches Werk GmbH, Germany* **241: Explosion risk evaluation for the inlet ducts, crankcase & exhaust systems of combustion engines running on alternative gaseous & liquid fuels,** *by J. Besau, HOERBIGER VENTILWERKE GMBH & Co. KG, Austria*	**188: Caterpillars electronically controlled injection systems for medium-speed engines,** *by F. Starke, Caterpillar, Inc., USA, U. Hopmann, Caterpillar Motoren GmbH & Co. KG, Germany* **233: Common rail experiences & new developments — 4-stroke Wärtsilä engines,** *by D. Jay, A. Järvi, K. Ehrstrom, Wärtsilä Finland Oy, Finland* **152: ADEC — the new MTU off-highway engine management,** *by O. Schnelle-Werner, H. Weidele, MTU Friedrichshafen GmbH, Germany*
12:00	Lunch break			
13:30	**The Collin Trust Lecture: "Fuel for Tomorrow"** by Prof. Dr. H. List, *AVL List GmbH, Austria* *Presentation of the Collin Trust Lecture Award, by Prof. Lars Collin, Sweden*			
14:30	**Panel: "25 CIMAC Congresses — driving source for future engine developments"** Chairman: C.-E. Egeberg, *MAN Diesel A/S, Denmark* *Panelists to be announced*			
16:00	End of Technical Sessions for Thursday			

POSTER SESSION FOR THURSDAY, 24th MAY 2007

Session 5 (continued)

238: Feed rate characteristics of motor-driven cylinder lubricator with electronic control quill in a large 2-stroke marine diesel engine, *by M.-W. Bae, Gyeongsang National University, H. Jung, Jinju Campus of Korea Polytecnic VII Colleges, I.-D. Kim, Graduate School of Gyeongsang National University, C.-H. Kang, Engineering Research Institute of Gyeongsang National University, Korea*

250: The development of the device for measuring crankshaft deflection by using the wireless communication, *by J. K. Kim, Doosan Engine Co., Ltd., Korea*

Session 6

116: A cooling water system analysis for a diesel engine with two-staged air cooler, *by B.-H. Kim, STX Engine Co., Ltd., Korea*

226: Approach for condition monitoring as integral part of engine & auxiliary systems, *by H. Mohr, AVL List GmbH, Austria*

227: The use of diesel engine simulation models in ship propulsion plant design & operation, *by H. Grimmelius, Delft University of Technology, P. Schulten, Ministry of Defence, D. Stapersma, Netherlands Defence Academy, The Netherlands, E. Mesbahi, University of Newcastle upon Tyne, UK*

256: A real-time simulation system of diesel engine based on RTW & Vxworks, *by Zhang Jie, Gao Shilun, Huazhong University of Science &Technology, PR China*

Session 7

33: Reducing emissions from gas engines through partial stratification, *by R. L. Evans, The University of British Columbia, Canada*

182: LPG as auxiliary fuel for gensets, *by P. Frederiksen, MAN Diesel A/S, Denmark*

Session 10

38: Efforts towards the effective use of unused energy by small gas turbine generators, *by H. Asai, M. Koyama, Y. Nakayama, K. Toba, Niigata Power Systems Co., Ltd., Japan*

202: High performance analysis on gas engine — gas turbine combined cycle integrated with Japanese super marine gas turbine, *by T. Tsuji, Maizuru National College of Technology, Japan*

Session 12

93: Parallel combined system of piston engines, *by K. Ito, A. Yuuki, K. Kosuge, Mitsubishi Heavy Industries, Ltd., Japan*

Session 13

282: Revision of MARPOL Annex VI and Directive 2005/33/EC key refining implications for the production and availability of low sulphur marine fuels, *by P.-M. Martinez Sanchez, CEPSA – Compania Espanola de Petroleos, S.A., Spain*

POSTER SESSION FOR THURSDAY, 24th MAY 2007

Session 14

14: Economical & environmental advantages of using natural gas as a fuel for inland water transport, *by A. Radwan, H. Barakat, Faculty of Engineering, Egypt*

58: The development & application of Chinese railway locomotive diesel engine lube, *by Yu Jun, Liu Jianxin, Petro-china Lubricant Company, PR China*

62: Development of large scale DME diesel power generation plant – NO_x reduction technology by large amount of EGR & DME use SCR, *by A. Shimizu, M. Yoshida, N. Konoshima, JFE Engineering Corporation, A. Todoroki, JFE Technos Corporation, H. Hayashi, JFE R&D Corporation, K. Nakao, Daihatsu Diesel Mfg. Co. Ltd., Japan*

18:30 **Gala Dinner Party**

The Technical Programme Committee

Dr. R. Aufischer, *MIBA Gleitlager GmbH, Austria*
C. Beiner, *MTU Friedrichshafen GmbH, Germany*
Dr. R. Beran, *AVL List GmbH, Austria*
Dr. T. Bouché, *AVL List GmbH, Austria*
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S. Fritz, *Southwest Research Institute (SwRI), USA*
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M. Pelzer, *CIMAC Central Secretariat, Germany*
Prof. Dr. S. Pischinger, *FEV Motorentechnik GmbH, Germany*
H. Pleimling, *FEV Motorentechnik GmbH, Germany*
D. Plohberger, *DEUTZ Power Systems GmbH & Co. KG, Germany*
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Dr. M. Sato, *Central Research Institute of Electric Power Industry, Japan*
Dr. H. S. Soyhan, *Sakarya University, Turkey*
F. Stadelmann, *MTU Friedrichshafen GmbH, Germany*
K. Sugiura, *Mitsui Engineering & Shipbuilding Co., Ltd., Japan*
Prof. K. Takeishi, *Osaka University, Japan*
T. Tanaka, *Mitsui Engineering & Shipbuilding Co., Ltd., Japan*
Dr. C. Teetz, *MTU Friedrichshafen GmbH, Germany*
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P. Vacra, *CIMAC Central Secretariat, Germany*
C. Van Geeteruyen, *Chevron Technology Gent, Belgium*
Prof. Dr. G. Wachtmeister, *Technical University of Munich, Germany*
Dr. H. E. Wettstein, *ALSTOM (Switzerland) Ltd., Switzerland*
T. Winter, *MAN Diesel SE, Germany*
K. Wojik, *AVL List GmbH, Austria*

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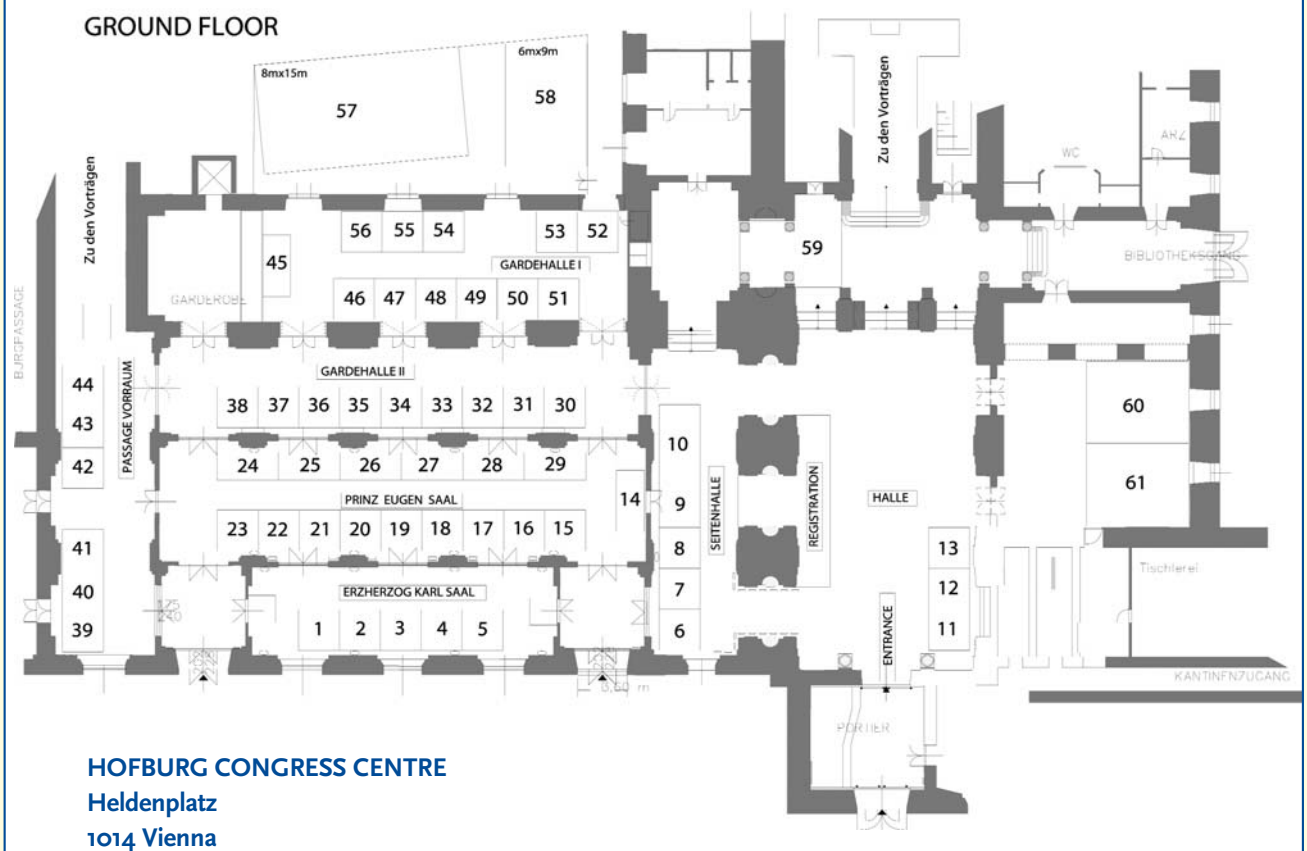
Congress 07

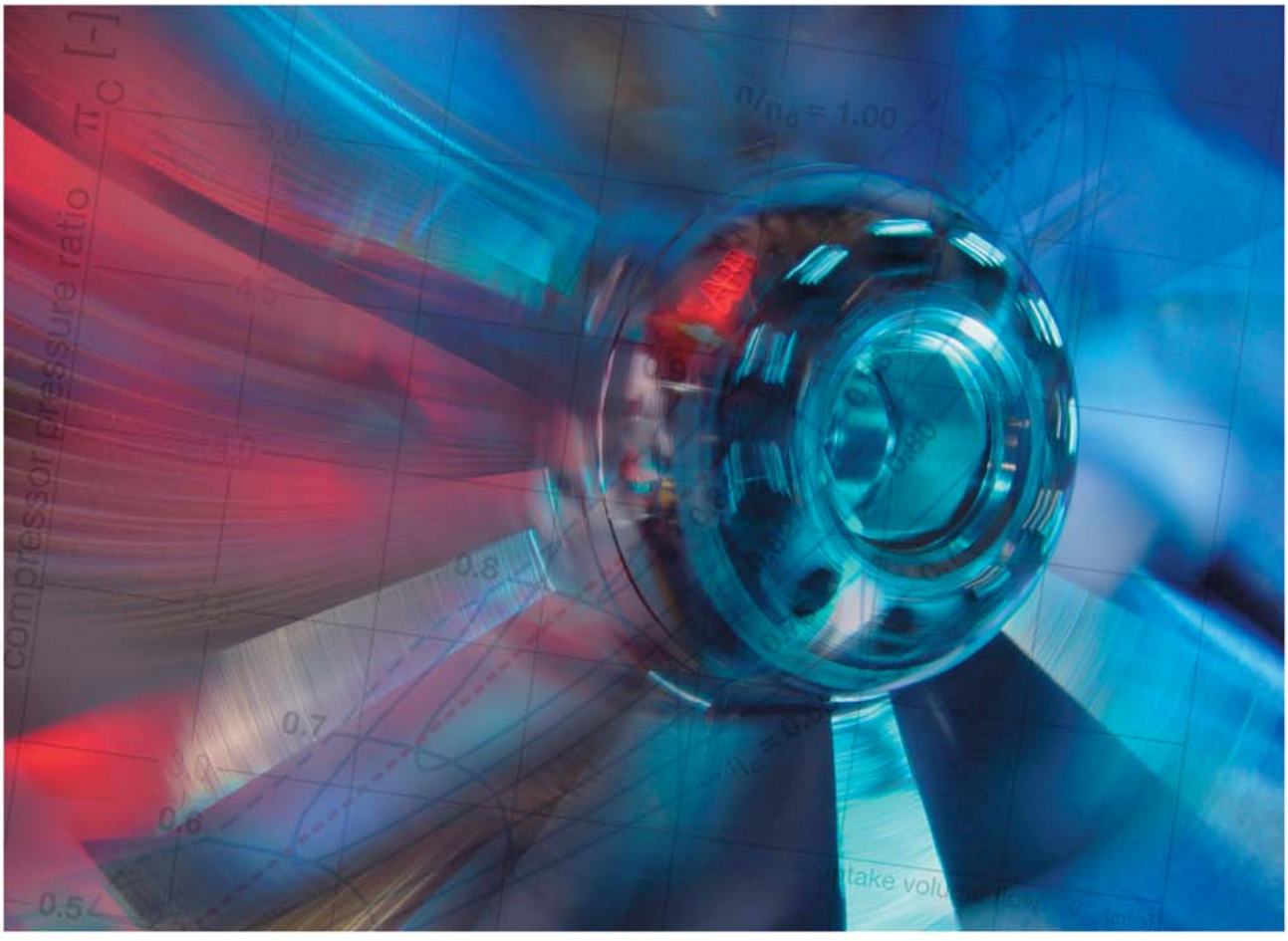
EXHIBITION

Together with the congress, a technical exhibition will be held in the Hofburg Congress Center on the ground floor (for details please see exhibition plan enclosed).
The exhibition occupies about 700 m² of floorage. Entrance to the exhibition is free of charge for all delegates, and coffee/tea will be served in the exhibition area during all coffee breaks. Integrated in the exhibition is the CIMAC technical poster session.

Please refer to the following webpage to gather further information on the exhibition and registration: *www.cimac.com* under Congress 2007/Exhibition.



HOFBURG CONGRESS CENTRE
Heldenplatz
1014 Vienna



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Optional Tours Monday, 21st May 2007

A varied choice of optional tours and activities for accompanying persons have been developed to provide a long lasting impression of Austria.

All tours and activities will be accompanied by an English-speaking guide and are based on a minimum number of 20 participants. All tours start and end at the Hofburg Congress Centre.

The prices are quoted in Euro/per person and may be subject to change for reasons beyond the control of Congress Secretariat (AIMS International Congress Services).

Cancellation terms of the optional tours and accompanying persons activities:
A full refund minus € 5,– will be granted if written notice is received prior to 15th April 2007. Cancellations after that date will not be refunded, unless the activity is cancelled due to lack of participation.

VIENNA HIGHLIGHTS (Bus tour)
Monday, 21st May 2007 (14:00–17:00)

During this city bus tour you will receive a first impresssion of Vienna. The tour starts on the Ringstraße, which was built between 1858 and 1865 after the destruction of the city wall. In the subsequent decades hundreds of private and public buildings were constructed, which reflect the respective styles of the different eras. Some examples are: the Hofburg (Imperial Castle), the Volksgarten (Public Garden), the Kunsthistorisches Museum (Art History Museum) and the Naturhistorisches Museum (Natural History Museum), the Parliament, the Rathaus (City Hall), the Burgtheater, etc.

Price per person including bus ride: **EUR 25,00**

LIECHTENSTEIN MUSEUM (Tour & Activity)
Monday, 21st May 2007 (14:00–17:00)

With the opening of the Liechtenstein Museum on 29th March 2004 a part of the art treasures of the baronial collections were returned to the Viennese Garden Palace, where it had already been on show for the public until 1938.

The Liechtenstein family, one of Europe's oldest families of noble lineage, were famous for collecting beautiful works of art over many generations. Painting, sculpture and artwork are presented in the Liechtenstein Museum as a complete work of art in which the building itself, with its furnishings and the collection pieces become a classical temple.

Artistic Production
Guests who are interested in setting their artistic talents free, have the opportunity to visit the Liechtenstein art studio and become creative themselves. This visit takes place after the guided tour through the permanent or special exhibition. The guests will then be served sparkling wine and sandwiches.

Price per person including admission to the Liechtenstein Museum, guided tour, art workshop, sparkling wine and sandwiches: **EUR 70,00**

Optional Tours Tuesday, 22nd May 2007

ART NOUVEAU AND THE "SECESSION" (Walking tour) Tuesday, 22nd May 2007 (10:00–12:00)

At the end of the 1800's many young artists felt that the Viennese galleries were far too conservative and decided to found a new art scene. And so the "Secession" was born. In the years 1897 to 1898 Josef Olbrich constructed the "Secession" Art-Nouveau gallery, which was financially supported by the government. The famous "Beethoven Frieze" was created by Klimt for the Beethoven Exhibition in 1902 and is still on display in the museum. The domed roof consists of golden leaves and is often referred to as "the golden cabbage" by the Viennese.

Price per person including admission to the Beethoven Frieze: **EUR 15,00**

TOUR OF SCHÖNBRUNN PALACE & APPLE STRUDEL SHOW (Tour & Activity) Tuesday, 22nd May 2007 (13:00–17:00)

Every room in this world famous palace has its own history. The anecdotes which combine with the important historical events are characteristic of the life style, atmosphere and international impression of the Emperor's time.
This tour will transport you into this wonderful world and grant you a deeper insight into the history of Schönbrunn.

After the tour of the palace, you are invited to visit the renowned apple strudel demonstration in the Café Residenz in the main courtyard of the Schönbrunn Palace. The former imperial bakery with its open display area, is the ideal place for the experienced baker to prepare and bake the original hand made Viennese apple strudel.
You will learn more about the exact preparation of this typical Viennese specialty and have the opportunity to enjoy a piece of the fresh apple strudel together with a cup of good coffee. The imperial bakery with its coffee house tables provides the perfect setting.

Price per person including guided tour of Schönbrunn and apple strudel show: **EUR 75,00**

Optional Tours Wednesday, 23rd May 2007

VIENNESE COOKERY COURSE (Activity)
Wednesday, 23rd May 2007 (09:00–14:00)

Vienna is famous for its good food and wine, so what better way to learn more about the Viennese culture than with a private cookery course.

All the guests in the group will have the possibility of preparing an individually composed menu and will then sit down to enjoy the meal and the appropriate wine.

A professional chef will demonstrate the diverse dishes and show the participants how to prepare it themselves. After the meal all the guests will then be presented with a certificate as a souvenir.

Price per person cookery course including chef's hat & apron: **EUR 156,00**

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DANUBE VALLEY (Bus tour)
Wednesday, 23rd May 2007 (09:00–17:30)

© Archiv Donau NÖ Tourismus GmbH/Bohnacker

This tour will take you west of Vienna, to the beautiful part of the Danube Valley known as the Wachau. The full day's journey includes a visit to the magnificent Benedictine abbey of Melk, which is one of the best examples of Baroque architecture in Austria. Lunch will be served in nearby Emmersdorf and will be followed by a boat ride on the Danube past some of the most romantic scenery, such as steep vine-yards, apricot orchards and castle ruins. A stop in the picturesque village of Dürnstein, where King Richard the Lionheart of England was held prisoner until rescued by his faithful minstrel Blondel, will round the day off. After this the bus will return along the valley to Vienna.

Price per person including bus ride, tours in Melk, lunch and boat ride: **EUR 122,00**

CIMAC Congress 07

Optional Tours Thursday, 24th May 2007

LEOPOLD MUSEUM (Walking tour)
Thursday, 24th May 2007 (9:30–12:00)

The Museums Quartier opened in June 2001 and is one of the ten largest cultural complexes in the world. It is also a progressive, inner-city cultural district that will have an enormous impact on future trends. The Museums Quartier combines baroque buildings, new architecture, cultural institutions of all sizes, different types of art and recreational facilities in one single spectacular location.

After a short walk through the Museums Quartier, the tour will continue to the Leopold Museum. The Leopold collection, which encompasses well over 5,000 pieces of art, was compiled by Rudolf and Elisabeth Leopold in the course of five decades and was transferred to the Leopold Museum private foundation in 1994. This museum houses the most extensive Egon Schiele collection as well as work by Gustav Klimt, Oskar Kokoschka and Richard Gerstl. These famous Austrian artists contributed significantly to the international art scene and share the museum with many other Austrian artists and important objects from the Austrian arts & crafts movement designers, such as Otto Wagner, Adolf Loos and Josef Hoffmann.

Price per person including admission to Leopold Museum: **EUR 17,00**

HISTORY OF VIENNESE COFFEE HOUSES
(Walking tour)
Thursday, 24th of May 2007 (10:00–12:00)

Follow the tradition and history of the Viennese Coffee Houses/Shops, the Coffee House culture, and the preparation of the "kleiner Schwarzer" (small black coffee) the "Melange" (milk coffee) and the "Einspänner" (typical Viennese coffee). A stroll through Vienna and a visit to some of the most famous Coffee houses, such as Griensteidl, Landtmann, Cafe Central, combined with a reading from the books of the 'Coffee House Writers' such as Altenberg, Torberg or Weigl, who spent most of their lives in their favourite Coffee House.

Price per person including coffee and cake in 2 coffee houses: **EUR 29,00**

CIMAC Congress 07

Optional Post Congress Tours/Technical Visits Friday, 25th May 2007

A variety of technical visits to Austrian manufacturers and institutions linked with the visit of sights will be offered to all participants and accompanying persons on Friday, 25th May 2007, just after the end of the congress.

Note: For each of the following tours a minimum number of **50 participants** is required. Due to the limited number of participants the registration will be done on "first come — first serve" basis.

Tour A — TOUR VIENNA: Hoerbiger Ventilwerke and Siemens Transportation
Friday, 25th May; 09:15 – 18:00
Bus tour by luxury coach air-conditioned.
09:15 Departure from the Hofburg Congress Center main entrance
- Hoerbiger Ventilwerke GmbH & Co KG
- Siemens Transportation Systems GmbH
- Steam Railway Museum — boiler house

Price per person: € 65,00 (+ 20% VAT) incl. coach, guide, entrance fee, lunch, one beverage
Note: This tour is limited to 70 persons

Tour B — TOUR GRAZ: AVL List and LEC Graz
Friday, 25th May; 08:45 – 19:00
Bus tour by luxury coach air-conditioned
08:45 Departure from the Hofburg Congress Center main entrance
Graz is also a tourist highlight on the same level as Vienna and Salzburg.
- AVL List GmbH
- LEC — Large Engines Competence Center Graz
- Historic City Centre Graz

Price per person: € 75,00 (+ 20% VAT) incl. coach, guide, entrance fee, lunch, one beverage
Note: This tour is limited to 100 persons

Tour C — TOUR ST. FLORIAN: Magna Powertrain and Miba Gleitlager
Friday, 25th May; 09:00 – 19:30
Bus tour by luxury coach air-conditioned
09:00 Departure from the Hofburg Congress Center main entrance
The baroque abbey of St. Florian is a tourist highlight in Upper Austria
- Magna Powertrain Engineering Center Steyr
- Miba Gleitlager GmbH Laakirchen
- Abbey St. Florian

Price per person: € 85,00 (+ 20% VAT) incl. Coach, guide, abbey St. Florian, lunch, one beverage
Note: This tour is limited to 100 persons

SPECIAL POST CONGRESS TOUR SALZBURG: GE Jenbacher, Miba Gleitlager, Robert Bosch and Geislinger
Friday, 25th May; 07:45 – 20:00
A very special tour will be organised to visit Austrian manufacturers in the west.
- Coach ride to the Airport Vienna
- Charter flight to Salzburg

Starting from the Airport Salzburg coach tour Salzburg and visit of one of the following companies:
- GE Jenbacher GmbH & Co OHG — approx. 4 hours coach ride in total

or
- Miba Gleitlager GmbH — approx. 3 hours coach ride in total

or
- Robert Bosch AG Grossdiesel — approx. 1 1/2 hours coach ride in total

or
- Geislinger GmbH — approx. 1 1/2 hours coach ride in total

Note: For the charter flight to Salzburg a **minimum of 80 participants** is required.
Deadline for registration is 12th April 2007
Price per person: € 380,00 (+20%VAT) incl. flight, all transfers as described in the programme, guide, lunch, one beverage

OPEN HOUSE

On Friday, 25th May 2007, the following companies offer an Open House and the opportunity for a company visit:
- GE Jenbacher GmbH & Co OHG, Achenseestrasse 1–3; 6200 Jenbach, Tyrol
- Geislinger GmbH, Hallwanger Landesstrasse 3, 5300 Hallwang, Salzburg
- Miba Gleitlager GmbH, Dr. Mitterbauerstrasse 3–5, 4663 Laakirchen, Upper Austria
- Magna Powertrain Engineering Center Steyr, Steyrer Strasse 32, 4300 St. Valentin, Upper Austria

Those congress participants who are willing to use the opportunity of the Open House, are kindly asked to organise the travel to and from the companies by themselves, but there is no need to make a reservation.

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CIMAC Congress 07

AUSTRIA

Austria is situated in southern Central Europe, covering a part of the eastern Alps and the Danube region and, although land-locked, it borders on the Mediterranean area. The country has a wide range of different landscapes, vegetation and climate and, situated as it is in the heart of a continent, it has always been an integral point for communication links between the trade and cultural centres of Europe.

Austria is a popular travel destination for guests from all over the world who appreciate the beautiful landscape, the rich culture, delicious food, hospitality and safety.

The Austrian landscape consists of high mountain regions, hill country and plains. The Alpine region stretches from the West to the South and East to the Vienna Basin, and takes up approximately two thirds of the country's surface area. The western part of the country is mountainous while the eastern part has hills and flatlands. The highest mountain is the Grossglockner (3,797m) and the main river is the Danube.

The population of Austria is as diverse as the landscape. Due to its central location in the heart of Europe and its vibrant history, a cross-section of cultures flow together here. Austria has a great number of impressive and culturally historical buildings, for example churches, monasteries, castles, palaces, and functional buildings such as museums, administration buildings and many more. The development of architecture and Austria's varied history have brought forth buildings in various styles.

Facts and Figures

GENERAL DATA:
Capital: Vienna
Population: 8.05 million
Total Area: 83,835 km²
Currency: EURO
Languages: German
National holiday: October 26
International Dialing Code: +43
Time Zone: Central European Time (C.E.T.)
Religion: Roman Catholic (78%), Protestant (5%), Other (17%)
Climate: Central European climate influenced by Atlantic climate
POLITICAL DATA:
Type of State: Federal Republic
Type of Government: Parliamentary Democracy

VIENNA

Vienna, the former capital of a multi-cultural empire in the heart of Europe, has become an international meeting point, European economy and culture cross-road and a gateway between East and West Europe. Vienna's stimulating atmosphere is the perfect place in which thoughts, ideas and theories can grow and mature.
Vienna has a long tradition of hosting international events: The Vienna Congress was held in 1814/15, when the new European Order after the victory over Napoleon I was established.

Vienna also has important characteristics needed to qualify as one of the best congress-cities. The city offers a wide range of cultural highlights (theatres, cabarets, historical and modern museums); musical entertainment (the Vienna Boys Choir, the Viennese Philharmonic Orchestra, the Vienna Opera Ball); typical Viennese specialities (Vienna coffee houses, Sacher Torte, Mozartkugeln) as well as breathtaking architecture (Romanticist monuments, Baroque palaces and Art Nouveau buildings).

Area: 414 km²
No. districts: 23
Population: 1,6 million
Altitude: 171 m above sea level

GENERAL INFORMATION

Bank and Exchange

Banks are generally open from Monday to Friday, from 08:00 to 12:30 and from 13:30 to 15:00 (Thursday from 08:00 to 12:30 and from 13:30 to 17:00). Most Austrian Banks have currency exchange facilities available during opening hours and can also change Traveller's cheques. Please ask about charges before changing money, as these may vary considerably. Automated cash dispenders are located outside most banks, where cash can be withdrawn 24 hours a day.

Business Hours and Shopping

Shopping hours are Monday to Friday 09:00 to 18:00 and Saturday 09:00 to 17:00. The shops are closed on Sundays. Luxury shops and cafés for elegant clientele can be found in the pedestrian zone of Vienna's 1st district. Another well known shopping area is Mariahilferstrasse. Visitors from non-EU countries should ask for VAT refunds when purchasing goods.

Climate

Vienna has a moderate continental climate: cold winters and warm summers, without excessive rain fall. It rains or snows, on average, not more than nine and not less than seven days a month. On average, 2,000 hours of sunshine are registered annually, and it can get quite hot at times during the summer. The best time to travel is spring, the beginning of summer and autumn.

VIENNA

Credit Cards

National and foreign Maestro cards as well as MasterCard, American Express, Visa and Diners are accepted. Credit cards are also accepted by numerous hotels, restaurants, shops and gas stations.

Currency

The official currency in Austria is the Euro.

Electricity

The standard voltage in Austria is 220 V. The Austrian network supplies a frequency of 50Hz. Plugs are continental-style two-pins.

Insurance

The conference organisers cannot accept liability for personal injuries sustained, or for loss or damage to property belonging to the participants and accompanying persons, either during or as a result of the congress. The registration does not include insurance.

It is strongly recommended that you arrange insurance when you register for the congress and book your travel arrangements. The insurance should be purchased in your country of origin.

Tip

In Austria it is usual to tip friendly service with 10% of the total amount of consumption.

Visa

Passport-holders from countries in Western Europe as well as from North America and Australia will not need a visa to enter Austria. For some nationalities, visas can be issued at the airport in Vienna upon arrival. Others may have to apply in advance. If in doubt, please check with your nearest Austrian embassy (*www.austria.org*), consulate or your airline.

The Congress Secretariat (AIMS International Congress Services) will be pleased to send letters of invitation to any individual making such a request. A letter of invitation often facilitates the procedure of obtaining a visa. Please note that the letter is not a commitment on the part of the congress to provide any financial support.

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CIMAC Congress 07

ACCOMMODATION

A number of rooms in different hotel categories have been booked at attractive rates. All the hotels are located in the city centre as this is more convenient for transport, shopping, sightseeing and dining.

To secure the accommodation of your choice, it is important to register as early as possible. The prices quoted are per room per night and include buffet breakfast, hotel service charge and VAT (Value Added Tax). All the hotel reservations, especially those received after 19th February 2007, will be subject to availability.

There will be no organized shuttle service to the congress venue, as the Hofburg Congress Center is located in the city centre and can easily be reached on foot or by public transport. The special room rates listed on the next page are only available if the reservations are made via the Congress Secretariat (AIMS International Congress Services) either electronically on the Online Registration Form or with the printed Registration Form. Please indicate two hotel preferences on your Registration Form to allow us to book your second choice hotel in case the first choice is no longer available.

BOOKING AND CANCELLATION CONDITIONS

Hotel Deposit

A hotel deposit of one night's stay must be paid in advance together with the Congress fees. The hotel deposit will be deducted from the total cost of the accommodation. The remaining hotel payment will be charged directly at the hotel during the Congress.

Cancellation

The hotel deposit will not be refundable for any cancellations after 15th April 2007. All cancellations and changes to reservations should be made in writing by e-mail, fax or post.

The cancellation policy for the accommodation is as follows:

Cancellation up to 15th April 2007	Handling fee of €15,–
From 15th April 2007 to arrival date	First night deposit
"No Show"	First night deposit

GENERAL INFORMATION

As soon as the Registration Form is received, your requested reservations will be completed, subject to availability. The verification of the hotel accommodation and the participation in the Congress will be included in a confirmation letter. Hotel vouchers will not be necessary as the Congress Secretariat will transfer the hotel deposit amounts to each hotel and the deposit amounts will be deducted from the remaining hotel invoice to be paid at the hotel during the Congress.

Participants are requested to pay their personal expenses directly to the hotel when checking out. Please observe the check-in and check-out times of the hotel. Generally check-in is possible between 14:00 and 18:00. Please indicate on the Registration Form if arrival at the hotel is scheduled after 18:00 so that the Congress Secretariat can inform the hotel about your late arrival. The check-out time in the hotels is usually 12:00.

Please note that all room reservations will be made on a "first come, first served" basis and all reservations will be subject to availability. Hotel bookings should be made through the Congress Secretariat in order to benefit from the special rates.

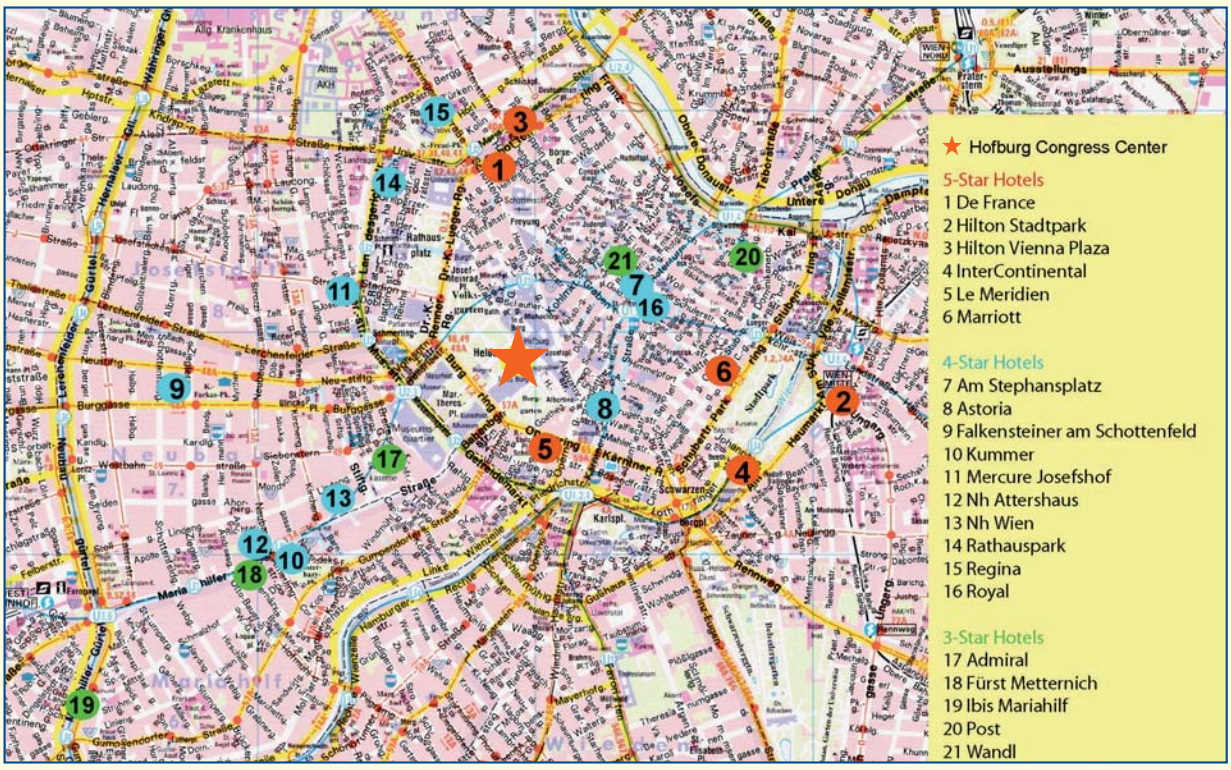
CIMAC Congress 07

Hotel Overview and Room Rates

	5-Star Hotels	Single room €	Double room €	Double room single use €	Access to Congress Venue
1	De France	215,00	235,00		approx. 10–15 min. walk
2	Hilton Stadtpark	219,00	239,00		approx. 10 min. by tram
3	Hilton Vienna Plaza	219,00	239,00		approx. 10 min. walk
4	InterContinental	225,00	245,00		approx. 10–15 min. walk
5	Le Meridien	240,00	255,00		approx. 5 min. walk
6	Marriott	219,00	239,00		approx. 10 min. by tram

	4-Star Hotels	Single room €	Double room €	Double room single use €	Access to Congress Venue
7	Am Stephansplatz	150,00	245,00	205,00	approx. 10 min. walk
8	Astoria	147,00	209,00	169,00	approx. 10 min. walk
9	Falkensteiner am Schottenfeld		169,00	133,00	approx. 5 min. by tram
10	Kummer	155,00	205,00	170,00	approx. 10 min. by subway
11	Mercure Josefshof		205,00	173,00	approx. 5–10 min. walk
12	Nh Atterseehaus	169,00	183,00		approx. 15 min. walk
13	Nh Wien	169,00	183,00		approx. 5 min. walk
14	Rathauspark	138,00	199,00	147,00	approx. 5 min. walk
15	Regina		180,00	160,00	approx. 7 min. walk
16	Royal		180,00	160,00	approx. 5–10 min. walk

	3-Star Hotels	Single room €	Double room €	Double room single use €	Access to Congress Venue
17	Admiral	89,00	105,00	105,00	approx. 10 min. walk
18	Fürst Metternich		144,00	120,00	approx. 10 min. by subway
19	Ibis Mariahilf	81,00	105,00		approx. 10 min. by subway
20	Post	75,00	120,00	110,00	approx. 10–15 min. walk
21	Wandl	98,00	150,00	130,00	approx. 5 min. walk



For detailed hotel information and booking conditions please visit the congress webpage *www.cimac.com*

CIMAC Congress 07

Underground Map

Getting to Vienna

Travelling by plane

Over 40 airline companies operate flights to Vienna.

The Vienna International Airport is 19 km (11 miles) south-east of the city centre (travel time approx. 30 minutes).

Airport Transfer

TAXI
A taxi rank is located directly in front of the arrivals hall. Expect to pay approx. €27,00 for a journey to the city centre.

BUS
Bus shuttle service between the Airport and the City Air Terminal (underground station — Landstraße/Wien-Mitte). Departures every 30 minutes — Journey time approx. 30 minutes.

Single ticket: Euro 6,00

Return ticket: Euro 11,00

Getting to Vienna

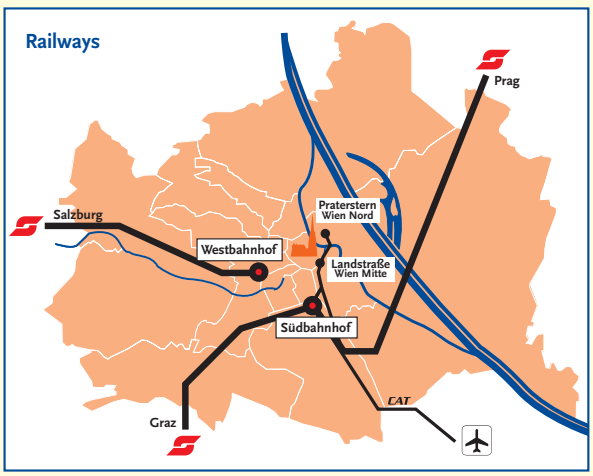
TRAIN

The **CAT (City Airport Train)** is a new fast train, which takes you non-stop to and from the airport in 16 minutes. From "Landstraße/Wien-Mitte" direct to the airport — and from the airport direct to "Landstraße/Wien-Mitte".

Automatic Ticket Machines: Single ticket: Euro 9,00/ Return ticket: Euro 16,00

You can pay for your CAT ticket with: Credit cards (Visa, Mastercard, Eurocard, American Express, Diners Club) or cash.

Online Tickets *www.cityairporttrain.com*; Single ticket: Euro 8,00/Return ticket: Euro 15,00
For more information about the CAT please visit *www.cityairporttrain.com*



Travelling by train

Vienna occupies a hub position in Europe's international rail network. Intercity and international express trains connect the capital with the rest of Austria and with all major cities in Europe.

Vienna has 4 main train stations: the "West-Bahnhof" (West train station), the "Süd-Bahnhof" (South train station), "Wien-Mitte" (Vienna centre) and the "Franz Josefsbahnhof". There are international services from most Central and Eastern European capitals. Night trains are available from most Western European countries (including cities such as Paris and Berlin) and from as far east as Moscow.

Transport to the city: All of Vienna's rails stations are connected to the underground network, either directly or by a very short walk.

For more information about the Austrian railway connections please visit *www.oebb.at*

Travelling by car/bus

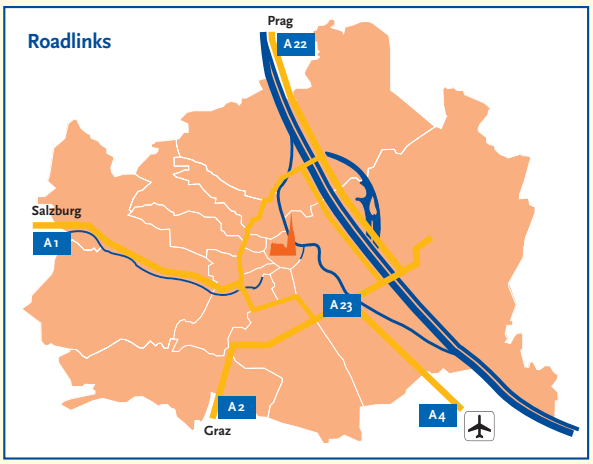
Austria's motorway network goes straight into Vienna, making it convenient and safe to reach the city by car or bus from anywhere on the European continent.

Austria has an excellent network of roads, with motorways (indicated with an "A") and national roads (or "B" roads) connecting the main cities and areas. Traffic drives on the right in Austria. The speed limits are 130km/h (81m/h)

Getting to Vienna

on motorways, 100km/h (62m/h) on main roads and 50km/h (31m/h) in built-up areas. Tolls are payable on a number of mountain roads, tunnels, motorways and main roads. Toll stickers, which must be attached to the windscreen, can be purchased from tobacconists, border-crossing points, petrol stations near the border and from automobile clubs. The legal maximum alcohol to blood ratio for driving is 0.5 ‰.

Routes to the city: The Westautobahn (A1) connects Vienna to Linz, Salzburg and Western Europe. The Südautobahn (A2) leads to Graz, Klagenfurt and the Italian border. The Ostautobahn (A4) passes the airport on its way to Bratislava and Budapest.



Driving times to Vienna: from Linz — 2 hours; Budapest — 2 hours 35 minutes; Salzburg — 3 hours.

Public Transport

The Wiener Linien (Vienna Transport Authority) network is one of the most modern and efficient in the world:

5 underground lines, 33 tram routes and 81 bus routes (including 22 night services) ensure that you can effortlessly reach almost any destination in Vienna. Waiting times are short or acceptable. At peak times an underground train runs every three minutes on average, and trams and buses around every three to five minutes.

In the evening hours, the intervals are between five minutes (underground) and a maximum of 15 minutes (tram). Night buses operate at half-hourly intervals.

The fares for single tickets are as follows:

1 single ticket (purchased in advance)	Euro 1,50
1 single ticket (purchased on tram/bus)	Euro 2,00

Single tickets can be purchased at tobacconists (Tabak-Trafik), from ticket machines in the underground stations, or directly in all trams and buses (not on the underground trains).

Please note that all congress delegates and accompanying persons will receive a ticket which allows them to use the public transport in Vienna for the duration of the CIMAC Congress 2007. This ticket will be available at the CIMAC 2007 registration desk in the Hofburg Congress Center.

Congress 07

GENERAL INFORMATION

The Congress will take place at the Hofburg Congress Center located in Vienna's city centre. The address is:

Hofburg Congress Center
Heldenplatz
1014 Vienna

Language

The official language of the Congress is English and all presentations are to be made in English. There is no translation service, but one of the chairmen at each Congress Session is German/Austrian native speaker. At the Post Congress Tours and Accompanying Persons Tour, there are guides speaking both English and German.

Congress Proceedings

For all participants, all Papers will be available in electronic form.

The Congress Proceedings can be ordered (for delivery after the Congress) in electronic form directly from:

CIMAC Central Secretariat
Lyoner Strasse 18
60528 Frankfurt, Germany
Phone: +49 69 6603 1567
Fax: +49 69 6603 1566
E-mail: cimac@vdma.org
Internet: www.cimac.com

Lunches

Lunch after the Opening Ceremony on Monday, 21st May is included in all delegates' and accompanying persons' fees. Lunches from Tuesday, 22nd May to Thursday, 24th May are included in the delegate registration fee but not in the accompanying persons' fee.

Contact for Questions:

For questions regarding Registration, Exhibition, Post Congress Tours and Optional Tours for accompanying persons, please contact:

Congress Secretariat
c/o AIMS International Congress Services
Mariannengasse 32
1090 Wien, Austria
Phone: +43 1 402 77 55 – 611
Fax: +43 1 402 77 31
E-Mail: cimac2007@aims-international.com

For questions regarding Hotel Accommodation, please contact:

Congress Secretariat
c/o AIMS International Congress Services
Mariannengasse 32
1090 Wien, Austria
Phone: +43 1 402 77 55 – 622
Fax: +43 1 402 77 31
E-Mail: cimac2007@aims-international.com

For questions regarding the Technical Programme, please contact:

CIMAC Central Secretariat
Lyoner Strasse 18
60528 Frankfurt, Germany
Phone: +49 69 6603 1567
Fax: +49 69 6603 1566
E-mail: cimac@vdma.org
Internet: www.cimac.com
Contact Persons: Mr. Markus Heseding, Secretary General
Mrs. Martina Pelzer
Mrs. Pinelopi Vacra

For questions directed at the local host, please contact:

National CIMAC Secretariat
c/o Association of the Austrian Machinery and Metalware Industries (FMMI)
Wiedner Hauptstrasse 63
1045 Wien, Austria
Phone: +43 5 90 900 - 3467
Fax: +43 1 505 10 20
E-Mail: spitzer@fmmi.at
Internet: www.fmmi.at
Contact Person: Mrs. Johanna Spitzer

Congress 07

REGISTRATION INFORMATION

The congress participation is open to all persons who are interested in attending the congress at the fees which are stated below.

How to register

- You may register online through the web by filling in the online registration form which is available on the congress webpage (*www.cimac.com*) under Congress 2007/Registration.
- You may alternatively register via the printed registration form which is enclosed in the back of the Preliminary Programme or can be downloaded from the congress webpage (*www.cimac.com*) under Registration.

Registration Fees

Registration Fees	Fee incl. VAT/€
CIMAC Members*	1.560,–
NON-Members	1.680,–
Speakers**	1.020,–
Accompanying Persons	360,–
Students***	720,–
One Day Tickets	600,–
Gala Dinner for One Day Participants + Exhibitors	102,–

* If you are uncertain on your membership status please contact the CIMAC Central Secretariat (*cimac@vdma.org*). US-ASME members are dealt as CIMAC members.

** Please indicate whether you are the presenter of a paper at the congress and indicate the abstract number. Please note that only one person per paper will be granted the reduced "speakers's fee".

*** Students are required to send a copy of their student ID to the Congress Secretariat (AIMS International Congress Services) by fax or e-mail.
Fax: +43 1 402 77 31
Email: cimac2007@aims-international.com

The registration fee for CIMAC-Members, Non-Members, Speakers and Students includes:

- Congress bag
- Congress badge (to be worn at all arrangements)
- Vienna city transportation ticket
- Admission to all sessions
- Admission to the exhibition
- Coffee/tea during coffee breaks
- Opening Ceremony on Monday 21st May in the Hofburg Congress Center
- Lunch on 21st–24th May in the Hofburg Congress Centre
- Welcome Reception on Monday 21st May in the Vienna City Hall
- ABB evening on Tuesday 22nd May
- Gala Dinner on 24th May in the Orangerie Schönbrunn

The One-day ticket includes:

- Congress bag
- Congress badge (to be worn at all arrangements)
- Admission to all sessions
- Admission to the exhibition
- Coffee/tea during coffee breaks
- Lunch in the Hofburg Congress Centre

* Those who would like to attend the Gala Dinner on 24th May are required to apply and pay separately.

The registration fee for accompanying persons includes:

- Congress badge (to be worn at all arrangements)
- Vienna city transportation ticket
- Admission to the exhibition
- Coffee/tea during coffee breaks
- Opening Ceremony on Monday 21st May in the Hofburg Congress Center
- Lunch after the Opening Ceremony in the Hofburg Congress Centre
- Welcome Reception on Monday 21st May in the Vienna City Hall
- ABB evening on Tuesday 22nd May
- Gala Dinner on 24th May in the Orangerie Schönbrunn

Congress 07

REGISTRATION INFORMATION

How to register at the Congress (on-site)

The registration counters are located on the ground floor of the congress venue:

Hofburg Congress Center, Heldenplatz, 1014 Vienna

Registration opening hours:

Sunday 20th May	14:00 – 18:00
Monday 21st May	08:00 – 17:00
Tuesday 22nd May	08:00 – 17:00
Wednesday 23rd May	08:00 – 17:00
Thursday 24th May	08:00 – 12:00

The congress badges will be handed over to you at the registration counter together with the congress bag.
All participants and accompanying persons are obliged to wear the official congress badges on all congress occasions. An additional fee will be charged for reproduction of lost congress badges.

The Opening Ceremony will take place at the Main Hall (Festsaal) of the Hofburg Conference Center on Monday from 10:00 to 12:00.
For those who intend to join the Opening Ceremony, we recommend that you register earlier in order to avoid a last-minute opening-ceremony rush.

Payment Instructions

All payments must be made in Euro either by bank transfer or credit card. No other type of payment will be accepted.

1) Payment by Bank Transfer:

Please note that all transfer charges must be paid by the participant.
Please indicate your name, registration number and the purpose of your payment in the message field on the bank transfer, so that the money can be assigned.
The bank transfer must be arranged no later than 20th April, 2007. After this deadline only credit card payments will be accepted.

Please transfer the full amount to the following bank account:
Congress Secretariat (AIMS International Congress Services)

Erste Österreichische Sparkasse/First Austrian Bank
Billrothstrasse, 1190 Vienna, Austria
Account N°: 052.077.38 **Bank Code:** 20 111
IBAN: AT09 2011 1000 0520 7738 **Swift Code:** GIBAATWW

2) Payment by Credit Card

The following credit cards are accepted:
Visa, Euro-/MasterCard, American Express and Diners

If you pay by credit card via the congress website, please submit your credit card number including the expiry date and the total sum charged to make the transaction. If you register using the printed registration form and wish to pay by credit card, we will send you a credit card form, which needs to be filled out completely and faxed back to the Congress Secretariat (AIMS International Congress Services).

Confirmation of Registration

The confirmation of registration and receipt of payment will only be sent when both the registration form and payment in full are received. The confirmation will be sent to the participant by post, fax or e-mail.

Cancellation Conditions

The amount to be refunded will depend on the cancellation date as follows:

Up to 14th March 2007:	90% refund
From 15th March to 9th April 2007	50% refund
After 10th April 2007	no refund

Cancellations must be made to the Congress Secretariat (AIMS International Congress Services) in writing either by letter, fax or e-mail. Refunds for cancellations received before 10th April 2007 will be returned after the CIMAC Congress. Bank transfer charges for cancellation refunds must also be paid by the participants.

Replacements
In the event that you are unable to participate in the congress and would like to send a substitute attendee, please contact the Congress Secretariat. Name substitutions are accepted at any time at an extra charge of € 10,–

Congress Secretariat of the 25th CIMAC Congress 2007 in Vienna
c/o AIMS International Congress Services GmbH
Mariannengasse 32, A-1090 Vienna
Phone:+43 1 402 77 55 – 37
Fax:+43 1 402 77 31
E-mail: cimac2007@aims-international.com

25th CIMAC World Congress 2007
on Combustion Engine Technology

May, 21–24, 2007
Hofburg Congress Center
Vienna – Austria

Congress 07

REGISTRATION FORM DEADLINE: 12th MAY 2007

Please return to:
AIMS International Congress Services, Mariannengasse 32, 1090 Vienna, AUSTRIA
Fax: +43 1 402 77 31, Tel: +43 1 402 77 55 – 37, E-mail: cimac2007@aims-international.com
OR REGISTER ONLINE: www.cimac.com

PARTICIPANT

Please print clearly in block letters!

☐ Mr. ☐ Mrs. ☐ Ms. Title (Dr., Dipl.-Ing., ...) _____

Last Name _____ First Name _____

Company _____

Street _____

Postal Code _____ City _____ State _____ Country _____

Phone (incl. country code) _____ Fax(incl. country code) _____

E-Mail _____

ACCOMPANYING PERSON

Last Name _____ First Name _____

REGISTRATION FEES

	Prices are including VAT
☐ CIMAC Member Fee *	EUR 1.560,00
☐ Non-Member Fee	EUR 1.680,00
☐ Speakers Fee **	EUR 1.020,00
☐ Students Fee ***	EUR 720,00
☐ Accompanying Person	EUR 360,00

	Prices are including VAT
☐ Day Ticket — Monday	EUR 600,00
☐ Day Ticket — Tuesday	EUR 600,00
☐ Day Ticket — Wednesday	EUR 600,00
☐ Day Ticket — Thursday	EUR 600,00

* If you are uncertain on your membership status, please contact Cimac Central Secretariat (*cimac@vdma.org*). US-ASME members are dealt as CIMAC members.

** Please indicate your abstract number _____ *** Please fax or e-mail your student ID to AIMS

FLIGHT ARRANGEMENTS

Austrian, Austrian arrows and Lauda are the official carriers for the CIMAC congress. You and one accompanying person can benefit from a favourable congress fare on Austrian, Austrian arrows and Lauda flights (excluding certain reduced and action fares). Please identify yourself as participant by presenting your registration and referring to: **CODE – CIMA7**

SOCIAL PROGRAMME

All Social Events are included in the Registration Fee (except Day Tickets)!
For organisational reason please indicate at which social event you intend to participate:

☐ Welcome Reception	Monday,	21st May 2007	☐ I will attend	☐ My accompanying person will attend
☐ Gala Dinner	Thursday,	24th May 2007	☐ I will attend	☐ My accompanying person will attend
☐ Gala Dinner for day ticket holders	€ 102,00			

POST CONGRESS TOURS (Friday, 25th May 2007)

☐ **TOUR A — TOUR VIENNA: Hoerbiger Ventilwerke and Siemens Transportation.** ____ person(s) € 65,00 (+20% VAT)
☐ **TOUR B — TOUR GRAZ: AVL List and LEC Graz.** ____ person(s) € 75,00 (+20% VAT)
☐ **TOUR C — TOUR ST. FLORIAN: Magna Powertrain and Miba Gleitlager.** ____ person(s) € 85,00 (+20% VAT)
☐ **SPECIAL POST CONGRESS TOUR SALZBURG: GE Jenbacher, Miba Gleitlager, Robert Bosch** and **Geislinger.** ____ person(s) € 380,00 (+20% VAT)

Please choose one company: ☐ **GE Jenbacher GmbH & Co OHG** — approx. 4 hours coach ride in total or ☐ **Miba Gleitlager GmbH** — approx. 3 hours coach ride in total or ☐ **Robert Bosch AG Grossdiesel** — approx. 1 1/2 hours coach ride in total or ☐ **Geislinger GmbH** — approx. 1 1/2 hours coach ride in total

25th CIMAC World Congress 2007
on Combustion Engine Technology

May, 21–24, 2007
Hofburg Congress Center
Vienna – Austria

Congress 07

REGISTRATION FORM DEADLINE: 12th MAY 2007

HOTEL RESERVATION

For all information about the offered hotels please refer to the congress webpage (*www.cimac.com*) under Accommodation or to chapter "Hotel Overview & Room Rates" in the Programme. Please indicate two hotel preferences to enable booking at your second choice hotel in case the first choice hotel is no longer available. Please be informed that a first night deposit has to be paid to guarantee your reservation.

1st hotel choice: _____ 2nd hotel choice: _____

Arrival Date: _____ Departure Date: _____

☐ Single Room ☐ Double Room Single Use ☐ Double Room (if you share the room with another delegate, please indicate the delegate's name here _____)

Remarks: _____

OPTIONAL TOURS / ACCOMPANYING PERSONS ACTIVITIES

Detailed information about the tours can be found in the Preliminary Programme or on the congress webpage.

		Prices are including VAT
☐ Vienna Highlights (Monday, 14:00–17:00)	_____ person(s)	EUR 25,00
☐ Liechtenstein Museum (Monday, 14:00–17:00)	_____ person(s)	EUR 70,00
☐ Art Nouveau during the "Secession" (Tuesday, 10:00–12:00)	_____ person(s)	EUR 15,00
☐ Tour of Schönbrunn P. & Apple Strudel Show (Tuesday, 13:00–17:00)	_____ person(s)	EUR 75,00
☐ Wachau — Danube Valley (Wednesday, 09:00–17:30)	_____ person(s)	EUR 122,00
☐ Viennese Cookery Course (Wednesday, 09:00–14:00)	_____ person(s)	EUR 156,00
☐ Leopold Museum (Thursday, 09:30–12:00)	_____ person(s)	EUR 17,00
☐ History of Viennese Coffee Houses (Thursday, 10:00–12:00)	_____ person(s)	EUR 29,00

PAYMENT

All payments must be made in Euro either by bank transfer or credit card.

Please indicate if you will pay by

☐ **Bank Transfer: (Please note that all banking fees have to be settled by the participant)**

After the receipt of your registration, we will send you a statement of all booked services. Please indicate your name, registration number and the purpose of your payment, so that the money can be assigned.

Banking Details: Erste Österreichische Sparkasse/First Austrian Bank, Billrothstrasse, 1190 Vienna, Austria
Account N°: 052.077.38 Bank Code: 20 111 IBAN: AT09 2011 1000 0520 7738 Swift Code: GIBAATWW

☐ **Credit Card:** ☐ VISA ☐ DINERS ☐ AMEX ☐ EURO/MASTERCARD

In case of payment by credit card, you will receive an extra form where you have to fill in your credit card details, the correct amount and your signature.

CANCELLATION / ALTERATION CONDITONS

All cancellation or alterations must be made in written form by letter, fax or e-mail to the Congress Secretariat *AIMS International Congress Services*. Kindly note that any refunds will be returned after the congress.

Cancellation Conditions for Registration:

Up to 14th March 2007	90% refund
From 15th March to 9th April 2007	50% refund
After 10th April 2007	no refund
Name change and other alterations	€ 10,00

Cancellation Conditions for Hotel Reservations:

Cancellation up to 31st March 2007	no charge
From 15th April 2007 to arrival date	first night
No-Show	first night

Cancellation Conditions for Tours

A full refund minus € 5,– will be granted if written notice is received prior to 15th April 2007. Cancellations after that date will not be refunded, unless the activity is cancelled due to lack of participation.

LIABILITY

The participants are required to arrange an insurance for cancellation, travel, loss of personal possessions, accident etc. on their own behalf. The Congress Secretariat (AIMS International Congress Services) and the CIMAC Congress Organisers cannot be held responsible for any loss, injury or damage to any property, whatever the cause may be. The liability of any persons and enterprises providing means of transportation or other services remains unaffected.
Only written arrangements are binding. The laws of the Republic of Austria shall apply. The legal venue is Vienna.

I have read and accepted the booking and cancellation conditions as well as the payment conditions of AIMS International Congress Services GmbH

Date _____ Signature _____

Austrian
Official Carrier

Austrian, Austrian arrows and Lauda are the official carriers for our event. They offer the most frequent flights to and from Austria.

Please contact your nearest Austrian Airlines office or travel agent where you will receive information on flights and fares.

As participant of the

"25th CIMAC World Congress on Combustion Engine Technology, May 21st – 24th, 2007"

you and one accompanying person will benefit from a favourable congress fare on Austrian, Austrian arrows and Lauda flights.*)

Please identify yourself as participant by presenting your registration and referring to:

CODE – CIMA7

If your ticket is issued at a travel agency, please ask your agent to contact his Austrian Airlines office.

*) excluding certain reduced and action fares

Participants from the USA please contact exclusively:

Lyon Travel
999 Putney Road, P. O. Box 6179
Brattleboro, Vermont 05302-
Toll Free Telephone Number: 800-639-3849
General Office Tel.: 1-802-254-6033
Fax: 1-802-254-6123
E-mail: conferences@lyontravel.com

Members of CIMAC

National Member Associations (NMAs):

Austria
FMMI
Wiedner Haupstraße 63
1045 Vienna
Phone: +43 590 900 3440
Fax: +43 15051020
E-mail: krafft@fmmi.at
Internet: www.fmmi.at

China
CSICE
2500 Jungong Road
Shanghai 200438
Phone: +86 21 65 74-53 23
Fax: +86 21 65 74-81 32
E-mail: cnnma211@126.com

Denmark
CIMAC DANMARKS NATIONALE KOMITÉ
c/o ABB A/S
Meterbuen 33
2740 Skovlunde
Phone: +45 44 50 40 51
Fax: +45 44 50 40 50
E-mail: peter.s.jensen@dk.abb.com

Finland
Technology Industries of Finland
Eteläranta 10
00131 Helsinki
Phone: +358 9 1 92-33 71
Fax: +358 9 1 62 44 62
E-mail: pekka.tuunanen@techind.fi
Internet: www.techind.fi

France
FIMECA
39–41, rue Louis Blanc
Maison de la Mécanique
92400 Paris-Courbevoie
Phone: +33 1 47 17 62 81
Fax: +33 1 47 17 62 82
E-mail: jean-pierre.corbet@wanadoo.fr
Internet: www.fim.net

Germany
Deutsches Nationales CIMAC Komitee
c/o VDMA
Lyoner Str. 18
60528 Frankfurt
Phone: +49 69 66 03-13 51
Fax: +49 69 66 03-23 51
E-mail: thorsten.herdan@vdma.org

Greece
Greek CIMAC Member Association
c/o NTUA
9, Iroon Politechniou
15710 Athens-Zografos
Phone: +30 210 77 21 119
Fax: +30 210 77 21 120
E-mail: npk@gracimac.org
Internet: www.lme.naval.ntua.gr/cimac_gr

India
CIMAC INDIA
c/o Indian Oil Corporation Ltd.
Research & Development Centre,
Sector 13,
Haryana St.
Faridabad 121 007
Phone: +91 129 5 28 56 11
Fax: +91 129 5 28 62 21
E-mail: ramakumarssv@iocrd.co.in

Iran
IRAN-CIMAC
c/o Iran Heavy Diesel Engine Mfg. Co.
No. 83th Vahid Dastjerdi,
Tehran-Zafar 19395-1855
Phone: +98 21 2 26 19 02
Fax: +98 21 2 26 19 03
E-mail: javadirad@gmail.com

Japan
JICEF
Kimura Building
6-6, Shinbashi 1-chome
Minato-ku
105-0004 Tokyo
Phone: +81 335 747 882
Fax: +81 335 747 883
E-mail: tayama@jicef.org

Korea
Secretariat of KOFCE
c/o Korea Marine Equipment Research
Institute
1125–22, Dongsam-dong
Youngdo-Gu
Busan 606-806
Phone: +82 51 4 05 21 00
Fax: +82 51 4 05 68 82
E-mail: jrkim@komeri.re.kr

Norway
MARINTEK
Otto Nielsensveg 10
7017 Trondheim
Phone: +47 73 59 55 00
Fax: +47 73 59 57 76
E-mail:
kristin.bjorkander@marintek.sintef.no
Internet: www.sintef.no

Sweden
Mr. Kurt V. Olsson
Agardevagen 33
15147 Södertalje
E-mail: luddeninc@telia.com

Switzerland
Swissmem (ASM/VSM)
Kirchenweg 4
8032 Zürich
Phone: +41 1 3 84 41 11
Fax: +41 1 3 84 48 45
E-mail: j.mermod@swissmem.com
Internet: www.swissmem.ch

United Kingdom
Humphrey Niven Engines Ltd.
20 Ashurst Drive
GORING-BY-SEA, WEST SUSSEX BN12 4SW
Phone: +44 1903 24 00 01
Fax: +44 1903 60 06 21
E-mail: h.niven@ntlworld.com

National Member Groups (NMGs):

USA
ASME
Three Park Avenue, 22W3
New York, NY 10016-5990
Phone: +1 212 591 7055
Fax: +1 212 591 7671
E-mail: bendoj@asme.org
Internet: www.asme.org

Congress 07

Members of CIMAC

Corporate Members (CMs):

Belgium
Chevron Texaco Technology Gent
Technologiepark-Zwijnaarde 2
9052 Ghent
Phone: +32 9 2 40 72 73
Fax: +32 9 2 40 72 11
E-mail: vermemb@chevrontexaco.com
Internet: www.chevrontexaco.com

Brazil
PETROBRAS
Av. República do Chile, 65
Sala 2001
20031–912 Rio de Janeiro RJ
Phone: +55 21 25 34-31 69
Fax: +55 21 25 34-40 14
E-mail: kremer@petrobas.com.br
Internet: www.petrobras.com.br

Canada
Teekay Shipping (Canada) Ltd.
Suite 2000 Bentall 5
550 Burrard Street
Vancouver, B. C. V6C 2K2
Phone: +1 604 6 09 29 80
Fax: +1 604 8 44 66 50
E-mail: derek.walford@teekay.com
Internet: www.teekay.com

Seaspan Ship Management Ltd.
2600–200 Granville Street
Vancouver, B. C. V6C 1S4
Phone: +1 604 6 38 25 82
Fax: +1 604 6 38 25 95
E-mail: rdewan@seaspanltd.ca
Internet: www.seaspanshipmanagement.com

Czech Republic
PBS Turbo s.r.o.
Vlkovská 279
595 12 Velká Bíteš
Phone: +420 566 822-218
Fax: +420 566 822-272
E-mail: klima.j@pbsvb.cz
Internet: www.pbsvb.cz

Guatemala
Generadora Electrica del Norte, Lta.
Km. 292 Carretera al Atlantico
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