

Tampere Manufacturing Summit



LEAN AND BEYOND BETWEEN EXTREMES!

June 8-10, 2009, Tampere Hall, Tampere, Finland

1.5.2009

Programme Overview

Saturday, June 6 – Sunday, June 7

- Arrival in Tampere
- Companies' customer days and events
- Meetings and workshops of research communities

Monday, June 8

9:00-	Registration
9:45-10:15	Wellcome Addresses
10:15-12:00	Opening Plenary Session
12:00-13:00	Lunch
13:00-14:45	Plenary Session 1: Competitive and Sustainable Manufacturing 1
14:45-15:15	Coffee Break
15:15-17:15	Plenary Session 2: Competitive and Sustainable Manufacturing 2
19:30-	Summit Banquet

Tuesday, June 9

8:00-	Registration
8:45-10:15	Plenary Session 3: Lean and Competitive
10:15-10:45	Coffee Break
10:45-12:25	Session 1: ICT in Manufacturing
10:45-12:25	Session 2: Enabling Technologies
12:25-13:20	Lunch
13:20-15:00	Session 3: Transformation in Manufacturing
13:20-15:00	Session 4: Future Manufacturing Technologies
15:00-15:30	Concluding Closing Remarks and Coffee & Refreshments
15:30-17:30	Parallel Thematic Sessions
	Track 1: FMS for Lean and Beyond
	Track 2: Smart Business Flow
	Track 3: Novel Sheet Metal Working
	Track 4: Education and Training
19:00-	Technology-Historical and Cultural Evening

Wednesday, June 10

Alternative Technical Visits

- Technical Visit A. Tampere 1: TUT and VTT
- Technical Visit B. Tampere 2: Fastems and Kalmar
- Technical Visit C. Tampere 3: Katsa and Agco Sisu Power
- Technical Visit D. Tampere 4: Avant Tecno and Pilkington
- Technical Visit E. Tampere 5: Tasowheel and Gardner Denver
- Technical Visit F. Salo: Högfors and Nokia
- Technical Visit G. Loimaa-Turku: Pemamek and STX
- Technical Visit H. Hämeenlinna-Hyvinkää: Konecranes and Kone

Meetings and workshops of research communities

Summit Programme

Day 1, Monday, June 8, 2009

- 09:00 Registration
- 09:45 **Welcome addresses**
Prof. Reijo Tuokko, Head of Department of 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 **Plenary Session 1: 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 **Plenary Session 2: 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 Transportaion 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 **Plenary Session 3: 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 **Session 4: 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
- 10:45 **Session 5: 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 **Session 6: 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 Dr. Volker Katschinski, Fraunhofer Institute for Production Systems and Design Technology, Germany
- 13:20 **Session 6: 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

Day 2, Tuesday, June 9, 2009

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

- FMS Training Center 10 years, what next?
- Virtual visit to FMS Training Center, FMS simulator and Virtual FMS

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

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

Alternative Technical Visits

- Technical Visit A. Tampere 1:
 - Tampere University of Technology www.tut.fi
 - VTT www.vtt.fi
- Technical Visit B. Tampere 2
 - Fastems Oy Ab www.fastems.com
 - Kalmar Industries Oy Ab www.kalmarind.com
- Technical Visit C. Tampere 3
 - Katsa Oy www.katsa.fi
 - Agco Sisu Power Oy www.agcosisupower.com
- Technical Visit D. Tampere 4
 - Avant Tecno Oy www.avantteco.com
 - Pilkington Automotive Finland Oy www.pilkington.com
- Technical Visit E. Tampere 5
 - Tasowheel Oy www.tasowheel.fi
 - Gardner Denver Oy www.gardnerdenver.com
- Technical Visit F. Salo
 - Högfors Oy, Salo www.hogforsvalves.com
 - Nokia Oyj, Salo www.nokia.com
- Technical Visit G. Loimaa-Turku
 - Pemamek Oy, Loimaa www.pemamek.com
 - STX Finland Cruise Oy, Turku www.stxeurope.com
- Technical Visit H. Hämeenlinna-Hyvinkää
 - Konecranes Oyj, Hämeenlinna www.konecranes.com
 - Kone Oyj, Hyvinkää www.kone.com

Further information: www.tamperemanufacturingsummit.fi