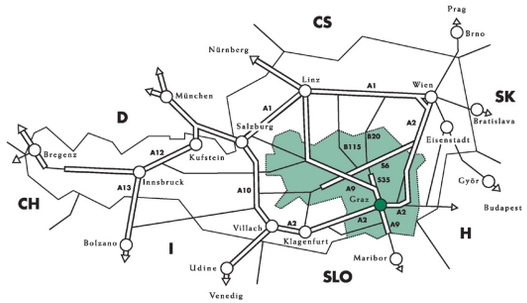
Scope

The success of our last year's IDDRG conference demonstrated that the research in the field of ultrahigh-strength steel is of great importance. Especially the large amount of industrial participants proves the relevance of this topic for the economy.
Due to that fact we would like to meet your expectations with our new conference „Tools and Technologies for Processing Ultra High Strength Materials" from 19th – 21st of september. We want to provide a forum for a productive exchange between science and industry. Therefore we cordially invite you to round up the conference program with your contribution. This can be done with either a "scientific paper" or an "industrial presentation".
In any case we are looking forward to welcoming you in Graz.

Venue

Graz is situated in the south-east of Austria and is the capital of Styria, a region famous for its wine yards. In 2003 Graz was Cultural Capital of Europe but apart from its cultural heritage the city has a long industrial tradition.
Automotive suppliers are located in the region which is reflected in the scope of the Graz University of Technology and in particular in the research work of The European Institute Tools and Forming.



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1st Call

T&F Conference

2011

Tools and Technologies for Processing Ultra High Strength Materials

SCIENCE MEETS INDUSTRY

19.-21.09.2011
Graz | Austria

Conference Topics

Materials
- high-performance steel
- aluminum
- coatings

Cold Forming
- process limits
- spring back
- parts complexity

Trimming
- tool wear
- economical limits
- laser cutting

Hot Stamping
- process optimization
- tool design
- heating technologies

Simulation
- material models
- spring back prediction
- micro structural effects

Tool Technologies
- tool wear
- tool materials
- surface & heat treatment

Call for Contributions

We offer the possibility to contribute with a reviewed paper which will be published in the conference proceedings or with an industrial presentation. The industrial presentations will be published on CD.

Abstracts
A one-page overview of the presentation or paper plus a key figure or table should be submitted through the conference website at www.toolsandforming.com. Abstracts are required for all contributions.

Papers
Full papers up to 8 pages in length. Please use the template on the conference website.

Attendance
At least one author of a contribution must attend the conference to be included in the program or proceedings. A paid registration must be submitted by the deadline.

Deadlines

Submission of abstracts December 07, 2010
Notification of acceptance by January 30, 2011
Full papers April 30, 2011
Review until July 15, 2011
Final paper July 31, 2011
For publication and presentation, registration by at least one author is required April 30, 2011

Registration Fees

The registration fee is 760 EUR (850 after April 30, 2011) which includes the technical visit, conference proceedings, lunches and all events.

Call for Sponsors

In addition to the conference, there will be a small number of exhibition stands available. There will also be a variety of corporate sponsorship opportunities possible, which will offer substantial promotion and publicity for your organisation.
If you are interested in receiving details of the exhibition or sponsorship opportunities please contact our conference secretary.

	Monday, 19 September 2011		Tuesday, 20 September 2011	
08:30-9:30				
09:30-10:15	Registration Opening Ceremony		***Keynote 4*** **Michael Wohlmuth; Simufact** Innovative Process Engineering based on Computer Aided Tryout Assures Sustainable Competitiveness	
10:15-11:00	***Keynote1*** **Roman Löw; Gestamp** „Chance & Turnaround“		***Keynote 5*** **Prof. Dr. Karl Roll; formerly Daimler AG** Application of virtual Methods in Automotive Industry	
11:00-11:45	***Keynote 2*** **Alexander Zak; Magna Cosma** Lightweight Structures Manufacturing for Fuel Economy		***Keynote 6*** **Prof. Dr. Pavel Hora** Applicability of cognitive systems, metamodels and virtual tools for an in-line of process robustness control	
11:45-12:30	***Keynote 3*** **Prof. Dr. Nader Asnafi; Böhler Uddeholm** Tooling & Technologies for Processing Ultra High Strength Materials		***Keynote 7*** **Gert Weiss; Thyssen Krupp Nirosta** The new approach: High strength stainless steel for high expectations	
12:30-13:30	Lunch		Lunch	
13:30-14:00	***Partners 1*** **Per Josefsson; AP&T** Production Process Development for Hotforming		***Hot Stamping 5*** **Prof. Dr. Ralf Kolleck, Robert Veit; TU Graz** Induction Heating Device for alumnized coated sheet materials in Hot Stamping	***UHSS 5*** **Fredric Bergström; Uddeholms AB** Cutting UHS sheet with laser hardened tool steels
14:00-14:30	***Partner 2*** **Harald Lehmann; Schwartz GmbH** Heating Technologies in Press Hardening Process		***Hot Stamping 6*** **Anna Ingebarnd, Isaac Valls; Rovalma** New Tool Material Developments Allowing Direct Processing of Tailored Press Hardened Components	***UHSS 6*** **Ph. D. Per Hansson; SSAB** Use of Surface Engineered 45 HRC Pre-hardened Tool Steel in Forming Applications
14:30-15:00	***Partners 3*** **Lothar Gräbener; Schuler SMG** Technologies and Manufacturing Processes for innovative Lightweigth Materials		***Hot Stamping 7*** **Dieter Dörmann; Neff GmbH** Hot Stamping, a new innovative manufacturing technology in automotive engineering	***UHSS 7*** **Ernst Heinl, Johannes Schneckenleitner, Reinhold Schneider, Gerald Rabler, Christian Walch, Josef Mauser, Alois Hecht; Voest Alpine** Tool performance of different tool steels for the cutting of an CP1000 Advanced High Strength Steel
15:00-15:30	***Partners 4*** **Ph.D. Martin Skikerud; ESI** Simulation as a tool to design Hotforming Process		***Hot Stamping 8*** **Dr. Dhananjay Kumar; KLT Automotive, India** Design optimization of hot forming tools by numerical thermal analysis	***UHSS 8*** **Deividi Nardi; University of the Basque Country** Friction Drilling of Dual Phase Steels
15:30-16:00	Coffee break		Coffee break	
16:00-16:30	***Hot Stamping 1*** **Dr. Harald Hofmann; Thyssen Krupp Steel Europe** Diffusion Process of aluminized coated 22MnB5	***UHSS 1*** **Thomas Thülig; Bilstein Kaltband** “Innovative high and ultra high strength steel concepts for cold forming applications”	***Hot Stamping 9*** **Michael Heyde; Prof. Dr. Karl Roll; Daimler AG** Simulation of car body parts with graded properties	***Stainless 1*** **Dr. Joachim Schulz; WISURA** Interaction of Lubricants with Metal Surfaces in Conideration of Stainless Steels
16:30-17:00	***Hot Stamping 2*** **Christine Kopp, Dr. Bernd Griesbach, Karl Michael Bader, Patrick Freudenberg, Christian Hezler, Franz Russ; Audi AG** "Optimization in Hot-Forming Technologies – New Tool Designs and Alternative Heating Technologies for Tailored Properties"	***UHSS 2*** **Dr. Gerhard Jesner, Franz Russ; Böhler Uddeholm** Innovative Tool Steels For Processing Ultra High Strength Materials	***Hot Stamping 10*** **Borja Fernandez; DieDe Die** Benchmarking: Tailor Strategies in Press Hardening	***Stainless 2*** **Fernand Beyeler; AMPCO** Application of AMPCO premium alloys in metal forming
17:00-17:30	***Hot Stamping 3*** **Vasily Ploshikhin, Andrey Prihodovsky, Juergen Kaiser, Roman Bisping, Hartmut Lindner, Christian Lengsdorf, Prof. Dr. Karl Roll; Neue Materialien Bayreuth GmbH** New Heating Technology for the Furnace-free Press Hardening Process	***UHSS 3*** **Roland Hennig; DataM** Curvature Optimized 3D-Profiles to improve the Line Speed of Flexible Roll Formed Ultra High Strength Steels	***Hot Stamping 11*** **Dominique Viale; Industeel France** Optimization of cutting tools to process ultra high strength steels ; comparison of cold work tool steel lifetimes during laboratory tests and industrial applications	***Stainless 3*** **Siegfried Piesslinger-Schweiger; Poligrat** New Pickling Process for Stainless Steel
17:30-18:00	***Hot Stamping 4*** **Ignacio Garcia Acha; DieDe Die** New Developments in Hot Stamping: Skin Panels	***UHSS 4*** **Arndt Pohl; Profil Verbindungstechnik GmbH & Co.KG** Integration of mechanically joined Fasteners in Ultra High Strength Steels	***Hot Stamping 12*** **Michael Fritz; Trumpf** Improving the Process Chain for Hot-formed Part Processing, 2D Cutting of Blanks, Induction Heating and 3 D Laser Cutting	***Stainless 4*** **Dr. Andre Hauffe; David Lorenz, Thomas Borrvall Dynamore** State-of-the-Art: Forming Simulation of Car Body Parts of austenitic Stainless Steel
19:00-19:30	Bustransfer			
19:30-22:30	Styrian Evening		Conference Banquet	

	Wednesday, 21 September 2011	
09:30-10:00	*Keynote 8:* **Ralf Sünkel; Thyssen Krupp Steel Europe** "Innovative Process Engineering based on Computer Aided Tryout Assures Sustainable Competitiveness"	
10:00-10:30	***Hot Stamping / Special Processes*** **Max Brandt, Arndt Breuer, Dr. Both; Thyssen Krupp Tailored Blanks** Partial influence on structural weld seam composition – potentials for modern car body manufacturing	***Special Processes 1*** **Robert Vollmer; TU Graz** Microforming and Punching of Stainless Steel Foils
10:30-11:00	***Springback 1*** **Francesca Campana; Sapienza University of Rome** Robust Die Design for springback compensation of high strength steels	***Special Processes 2*** **Ulrike Beyer, Prof. Dr. Birgit Awiszus; Technische Universität Chemnitz** With flat-clinching to a planar material compound
11:00-11:30	***Springback 2*** **Stefan Haage, Autoform** Reducing Tryout Efforts - by effective Application of the Simulation for Springback Compensation	***Special Processes 3*** **Mohammad M. Gharbi; Technical University Dortmund** Failure Analysis in Bending of a Class High Strength Steels Using Enhanced Porous Plasticity
11:30-12:00	***Simulation/CAE 1*** **Martin Maisl, Andreas Eisinger; Tebis** Ultra High Strength Materials: CAD/CAM Requirements in Die Manufacturing	***Special Processes 4*** **Trent Maki; Amino Corp.** New Developments in Sheet Metal Hydrofroming
12:00-12:30	***Simulation/CAE 2*** **Stephan Rudolph, Stefan Huhn; Forming Technolgies** A new Approach for the Integration of Process Planning and Feasibility Analysis	***Special Processes 5*** **Sunthorn S.; Kittiphat R.; Nuttaphong S.; King Mongkut's University of Technology North Bangkok,Thailand,** The Rotational Forming Tool Wear in Single Point Incremental Forming Process of Stainless Steel
12:30-13:30	Lunch	
13:30-16:00	**Technical Tours:** **Tour 1: Magna Steyr, production plant Mini Countryman**  **Tour 2: Magna Presstec, press plant**  **Tour 3: Frank Stronach Institute, Graz University of Technology**