Programme September 30, 2020

Moderators: *Anna Davidsson, Volvo Cars and Johan Svenningstorp, Volvo Group Trucks Operations*

08.15	**Check in**
08.30	**Welcome and introduction of the conference,** *Anna Davidsson, Volvo Cars and Johan Svenningstorp, Volvo GTO*
08.50	**Sustainable production and Startup Collaboration**, *Mats Torring, Stena Metall*
09.20	**Innovation by Value Constellation**, *Jenny Elfsberg, Vinnova*
09.40	**Production for Future,** *Greta Braun and Johan Bengtsson, Göteborgs Tekniska Collage*
09.55	**Break - Coffee, tea**
10.15	**Is sustainable production a competitive advantage globally?** **Moderator:** *Jenny Bramell, IUC Sverige, Programrådets Ordförande, FFI Hållbar Produktion* *Pernilla Walkenström, RISE and Strategy Board for production clusters: Staffan Vidén, AB Volvo, Lars-Henrik Jörnving, Scania CV AB, Anders Bryngelsson, Volvo Cars, Peter Bryntesson, FKG*
11.20	**Produktion2030: Our strategy for sustainable and competitive manufacturing in Sweden** *Cecilia Warrol, Programme Director Produktion2030 and senior expert at Teknikföretagen*
11.30	**Summary and closing first part,** *Anna Davidsson, Volvo Cars and Johan Svenningstorp, Volvo GTO*
11.45	**Lunch**

Sessions

Tid	**1 Production Management** *Ulrika Harlin, RISE*	**2 Joining** *Joakim Hedegård, Swerim*	**3 Component Manufacture** *Goran Ljustina, Volvo Cars*	**4 Logistics** *Leif Ohlsson, FKG*	**5 Assembly** *Åke Gustafsson, Volvo Cars and Sandra Mattsson, RISE*	**6 Forming** *Johan Berglund, RISE*	**7 Digital Manufacturing** *Gunilla Sivard, KTH*	**8 Sustainability** *Karin Wilson, RISE*
12.45	Welcome and check in	Welcome and check in	Welcome and check in	Welcome and check in	Welcome and check in	Welcome and check in	Welcome and check in	Welcome and check in
13.00	To lead by taking out a compass direction *Tommy Bengtsson, Volvo Construction Equipment AB*	Production friendly joining methods for Aluminium *Fredrik Sikström, HV*	Robust and cost-efficient hard part turning of transmission components *Ulrika Brohede, Swerim*	Circular loops Packaging & Digitalisation *Johan Tjernell, EQ-pack and Sasha Shahbazi, RISE*	Future Assembly Preparation *Johan Karlsson, Scania CV*	Analytical Description of Anisotropic Hardening in Sheet Forming *Jeong Yoon, Deakin University*	Experiences of using 3D scanning and point cloud modelling for efficient design and installation. *Per Gullander, RISE and Thomas Rosell, 3button Group*	Servitization in the Automotive Industry: Benefits and challenges of selling mobility *Brenda Nansubuga, Linköpings Universitet*
13.30	Design of Productions Systems for Business Value *Anders Johansson, Scania*	Enhanced process robustness and fatigue life of welded structures *Rickard Aldén, Swerim*	Transitioning to sustainable production cryogenic manufacturing processes *Peter Krajnik, Chalmers*	ASPIRE - Management of deviations in the supply chain *Zuhara Chavez KTH and Per Gullander, RISE*	Assembly simulations with VR/AR/Computers *Dan Lämkull and Maciej Zdrodowski, VCC*	LIGHTest North: Activities in high volume composite forming *Yvonne Aitomäki, RISE*	Engineering Tool Chain for efficient and iterative development of smart factories *Johan Vallhagen, Volvo GTO*	Green Accelerator - a green lean method for practical application in production". *Maria Bodingh Johansson, Scania*
14.00	Production Innovation – future-proof your manufacturing business *Anna Öhrwall Rönnbäck and Lisa Larsson, Luleå University of Technology*	Smart Welding Knowledge Platforms *Elmira Ashtari, KTH-IIP*	Minimising heat treatment distortion *Hans Kristoffersen, RISE*	C-PALS (Cyber-Physical Assembly and Logistics System), presenting an AGV-case study. *Erik Flores and Yongkuk Jeong, KTH*	Industry 4.0 Maturity in Final Assembly *Dan Li, Chalmers*	Towards Virtual Tryout: Elastic Dies in Sheet Metal Forming *Johan Pilthammar, Volvo Cars BTH*	Digitalization in the additive manufacturing supply chain *Magnus Widfeldt and Tomas Vannucci, RISE*	Production disturbances and sustainability: a holistic perspective *Adriana Ito, Chalmers*
14.30	End of the day	From the project FFI-Q-IN-MAN - Next generation visual weld quality evaluation *Kurt Broeckx, HIAB*	Environmental Friendly Bevel Gear Production by Using Pre-Forged Blanks *Jannik Henser, PMH/KTH*	Virtual tools for more efficient collaboration in logistics development processes *Johanna Sigvardsson, Virtual Manufacturing*	The future of the suppliers - Challenges and Opportunities with electrification *Gabriella Virdarson, FKG*	Measurement of elastic press deflections and development of substitutive FE models *Daniel Wiklund, RISE*	Deliberative automation, enabler for true collaborative and intelligent automation *Kristofer Bengtsson, CTH*	End of the day

Programme October 1, 2020

Moderators: *Mariam Nafisi, Scania CV AB and Peter Bryntesson, Fordonskomponentgruppen*

08.15	**Check in**
08.30	**Welcome and introduction of the conference,** *Mariam Nafisi, Scania CV AB and Peter Bryntesson, Fordonskomponentgruppen*
08.50	**Sustainable production and Startup Collaboration,** *Peter Löfgren, ABB, Marcus Nilsson, Gimic AB och Pär Bergsten, H&D Wireless AB*
09.40	**Break - Coffee, tea**
09.55	**The Governments innovation partnership programmes,** *Margareta Groth, Vinnova*
10.15	**Opportunities and advantages of participating in Swedish Manufacturing's R&D Clusters** *Stefan Janols, IVF IF Service AB/Spectra Premium AB, Johan Svenningstorp, Volvo GTO and Boel Wadman, RISE*
10.35	**Short break**
10.40	**Aligning business and design logics for a circular economy,** *Thomas Nyström and Peter Algurén, RISE*
11.20	**Summary and closing first part,** *Mariam Nafisi, Scania CV and Peter Bryntesson, Fordonskomponentgruppen*
11.45	**Lunch**

Sessions

Tid	**9 Digital Manufacturing** *Frida Schildauer, Volvo GTO*	**10 Additive Manufacturing** *Patrik Hallberg, RISE*	**11 Graphene - from lab to industry** *Elisabeth Sagström-Bäck, SIO Grafen*	**12 Digitalization of value chains** *Martin Friis, Produktion2030*	**13 Component Manufacture** *Lorenzo Daghini, Scania CV*	**14 Surface Treatment** *Jan Skogsmo, RISE*	**15 Geometry & Quality** *Helena Björk, RISE and Alf Andersson, Volvo Cars*	**16 Education in co-operation: Academy-Industry** *Bengt-Göran Rosén, Halmstad University*
12.45	Welcome and check in	Welcome and check in	Welcome and check in	Welcome and check in	Welcome and check in	Welcome and check in	Welcome and check in	Welcome and check in
13.00	Smart prognosis of energy use aware virtual commissioning including energy optimization *Kristofer Bengtsson, Chalmers*	Additive manufacturing of customized tool-steel components for manufacturing industry *Taoran Ma, RISE*	Effect of graphene reinforced adhesives on spot welding in car bodies *Oscar Andersson, Volvo Cars*	”Digitala stambanan” Opportunities and obstacles of digitalisation in the value chain *Martin Friis, Produktion2030*	A simulation-based guide for predicting machinability *Ragnar Larsson, Chalmers*	Oven curing and the virtual paint shop *Fredrik Edelvik, Fraunhofer Chalmers Center*	Method for surveillance of accuracy of measurement system by internal control *Peter Josefsson, NEVS*	Ingenjör 4.0 - an unique Pilot testing in the shadow of CORONA *BG Rosén, HH and Johan Stahre, Produktion2030*
13.30	Adaptive production scheduling using Reinforcement Learning with the focus on energy optimization. *Zhiping Wang, Volvo GTO*	Powders and Material Selection for Additive Manufacturing by Laser Powder Bed Fusion *Sven Bengtsson, Höganäs*	Multifunctional graphene enhanced nanocomposites *Linnea Selegård, Saab AB and LiU*	Sensible Value Chain through Digitalised Planning, Material handling and Circular Economy *Sandra Mattsson, RISE*	Friction control through surface texturing *Robert Tomkowski, KTH*	Digi-Load – Automated loading and unloading for surface treatment processes *Charlotte Ireholm, RISE*	SivPro2 – Quality control on the fly *Mikael Sjödahl, LTU*	Industrial "upskilling" today and tomorrow *Håkan Celik, SKF* *Ann-Sofie Gustavsson, Sandvik*
14.00	Concepts for plug and produce, edge analytics and smart sequencing. *Pierre Johansson and Frida Schildauer, Volvo GTO*	Design & Simulation - Key components in the AM value chain *David Ohlsson, RISE*	Graphene-based Polymer and Metal Composites: Challenges and Opportunities *Mamoun Taher, Graphmatech AB*	Adaptive lifecycle design by applying digitalization and AI techniques to production (Adapt 2030) *Tomohiko Sakao, LiU*	Controlled quenching at case hardening for optimal performance *Thomas Kohne, KTH*	Pretreatment with Plasma technology for increased adhesion between paint and plastic material *Åsa Lundevall, RISE*	Industry4.0 and the benefits of big data *Jerker Delsing, LTU*	Examples from the PILOT Ingenjör 4.0 The Swedish production Academy and Industrial Pilots *Vincent Wang, KTH* *Amogh Krishna, Halmstad University and Victor Svensson, Volvo AB*
14.30	Presentation of cluster and discussion of research topics and industrial challenges. *Johan Vallhagen, Volvo GTO, Magnus Widfeldt and Per Gullander, RISE*	SoftDREAM: A framework to turn any robot arm into a flexible additive manufacturing cell *Emil Johansson, RISE*	Graphene enhanced polymer based coatings for improved tribology *Lena Killander, Applied Nano Surfaces AB*	Demo of Infrastructure for Digitalization enabling industri-alization of Additive Manufacturing (DiDAM) *Ola Isaksson, Chalmers*	Compound casting for lightweight applications with optimized properties *Torsten Sjögren, RISE*	Sustainability and electrified vehicles in a surface treatment perspectiv *Christian Werdinius, Provexa*	National Center for Industrial Computed Tomography *Anna Larsson, RISE* Surface Quality - ISO 25178, a new toolbox *Stefan Rosén, Toponova*	How do we move from here? Plenum Discussion *BG Rosén, Johan Stahre, Produktionsakademien, Produktion 2030* *Vincent Wang, KTH* *Amogh Krishna, HH* *Victor Svensson, Volvo AB*

With reservation for changes in the programme

THE SWEDISH **Manufacturing R&D Clusters**