Trends in the manufacturing of composite Aerospace Components and resulting demands for Machining Technologies

09:00 a.m.  Introduction Speech for the second Day
Olaf Lawrenz, Chairman of the Board of Manufacturing Innovations Network e.V., Head of Varel/Bremen Site at Premium AEROTEC GmbH

Keynote Speeches (Auditorium)

09:15 a.m.  Trends in the manufacturing of composite Aerospace Components and resulting demands for Machining Technologies
Dr.-Ing. Jan Stüve, Head of Department Composite Process Technology, German Aerospace Center (DLR)

09:50 a.m.  Research pushing the limits of aerospace manufacturing
Alexander Krädel, Head of Department for Manufacturing Processes (IFW), Leibniz Universität Hannover

10:25 a.m.  Coffee Break

Sessions 3:  11:00 a.m. – 03:00 p.m.
Digitalisation and Industry 4.0

11:00 a.m.  Aero-engine trends and drivers for advanced machining
Dr. Gregor Kappmeyer, Associate Fellow – Machining, Rolls Royce plc.

11:30 a.m.  Recent technology development for aero-engine manufacturing in IHI
Hiroshi Kuroki, General Manager Engine Technology Department, IHI Corporation

12:00 p.m.  The future of aviation MRO – opportunities and risks by digital transformation
Dr.-Ing. Felix Flöter, Corporate Innovation Management, Lufthansa Technik AG

12:30 p.m.  Lunch Break

01:30 p.m.  Digital Excellence: performance gains in development, technology implementation, and run-off
Dr.-Ing. Niklas Kramer, Director Product and Industry Segment Management Sales Area Central Europe, Sandvik Coromant

02:00 p.m.  Computed Tomography for Inspection, Failure analysis and Dimensional Measurement in Industry
Dr. Holger Roth, Global Application Trainer, Baker Hughes, a GE company

02:30 p.m.  AI based cooling lubricant systems – “Coolant as a Service” when manufacturing parts for aeronautical use!
Dr.-Ing. Dirk Friedrich, Chief Executive Officer, Grindaix GmbH

Farewell Address (Auditorium)

03:00 p.m.  Farewell address of the MIC 2019
Prof. Dr.-Ing. Berend Denkena, Leibniz Universität Hannover and Member of the Board of the Manufacturing Innovations Network e.V.
Sessions 4: 11:00 a.m. – 03:00 p.m. 
Scientific Presentations with Topics of the Session 3

11:00 a.m. Stabilization of metal structure formation in directed energy deposition by applying a coolant system
Ph.D. Ryo Koike, Keio University

11:30 a.m. Automatic re-contouring of repair-welded tool moulds
Klaas Heide, Leibniz Universität Hannover

12:00 p.m. A novel hybrid clamping system for sheet metals and thin walled structures
Dr.-Ing. Uwe Teicher, Technische Universität Dresden

12:30 p.m. Lunch Break

01:30 p.m. Ultrasonic assisted peripheral milling of fiber reinforced plastics in consideration of clamping and cutting edge geometry
Falk Protz, Technische Universität Berlin

02:00 p.m. Analysis of burr formation mechanisms when drilling CFRP-aluminium stack using acoustic emission
Jonas Duntschew, Universität Stuttgart

02:30 p.m. Vision-assisted robotic finishing of friction stir-welded corner joints
Ph.D. Erdem Ozturk, ARMC University Sheffield