

Model Based Control for Smart Forming Processes

Program

12 October

8:00	Registration / Welcome drinks
8:30	Opening (Ton van den Boogaard)
8:40	<i>Smart Change in the Making; Transforming Forming with Control</i> , Ravi Venugopal
9:20	<i>Model based control of product properties in metal processing: Challenges and opportunities</i> , Stephen Duncan
10:00	Coffee
10:30	<i>Product-to-product state estimation for metal forming mass production</i> , J. Havinga , A.H. van den Boogaard
11:00	<i>Approaches for control in deep drawing</i> , P. Fischer , D. Harsch, J. Heingärtner, Y. Renkci and P. Hora
11:30	<i>Physical model based digital twins in manufacturing processes</i> , J. Post , M. Groen, G. Klaseboer
12:00	<i>Influence of the elastic behaviour of a moving bolster on punch active surface: a numerical investigation</i> , F. Zgoll , T. Götze and W. Volk
12:30	Lunch
13:50	<i>Chances and limitations of in-line measurement for automotive press shops</i> , Wolfram Volk
14:30	<i>Recent developments in modelling for on-line setup and control</i> , Camile Hol
15:00	<i>Physics-based simulation of laser assisted tape winding for online process control</i> , A. Zaami , I. Baran, R. Akkerman
15:30	Coffee
16:00	<i>Systematic drawbead design for optimal process control</i> , B. Carleer, I. Burchitz and M. Stippak
16:30	<i>New bending process with superposition of radial stresses for damage control</i> , R. Meya , C. Löbbe, O. Hering and A. E. Tekkaya
17:00	<i>Developments in process modeling for strip steering in hot strip rolling</i> , Leo Kampmeijer
17:30	<i>Experiences with the q-guard in-line control system in production</i> , J. Heingärtner , P. Fischer, D. Harsch, Y. Rencki and P. Hora
19:00	Conference Banquet

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8:40	<i>Four steps towards fully automated forming processes</i> , Peter Groche
9:20	<i>Future needs in the development of FEM in combination with in-line process control</i> , Pavel Hora
10:00	Coffee
10:30	<i>Influence of scattering material properties on the robustness of deep drawing processes</i> , D. Harsch , J. Heingärtner, Y. Renkci and P. Hora
11:00	<i>Closed feedback loop process control approaches and sensor evaluation for deep drawing tools with integrated piezoelectric actuators</i> , T. Bäume , W. Zorn, W. Drossel
11:30	<i>Verification of a closed loop control for deep drawing process</i> , M. Barthau , M. Liewald and C. Held
12:00	<i>Deepdrawing process control using active drawbeads</i> , C. Maier , V. Paunoiu, A. Epureanu
12:30	Lunch
13:50	<i>On feedback control of stamping and deep drawing operations</i> , Benny Endelt
14:30	<i>Data-driven inline optimization of the manufacturing process of car body parts</i> , S. Purr , A. Wendt, J. Meinhardt, K. Mözl, A. Werner, H. Hagenah and M. Merklein
15:00	<i>Augmented reality (ar) technology for the purpose of sheet metal forming simulation evaluation</i> , M. Lechner , R. Schulte, S. Meckler and M. Merklein
15:30	Coffee and closure