

Tampere Manufacturing Summit



LEAN AND BEYOND BETWEEN EXTREMES!

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

4.6.2009

Final Programme

Programme Overview

Saturday, June 6 – Sunday, June 7

- Arrival in Tampere
- Meetings and workshops of research communities

Monday, June 8

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

Tuesday, June 9

8:00-	Registration
8:45-10:15	Plenary Session 3: Lean and Competitive (Small Auditorium)
10:15-10:45	Coffee Break
10:45-12:15	Session 4A: ICT in Manufacturing (Small Auditorium)
10:45-12:15	Session 4B: Enabling Technologies (Auditorium Studio)
12:15-13:10	Lunch
13:10-15:00	Session 5A: Transformation in Manufacturing (Small Auditorium)
13:10-15:00	Session 5B: Future Manufacturing Technologies (Auditorium Studio)
15:00-15:30	Concluding Closing Remarks and Coffee & Refreshments
15:30-17:30	Parallel Thematic Sessions Session 6A: FMS for Lean and Beyond (Small Auditorium) Session 6B: Smart Business Flow (Auditorium Studio) Session 6C: Novel Sheet Metal Working (Room Opus 4) Session 6D: Education and Training (Room Aaria)
19:00-	Technology-Historical and Cultural Evening

Wednesday, June 10

Technical Visits (only for pre-registered participants)

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|------|--------------------------------------|
| 8:30 | Bus transportation from Tampere Hall |
|------|--------------------------------------|
- Technical Visit A: TUT and VTT
 - Technical Visit C: Katsa and Agco Sisu Power
 - Technical Visit D: Avant Tecno and Pilkington
 - Technical Visit E: Fastems, Tasowheel and Gardner Denver
 - Technical Visit F: Högfors and Nokia
 - Technical Visit G: Pemamek and STX
 - Technical Visit H: Konecranes and Kone

Meetings and workshops of research communities

Programme in Detail

Day 1, Monday, June 8, 2009

- 09:00 Registration
- 09:45 **Welcome addresses** (Small Auditorium)
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** (Small Auditorium)
Chair: Prof. Reijo Tuokko, Tampere University of Technology
The Manufuture Road –Towards Competitive and Sustainable High-Adding-Value Manufacturing
Prof. Francesco Jovane, Manufuture EU Vice President, Italy
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 1** (Small Auditorium)
Chair: Dr. Harri Kulmala, Fimecc Oy
Integrative Production Technologies for High-Wage Countries
Prof. Dr.-Ing. Christian Brecher, RWTH Aachen University, Germany
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 2** (Small Auditorium)
Chair: Juhani Rantalainen, Fastems Oy Ab
Smart Investments in Europe in the Factories of Future
Dr. Andrea Gentili, European Commission
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**
Welcome
Dinner Buffet
Music performance by Maria Lund (song) and Jussi Främpling (piano)
- 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** (Small Auditorium)
Chair: Prof. Paul H. Andersson, Tampere University of Technology
In Pursuit of the Perfect Plant
Simon Pollard, VP, Manufacturing Operations and Execution, SAP EMEA
Robot automation for small and medium sized manufacturing
Martin Hägele, Fraunhofer IPA, Germany
Sourcing in Eastern Europe –Opportunities and Challenges
Sami Humala, Head of Finland Trade Center, Finpro, Central & South East Europe
- 10:15 Coffee Break
- 10:45 **Session 4A: ICT in Manufacturing** (Small Auditorium)
Chair: Karri Mikkonen, TeliaSonera Corp.
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, Sweden
- 10:45 **Session 4B: Enabling Technologies** (Auditorium Studio)
Chair: Harri Kuusela, Technology Centre Hermia Oy
3D flexibility in Remote Laser Welding Robotized Industrial Applications
Dr. Massimo Mattucci, New Business Development, and Fulvio Rusina, Director, 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
- 12:15 Lunch
- 13:10 **Session 5A: Transformation in Manufacturing** (Small Auditorium)
Chair: Dr. Veli Matti Kuisma, The Federation of Finnish Technology Industries
Managing Transformation in Manufacture –Doing the Right Things Right
Prof. Seppo Torvinen, CTO, Formia Technology Group
High Cost vs. Low Cost Countries. How to make the Game Even
Harri Lehtinen, BU Director, Fastems Oy Ab
From Individual Machine Tool Performance Improvement to Overall Production Flow Optimization
Juha Mäkitalo, COO, Finn-Power Oy
Trends in Flexible Assembly Systems Through Human-Machine Cooperation
Volker Katschinski, Fraunhofer Institute for Production Systems and Design Technology, Germany
- 13:10 **Session 5B: Future Manufacturing Technologies** (Auditorium Studio)
Chair: Dr. Timo Määttä, VTT
Next Generation Production Systems
Jon Agirre Ibarbia, Fatronik-Tecnalia, 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

Session 6A: FMS for Lean and Beyond (Chair: Fastems Oy Ab, Small Auditorium)

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

Risto Pihlanen, Fastems Oy Ab

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

Session 6B: Smart Business Flow (Chair: Formia Technology Group Oy, Auditorium Studio)

Smart Business Flow

Jukka Salminen, CEO, Formia Technology Group Oy

Best Available Technologies for Controlling Environmental Emissions

Reijo Lylykangas, CTO, Formia Emissions Control Oy

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

Pertti Mäki-Välkkilä, Movia Imageneering Oy

From Idea to Product with Lean Contract Manufacturing

Mika Illi, Sales Director, Formia Vesme Oy

Intelligent Material Handling

Kari Anttila, BUD, Formia Vesme Oy

Session 6C: Novel Sheet Metal Working (Chair: Finn-Power Oy, Room Opus 4)

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

Martti Ranki, Fläkt Woods Oy

Using Radial Polarization to Improve Laser Cutting Performance

Jan Muys, Prima Industrie SpA, Italy

Session 6D: Education and Training (Chair: Technology Centre Hermia Oy, Room Aaria)

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

Technical Visits

(only for pre-registered participants)

All buses leave from the Tampere Hall at 8:30 and drive back after the visits.
Lunch is served during the tour.

- Technical Visit A
 - 09:00-11:00 Tampere University of Technology www.tut.fi
 - 12:00-14:00 VTT www.vtt.fi
- Technical Visit C
 - 09:00-11:00 Katsa Oy www.katsa.fi
 - 12:15-14:15 Agco Sisu Power Oy www.agcosisupower.com
- Technical Visit D
 - 09:00-11:00 Avant Tecno Oy www.avanttecno.com
 - 12:00-14:00 Pilkington Automotive Finland Oy www.pilkington.com
- Technical Visit E
 - 09:00-11:00 Fastems Oy Ab www.fastems.com
 - 11:50-13:45 Tasowheel Oy www.tasowheel.fi
 - 14:00-16:00 Gardner Denver Oy www.gardnerdenver.com
- Technical Visit F
 - 11:15-13:00 Högfors Oy, Salo www.hogforsvalves.com
 - 14:15-16:00 Nokia Oyj, Salo www.nokia.com
- Technical Visit G
 - 10:15-12:00 Pemamek Oy, Loimaa www.pemamek.com
 - 13:30-15:30 STX Finland Cruise Oy, Turku www.stxeurope.com
- Technical Visit H
 - 10:00-11:30 Konecranes Oyj, Hämeenlinna www.konecranes.com
 - 12:45-14:45 Kone Oyj, Hyvinkää www.kone.com

Further information:

www.tamperemanufacturingsummit.fi