



Tampere Manufacturing Summit

LEAN AND BEYOND BETWEEN EXTREMES

**8 – 10 June 2009, Tampere, Finland
Tampere Hall**

www.tamperemanufacturingsummit.fi

Tampere Manufacturing Summit 2009 is an international benchmarking and networking forum that brings together front line industrial manufacturers and researchers to exchange opinions and ideas about different aspects of manufacturing and keys to improved global competitiveness. The summit programme is based on invited presentations by internationally recognized experts from industry and academia discussing industrial best practices and scientific and technological advances and breakthroughs in manufacturing.



Tampere Manufacturing Summit

Preparing for the Upturn!

Welcome to the 2nd Tampere Manufacturing Summit 2009 in Tampere, a city with strong manufacturing industries. Tampere is a good example on how to transform from a traditional industry towards a knowledge-based industry and an attractive center of high technology.

We all can see around us how the economic downturn is affecting the manufacturing industry, e.g. in the form of job cuts, budget freezes and decline in confidence for the future. However, it is certain that this downturn will be followed by an upturn. Instead of complete stagnation it's much better to prepare and get ready for the upturn. In the middle of the current challenges and between different extremes we could change our outlook and try to turn the challenges into opportunities.

One example of the opportunities is the European decision to boost R&D and other smart investments in the manufacturing sector as part of the European economic recovery plan in order to lay down a strong base for the future competitiveness of the manufacturing industry. The total R&D budget for the "Factories of the Future" initiative is 1.2 billion euros, of which the European Commission foresees to provide a contribution of 50%.

Globalization means close networking of the flow of goods, information and capital, which promotes the worldwide distributed production of goods. At the same time, the markets are changing. Customers call for faster product changes and demand products that are increasingly targeted to individual needs. Mass production is therefore replaced by customized and personalized production of individual products.

Starting with Lean and going Beyond you are able to improve your position in the current business environment and prepare yourself for the upturn. In the longer term, the road towards sustainable technologies and knowledge-based industries calls for a strong cooperation between the stakeholders on a global level.

The Tampere Manufacturing Summit 2009 will gather together stakeholders from industry, universities and research institutions to discuss the current trends and forces shaping the manufacturing industry. Through examples of the latest technological advances, best practices and business and manufacturing strategies, the summit will give the attendees tools and ideas on how to turn the challenges to opportunities and business success in the coming years.

Day 1

Monday, June 8, 2009

09:00 Registration

09:45 Welcome addresses

- Prof. Reijo Tuokko, Head of Department, Production Engineering, Tampere University of Technology
- Juhani Rantalainen, Director, Business Development and Marketing, Fastems Oy Ab
- Dr. Stig Gustavson, Chairman of the Board, Konecranes Oyj

10:15 Opening Plenary Session

- **Smart Investments in Europe in the Factories of Future**
- Dr. Andrea Gentili, European Commission
- **How to Manufacture World's Biggest Cruiser? –The Genesis Project**
- Sauli Eloranta, VP, STX Europe Oy
- **Global Manufacturing Strategy at Nokia**
- Esa-Matti Puputti, VP, Technology Strategy and Quality, Nokia Corp.

12:00 Lunch

13:00 Competitive and Sustainable Manufacturing

- **The Manufacture Road –Towards Competitive and Sustainable High-Adding-Value Manufacturing**
- Prof. F. Jovane, Politecnico di Milano, Italy
- **Sustainable and Lifecycle Information-based Manufacturing**
- Dr. Ram Sriram, NIST, USA
- **Monozukuri in Hitachi**
- Dr. Takashi Inoue, Hitachi Ltd., Japan

14:45 Coffee Break

15:15 Competitive and Sustainable Manufacturing

- **Integrative Production Technologies for High-Wage Countries**
- Prof. Dr.-Ing. Christian Brecher, RWTH Aachen University, Germany
- **Business Trends and Development within the Automotive Industry**
- Sven-Åke Berglie, Managing Director, FKG, Sweden
- **From Automotive Contract Manufacturer to Automotive Solution Provider –The Strategy Transformation of Valmet Automotive**
- Hannu Berger, Senior Vice President, Business Development, Valmet Automotive Oy
- **Stringent Requirements on Safety and Environment Make Automotive Car Body Assembly a Challenging Task**
- Mr. Johnny K. Larsson, Technical Specialist BIW Joining Technologies, Supervisor Advanced Body Concepts, Senior Car Body Design Engineer, Volvo Car Corporation, Sweden

17:30 Bus Transportation to the Hotels

19:15 Bus Transportation to the Banquette

19:30 Summit Banquette at the Music Theatre Palatsi

23:00 Bus Transportation to the Hotels

Day 2

Tuesday, June 9, 2009

08:00 Registration

08:00 Bus transportation from the Hotels

08:45 Lean and Competitive

- **In Pursuit of the Perfect Plant**
- Simon Pollard, VP, Manufacturing Operations and Execution, SAP EMEA
- **Lean, Productive and Efficient Machining of Large and Heavy Mechanical Parts**
- Dr. Tino Oldani, President & CEO, Ingersoll Machine Tools Inc., USA
- **Key Enabling Manufacturing Technologies for a 2000 USD Car –Case Tata Nano**
- Bob Repovs, President & COO, Samco Machinery Ltd., Canada

10:15 Coffee Break

10:45 Parallel Sessions

ICT in Manufacturing

- **From Individual Machine Tool Performance Improvement to Overall Production Flow Optimization**
- Juha Mäkitalo, COO, Finn-Power Oy
- **Ubiquitous Manufacturing and Management for Extended Product Life Cycle**
- Prof. Suk-Hwan Suh, Postech, Korea
- **MTConnect –Free and Open Standard for Interconnectability in Manufacturing**
- Dr. Andrew Dugenske, Manufacturing Research Center, Georgia Tech, USA
- **Advances in Visual Manufacturing System Planning and Monitoring**
- Jörgen Hedström, Prodatec Oy

Enabling Technologies

- **Robot automation for small and medium sized manufacturing**
- Martin Hägele, Fraunhofer IPA, Germany
- **3D flexibility in Remote Laser Welding Robotized Industrial Applications**
- Dr. Massimo Mattucci, New Business Development, Comau S.p.A., Italy
- **Advanced Welding Automation for Heavy Machinery**
- Pekka Heikonen, CEO, Pemamek Oy
- **Breakthroughs in Flexible Robotic Milling, Grinding and Surface Processing of Large Metal and Composite Structures**
- Mika Laitinen, CTO, Master Automation Group Oy

12:25 Lunch

13:20 Parallel Sessions

Transformation in Manufacturing

- **Sourcing in Eastern Europe –Opportunities and Challenges**
- Sami Humala, Head of Finland Trade Center, Finpro, Central & South East Europe
- **High Cost vs. Low Cost Countries. How to make the Game Even**
- Harri Lehtinen, BU Director, Fastems Oy Ab
- **Managing Transformation in Manufacture –Doing the Right Things Right**
- Prof. Seppo Torvinen, CTO, Formia Technology Group
- **Trends in Flexible Assembly Systems Through Human-Machine Cooperation**
- Dr. Klaus Schröer, Manager, Volkswagen AG, and Volker Katschinski, Fraunhofer Institute for Production Systems and Design Technology, Germany

Future Manufacturing Technologies

- **Next Generation Production Systems**
- Dr. Rikardo Bueno, Fatronik, Spain
- **Minimal Manufacturing**
- Dr. Akira Tezuka, Deputy Director, Advanced Manufacturing Research Institute, AIST, Japan
- **Recent Developments in Micro Manufacturing**
- Prof. Duc Pham, University of Cardiff, UK
- **Simulation and Validation of Adaptive Manufacturing Systems**
- Ricardo Velez, R&D Manager, Visual Components Oy, and Dr. Martijn Rooker, Profactor GmbH, Austria

15:00 Concluding Closing Remarks

Coffee and Refreshments

15:30 Parallel Thematic Sessions

Track 1: FMS for Lean and Beyond (Chair: Fastems Oy Ab)

- **From Dualism of Maintenance Towards Diversity of Value by Performance Monitoring**
- Sakari Kokkonen, Production Manager, Sandvik Mining and Construction Oy
- **Assembly Organizer © - Flexible Material Flow for Flexible Production (Customer presentation)**

- **FMS with robots -RoboFMS**

- Teemu-Pekka Ahonen, Fastems Oy Ab)

- **Automation user experience**

- Jani Granholm, Fastems Oy Ab

- **Intelligent Tooling System**

- Risto Niemi, Fastems Oy Ab

Track 2: Smart Business Flow (Chair: Formia Technology Group Oy)

- **Welcome and Introduction to Formia Operations**

- Jukka Salminen, President and CEO, Formia Technology Group Oy

- **Best Available Technologies for Controlling Environmental Emissions**

- Reijo Lylykangas, CTO, Formia Emissions Control Oy

- **Steel Construction in Russia and CIS**

- Svetlana Lehmus, Product Group Director, Formia Vesme Oy

- **Intelligent Material Handling Solutions**

- Kari Anttila, BUD, Formia Vesme Oy

- **Contract Manufacturing**

- Mika Illi, Sales Director, Formia Vesme Oy

- **Formia's Prospects in the Field of Bioenergy**

- Petteri Korpioja, Managing Director, Formia Bioenergy Oy

- **Enhancing Time-to-market with Digital Product and Production System Modelling**

- Pertti Mäki-Välkkilä, Movia Oy

Track 3: Novel Sheet Metal Working (Chair: Finn-Power Oy)

- **Sheet Metal Production from Development and Logistics to Assembly-Performance and Cost Efficiency**

- Antti Kuusisaari, Product Manager, Finn-Power Oy

- **Profiting from Investment on Sheet Metal Production Capacity (Customer presentation)**

- **Using Radial Polarization to Improve Laser Cutting Performance**

- Dr.ir. Danae Delbeke, University of Gent, Belgium

Track 4: Education and Training (Chair: Technology Centre Hermia Oy)

- **Flexible Manufacturing Needs New Kind of Competencies**

- Harri Kankaanpää, Sandvik Mining and Construction Oy

- **Future Production Learning Factory**

- Kai Salminen, Tampere University of Technology

- **Tomorrow's learning is here today**

- Harri Nieminen, Fastems Oy Ab and Timo Rainio, Technology Centre Hermia Oy

- o FMS Training Center 10 years, what next ?

- o Virtual visit to FMS Training Center, FMS simulator and Virtual FMS

17:30 Bus transportation to the Hotels

19:00 Technology-Historical and Cultural Evening in the City Centre

- **Museum Centre Vapriikki (www.tampere.fi/english/vapriikki): City Reception, Light Dinner, Innovations Exhibition**

- **Finlayson and Siperia Centre (www.finlaysoninalue.fi): Museums, Demola (www.demola.fi)**

Day 3

Wednesday, June 10, 2009

Technical visits

- **Tampere 1: Tampere University of Technology and VTT**
- **Tampere 2: Fastems Oy Ab and Kalmar Industries Oy Ab**
- **Tampere 3: Katsa Oy and Agco Sisu Power Oy**
- **Tampere 4: Avant Tecno Oy and Pilkington Automotive Finland Oy**
- **Tampere 5: Tasowheel Oy and Gardner Denver Oy**
- **Salo: Högfors Oy and Nokia Oyj**
- **Loimaa-Turku: Pemamek Oy, Loimaa and STX Finland Cruise Oy, Turku**
- **Hämeenlinna-Hyvinkää: Konecranes Oyj, Hämeenlinna and Kone Oyj, Hyvinkää**

VENUE

Tampere Hall
Yliopistonkatu 55
33100 Tampere, Finland
www.tampere-talo.fi

REGISTRATION

Please register to Tampere Manufacturing Summit 2009 by using the online registration form at **www.tamperemanufacturingsummit.fi**.

FEES

Registration fee: € 400

Registration fee includes:

Admission to all summit sessions, lunches, coffee breaks, conference banquet, city reception and guided tour in the technology-historical city centre, and the technical visits.

Registration is binding.

Please note: the availability of the rooms can only be guaranteed for a limited time. Please check the deadlines mentioned in the hotel info on the summit website.

ACCOMMODATION

The organizers have booked rooms for the participants at central hotels in the City of Tampere. To reserve your accommodation, please contact the hotel directly and make the reservation according to your own travel plan. When booking the hotel accommodation, please mention the code "Manufacturing Summit" to utilize the negotiated rate.

Please note: the availability of the rooms can only be guaranteed for a limited time. Please check the deadlines mentioned in the hotel info at the summit website.

FURTHER INFORMATION

www.tamperemanufacturingsummit.fi

Access: www.tampere-talo.fi/en/facilities/access/

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