6th

SCT2022

6th International Conference on
Steels in Cars and Trucks

Steels in Cars and Trucks

June 19 – 23, 2022

Milan, Italy

www.SCT-2022.com

Link to the program

Program

- Steel Components in Cars and Trucks
- Manufacturing of Components
- New high performance Steels
- Modelling, Simulation and Testing
- Lightweight forging
- e-Mobility with components made of steel

SCT2022

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Ladies and Gentlemen,

„Bringing the automotive, supplier and steel industries together" is one of two goals of the SCT. In proven form, this also applies to the 6th SCT 2022. This motto reinforces what the modern steel industry is all about, partnerships across value chains being made up of industry, research and development professionals.
The second goal of SCT 2022 is: "Future trends in steel development, processing technologies and applications." The ability to steadily innovate one of the most traditional and yet innovative materials for industrial use is reflected in the increasing amount of steel being consumed around the world. Steel offers countless solutions to address global challenges, such as living and mobility in megacities or reducing material consumption due to steel's excellent recyclability. Moreover, constant innovation has allowed us to take monumental steps toward the goal of decarbonizing the steel industry.
This is the impetus to organize once again a conference with accompanying exhibition, dedicated to the close relationship between the automotive industries, suppliers and steel industries.
Following the exciting and successful editions of the SCT in 2005, 2008, 2011, 2014 and 2017, we look forward to our next event in 2022. We started in Germany, went to the Netherlands, and now Steels in Cars and Trucks (SCT) 2022 takes place from June 19 to 23, 2022, in Milan, Italy. Unfortunately, due to covid, we had to postpone the conference twice. But meanwhile, it grew and became more advanced and innovative. This will be your opportunity to initiate future milestones for innovation and take away valuable information for your business. The necessary postponement of the conference by two years led to further enrichments. Many authors used the time to enhance their presentations and additional contributions led to new focal points. For example, the topic "E-Mobility" was significantly upgraded. In total, this year's conference offers 150 groundbreaking lectures.
We would like to invite all attendees to the site events, evening gatherings as well as the official conference dinner sponsored by ArcelorMittal.

Special thanks to our sponsors, exhibitors, speakers, and of course participants for making this event possible. We look forward to the fruitful discussions ahead.

Günter Bleimann-Gather
TEMA Technologie Marketing AG

Program structure

19.06.2022

17:00 – 18:00	***Early congress registration***
18:00 – 19:00	***Built-up Beer***

20.06.2022

09:00 – 10:25	***Opening Session of SCT 2022***

	Scala 3	Scala 4
11:20 – 12:35	E-Mobility I	Joining I
13:30 – 14:45	E-Mobility II	Joining II
15:40 – 17:20	E-Mobility III	16:05 – 16:30 Bainitic steels for flat products
		16:30 – 16:55 Medium and high Mn steels
20:00 – 23:00	Meet & Greet in the Exhibition	

21.06.2022

	Scala 3	Scala 4
08:30 – 10:10	Formability and processes I	Laser welding
10:40 – 12:20	Formability and processes II	Hybrid joining
13:10 – 14:25	3rd generation AHSS	Decarbonization of steel industry
15:20 – 16:35	High-ductility steels	Joining III
18:00	Bus transfer to conference dinner	
20:00 – 23:00	Conference Dinner at Museo Diocesano	

22.06.2022

	Scala 3	Scala 4
08:30 – 10:10	Liquid metal embrittlement I	Surface properties I
10:40 – 11:30	Liquid metal embrittlement II	Surface properties II
11:05 – 11:55		Fatigue Behavior
11:30 – 11:55	Press hardening steels I	
12:45 – 14:00	Press hardening steels II	Improved properties I
14:30 – 15:45	Press hardening steels III	Improved properties II

23.06.2022

Plant visits

Version: June 01, 2022

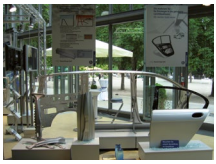
Arena 3	Arena 4	
Hydrogen resistent steel	Lightweight forging I	11:20 – 12:35
Hydr.-embr./Edge cracking I	Lightweight forging II	13:30 – 14:45
16:05 – 16:30 Edge cracking II	Lightweight strategies	15:40 – 17:20
16:30 – 17:25 Stress corrosion cracking		
Meet & Greet in the Exhibition		20:00 – 23:00

Arena 3	Arena 4	
Results of RFCS DURAMECH	Tube components for automotive applications I	08:30 – 10:10
Design of properties	Tube components for automotive applications II	10:40 – 11:30
	Heat treatment I	11:30 – 12:20
Modern steel design	Heat treatment II	13:10 – 14:25
Bending	Additive manufacturing	15:20 – 16:35
Bus transfer to conference dinner		18:00
Conference Dinner at Museo Diocesano		20:00 - 23:00

Arena 3	Arena 4	
Testing	Component properties	08:30 – 10:10
Novel hot-rolled steels	Springs for automotive applications	10:40 – 11:30
Components in heavy vehicles	Modelling and simulation	12:45 – 14:00
Chassis	Joining IV	14:30 – 15:45

17 years SCT – a success story

SCT 2005, 05 to 10 June, 2005, Wiesbaden, Germany
283 participants, 34 % customers of steel industry, 42 % from foreign countries, 82 reports, 5 sponsors



SCT 2008, 01 to 05 June 2008, Wiesbaden, Germany
311 participants, 32 % customers of steel industry, 40 % from foreign countries, 80 reports, 8 sponsors and exhibitors

SCT 2011, 05 to 09 June, 2011, Salzburg, Austria
338 participants, 24 % customers of steel industry, 44 % from foreign countries, 93 reports, 16 sponsors and exhibitors

SCT 2014, 15 to 19 June, 2014, Braunschweig, Germany, 380 participants, 40 % customers of steel industry, 40 % from foreign countries, 106 reports, 14 sponsors and exhibitors

SCT 2017, 18 to 22 June, 2017, Amsterdam-Schiphol, The Netherlands, 483 participants, ~ 30 % customers of steel industry, participants of 21 nations, 152 reports, 20 sponsors and exhibitors

SCT 2022, 19 to 23 June, 2022, Milan, Italy
More than 350 participants, ~ 40 % customers of steel industry, participants of > 20 nations, > 150 reports, > 15 sponsors and exhibitors

SCT 2022

Program

Scala 3 & 4

Opening Session of SCT 2022

09:00 – 09:10 ***Welcome***
Günter Bleimann-Gather, TEMA Technologie Marketing AG, Germany

09:10 – 09:35 ***Reinventing steel in a world of disruption***
Jérôme Favero, ArcelorMittal, Belgium

09:35 – 10:00 ***Steel in automotive present and future***
Michele Tedesco & Fabrizio Frascà, Stellantis N.V., Italy

10:00 – 10:25 ***CO_2 mitigation in steel production and by steel application***
Stefanie Brockmann, VDEh Steel Institute, Germany;
Hans Bodo Lüngen, Lüngen Consulting, Germany

10:25 Coffee / tea break in the Exhibition

	Scala 3	**Scala 4**
11:20	E-Mobility I	Joining I
	Session Chair: Jerome Favero, ArcelorMittal, Belgium	Session Chair: Matthias Beranek, TRUMPF Laser- und Systemtechnik GmbH, Germany
	Overview lecture *Oliver Schauerte,* Volkswagen AG, Germany	***Fatigue assessment of laser beam and laser hybrid welded butt joints made of ultra-high-strength fine-grained structural steels*** *Benjamin Möller,* Fraunhofer Institute for Structural Durability and System Reliability, Germany; Benjamin Seyfried, KIT Steel and Lightweight Structures, Germany; Rainer Wagener, Fraunhofer Institute for Structural Durability and System Reliability, Germany; Peter Knödel, KIT Steel and Lightweight Structures, Germany; Tobias Melz, Technische Universität Darmstadt, Germany; Thomas Ummenhofer, KIT Steel and Lightweight Structures, Germany
11:45	***Development of Advanced High-Strength Steel body structure for a new, fully autonomous Mobility as a Service vehicle – Steel E-Motive*** *Neil McGregor;* Owain Davies, Ricardo, United Kingdom; Tudor Illes; Catalin Marcu; Mihal Vele; Robert Szathmari, ARRK, United Kingdom	***Method development for increasing the prediction quality of mechanical joining process simulations by friction modeling based on local joining process parameters*** *Moritz Rossel;* Gerson Meschut, Paderborn University, Germany
12:10	***How HV-Batteries can benefit from latest steel developements?*** *Matthieu Amblard;* Cécile Pesci, ArcelorMittal Global R&D Maizières, France	***Cyclic transient material behaviour of steels for application of strain-life approaches of welds*** *Benjamin Möller,* Fraunhofer Institute for Structural Durability and System Reliability, Germany; Matthias Hell, Technische Universität Darmstadt, Germany; Rainer Wagener, Fraunhofer Institute for Structural Durability and System Reliability, Germany; Tobias Melz, Technische Universität Darmstadt, Germany
12:35	Lunch in the Exhibition	

Arena 3	Arena 4	
Hydrogen resistent steel	Lightweight forging I	11:20
Session Chair: Andreas Peters, Mendritzki Holding GmbH & Co. KG, Germany	Session Chair: Hans-Willi Raedt, prosimalys GmbH, Germany	
Study of improving resistance of hydrogen delayed fracture on 1.8GPahot stamped boron steel *HyeJin Kim;* Seung-Pil Jung; Jae-Youl Gong; Byung-Gill Yoo; Joo-Sik Hyun, Hyundai Steel Company, Korea, Republic of; Myoung-Gyu Lee, Seoul National University, Korea, Republic of	***Lightweight forging – a success-story in four chapters*** *Hans-Willi Raedt,* prosimalys GmbH, Germany; Alexander Busse, RWTH Aachen University, Germany; Thomas Wurm, Georgsmarienhütte GmbH, Germany	
Hydrogen embrittlement susceptibility of electrogalvanized advanced high strength steels *Andreas Muhr;* Klemens Mraczek; Bernhard Haneder; Ernst Commenda; Daniel Meister; Thomas Hofmeister; Gerald Luckeneder, voestalpine Stahl GmbH, Austria	***Next generation of high strength forging steels*** *Sergey Konovalov;* Jens Gervelmeyer; Jan C. Florian, Georgsmarienhütte GmbH, Germany	11:45
Alloying strategies for reducing the hydrogen embrittlement sensitivity of ultra-high strength steels *Hardy Mohrbacher,* NiobelCon bvba, Belgium	***Efficient strategies for controlled cooled lightweight forgings in automotive applications*** *Johannes Arndt;* Chris-Andre Möller, Buderus Edelstahl GmbH, Germany	12:10
Lunch in the Exhibition		12:35

	Scala 3	**Scala 4**
13:30	E-Mobility II	Joining II
	Session Chair: Jerome Favero, ArcelorMittal, Belgium	Session Chair: Richard Thiessen, thyssenkrupp Steel Europe, Germany
	SSAB EV concept – UHSS in electric vehicles *Robert Ström,* SSAB, Sweden	***Online process monitoring – an approach for process control during resistance spot welding based on electrode displacement*** *Moritz Ullrich;* Sven Jüttner; Maximilian Wohner, Otto-von-Guericke-University Magdeburg, Germany
13:55	***Boosting the power density of highly efficient traction motors in electric drive trains by higher strength lower loss electrical steels*** *Lode Vandenbossche,* ArcelorMittal Global R&D, Belgium; Lisa Lastra, ArcelorMittal Saint-Chély d'Apcher, France; Ahmed Abdallh, ArcelorMittal Global R&D Gent, Belgium	***Predictive process simulation for advanced friction welding applications*** *David Schmicker;* Christoph Rößler, Sampro GmbH, Germany
14:20		***Advanced modelling technique for multi-material joints in car body components considering crack initiation due to notch effects*** *Philipp Bähr;* Silke Sommer, Fraunhofer Institute for Mechanics of Materials, Germany; Eduard Unruh; David Hein; Gerson Meschut, Paderborn University, Germany
14:45	Coffee / tea break in the Exhibition	

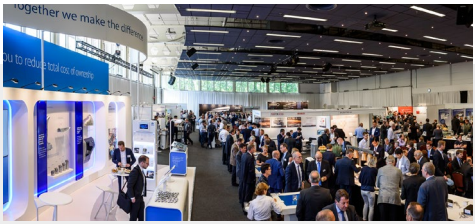
Arena 3	Arena 4	
Hydr.-embr./ Edge cracking I	Lightweight forging II	13:30
Session Chair: Matthias Schneider, Salzgitter Mannesmann Forschung GmbH, Germany	Session Chair: Hans-Willi Raedt, prosimalys GmbH, Germany	
Effects of stress and plastic strain generated by stretch forming on hydrogen embrittlement of ultra high-strength TRIP-aided martensitic steel *Tomohiko Hojo,* Tohoku University, Japan; Fumio Yuse; Junichiro Kinugasa, Kobe Steel, Ltd., Japan; Takahisa Shobu, Japan Atomic Energy Agency, Japan; Ryo Yasuda; Ayumi Shiro; Hiroyuki Saitoh, National Institutes for Quantum and Radiological Science and Technology, Japan; Takashi Matsuno, Tottori University, Japan; Eiji Akiyama, Tohoku University, Japan	***Ultra-high strength fasteners enable enhanced lightweight design*** *Matthias Becker,* KAMAX Automotive GmbH, Germany	
New approach to evaluate edge cracking resistance and crashworthiness of thin metallic sheets *Daniel Casellas;* Sergi Parareda; Antoni Lara, Fundació Eurecat, Spain	***Enhancing properties of bainitic steel SOLAM® B1100 during manufacturing of lightweight forged parts*** *Marie-Therese Perrot-Simonetta,* ArcelorMittal Europe, Luxembourg; Victor Bordereau, ArcelorMittal, France; Bruno Cofino, ArcelorMittal Global R&D, France	13:55
The role of preparing method on the sheared edge quality and hole expansion of hot-rolled 700 MPa steels *Pekka Plosila,* University of Oulu, Finland; Vili Kesti, SSAB, Sweden, Timo Kauppi, Lapland University of Applied Sciences, Finland; Antti Kaijalainen; Jaakko Hannula, University of Oulu, Finland		14:20
Coffee / tea break in the Exhibition		14:45

	Scala 3	Scala 4
15:40	E-Mobility III	Joining II
	Session Chair: Jerome Favero, ArcelorMittal, Belgium	Session Chair: Richard Thiessen, thyssenkrupp Steel Europe, Germany
	New ArcelorMittal steels offer solutions for battery electric vehicle body challenges *Matthieu Amblard;* Jérôme Favero, ArcelorMittal Global R&D, Belgium	***Indication of weld defects in constitution diagram for dissimilar Metal welding of high Mn steels*** *Florian Urban;* Norman Kauss; Manuela Zinke; Sven Jüttner, Otto von Guericke Universität Magdeburg, Germany
16:05	***Safety and lightweight innovations for battery electric vehicles by using stainless steels*** *Stefan Lindner,* Outokumpu Nirosta GmbH, Germany	Bainitic steels for flat products
		Session Chair: Andreas Pichler, voestalpine Stahl GmbH, Austria
		Hot rolled high strength bainitic steels with enhanced local formability *Maximilian Nagel;* Heike Denecke-Arnold; Henrike Bröker; Andreas Tomitz; Stephan Kovacs, thyssenkrupp Hohenlimburg GmbH, Germany
16:30	***Car battery cases for larger quantities in lightweight steel construction*** *Martin Hillebrecht,* EDAG Engineering GmbH, Germany	Medium and high Mn steels
		Session Chair: Andreas Pichler, voestalpine Stahl GmbH, Austria
		Available cold-rolled TWIP steel and its properties *Marco Goesling,* BILSTEIN GmbH & Co. KG, Germany; Andreas Tomitz; Markus Kaizik; Stephan Kovacs; Maximilian Nagel, thyssenkrupp Hohenlimburg GmbH, Germany; Markus Domogala; Thomas Thülig, BILSTEIN GmbH & Co. KG, Germany
16:55	***Investigation of leak tightness for bonded steel joints induced by mechanical and corrosive load for use in battery housings*** *Tobias Schmolk;* Gerson Meschut, Paderborn University, Germany	

18:00 Meet & Greet in the Exhibition

Traditionally on the evening of the SCT opening day an event takes place, which creates a relaxed atmosphere. End the first day of the conference with some typical Italian food and a cool drink.

Arena 3	Arena 4	
Edge cracking II	Lightweight strategies	15:40
Session Chair: N.N.	Session Chair: Hans-Willi Raedt, prosimalys GmbH, Germany	
Hydraulic bulge testing of metal sheets at elevated temperatures *Daniel Staupendahl,* Erichsen GmbH & Co. KG, Germany	***Optimization of Tier-X lightweight strategies with the E2P approach*** *Alexander Busse,* fka GmbH, Germany	
Automated hole expanding test to quantify edge-crack sensitivity of steel sheets *Matthias Schneider;* Sebastian Westhäuser, Salzgitter Mannesmann Forschung GmbH, Germany; Andreas Brinck, Salzgitter Flachstahl GmbH, Germany; Christian Fricke, Salzgitter Mannesmann Forschung GmbH, Germany	***Bainite for steering racks – a success story*** *Thomas Sourmail;* André Galtier, Ascometal, France; Antoine Le Bigot, Schmolz & Bickenbach International GmbH, France; Frederic Marchal, Ascometal, France	16:05
Stress corrosion cracking	Machinability of components	16:30
Session Chair: N.N.	Session Chair: Marie-Therese Perrot-Simonetta, ArcelorMittal Europe, Luxembourg	
Stress corrosion cracking of hot forming steels *Carsten Lachmann,* Volkswagen AG, Germany; Niclas Eick, SMS Elotherm GmbH, Germany	***Influence of microstructure on machinability of high strength steels*** *Fares Haddad,* ArcelorMittal Global R&D, France; Olivier Bomont, École nationale supérieure d'arts et métiers, France; Jean-Edouard Desaigues; Anne Bomont-Arzur, ArcelorMittal Global R&D, France; Christophe Lescalier, École nationale supérieure d'arts et métiers, France	
Delayed fracture, stress corrosion cracking: state of the art & mitigation actions *Dominique Cornette;* C Allely; C Cobo; T Dieudonne; T Sturel, ArcelorMittal, France	***Comparative machining tests on stainless steels*** *Jan Nickel;* Dirk Biermann, TU Dortmund University, Germany; Clara Herrera; Philipp Niederhofer, Deutsche Edelstahlwerke Specialty Steel GmbH & Co. KG, Germany; Nils Felinks, TU Dortmund University, Germany	16:55



	Scala 3	**Scala 4**
08:30	Formability and processes I	Laser welding
	Session Chair: Thomas Petzold, inpro Innovationsgesellschaft für fortgeschrittene Produktionssysteme in der Fahrzeugindustrie mbH, Germany	Session Chair: Michael Braun, Salzgitter Mannesmann Forschung GmbH, Germany
	Microstructure evolution in a hot-dip galvanized complex phase gigapascal steel combining high yield strength and extraordinary formability *Konstantin Molodov,* Salzgitter Mannesmann Forschung GmbH, Germany	***Advancements in laser welding technologies in the field of high strength steel grades*** *Matthias Beranek,* TRUMPF Laser- und Systemtechnik GmbH, Germany
08:55	***Benefits of using the new complex-phase steel CR780Y980T-CH-GI with an improved formability*** *Matti Teschner,* Salzgitter Mannesmann Forschung GmbH, Germany	***Effects of reduced ambient pressure and beam oscillation on gap bridging ability during solid state laser beam welding*** *Markus Köhler;* Klaus Dilger; Jonas Hensel, Technische Universität Braunschweig, Germany
09:20	***Hot stamping tools – challenges and solutions*** *Jens Jonas Wilzer,* Dörrenberg Edelstahl GmbH, Germany; Felice Zanellini, Stahl Italia S.r.l., Italy	***Improving weld mechanical properties in laser beam welded press-hardened martensitic-austenitic steel 1.4034*** *Martin Dahmen,* Fraunhofer Institute for Laser Technology, Germany; Tobias Melz, Fraunhofer Institute for Structural Durability and System Reliability, Germany; Gökhan Tümkaya, Paderborn University, Germany; Rainer Wagener, Fraunhofer Institute for Structural Durability and System Reliability, Germany; Matthias Hell, Technische Universität Darmstadt, Germany; Benjamin Möller, Fraunhofer Institute for Structural Durability and System Reliability, Germany
09:45	***Investigation on hot sheet metal forming by means of a longitudinal flux inductor*** *Florian Pfeifer;* Thomas Tröster; Thorsten Marten, Paderborn University, Germany; Bernard Nacke; André Dietrich, Leibniz University Hannover, Germany ; Guido Grundmeier, Paderborn University, Germany	***Laser welding of aluminum-silicon coated 22MnB5 without an additional ablation step*** *Jana von der Heydt;* Michael Keßler; Christian Both, Baosteel Tailored Blanks, Germany
10:10	Coffee / tea break in the Exhibition	

Arena 3	Arena 4	
Results of RFCS DURAMECH	Tube components for automotive applications I	08:30
Session Chair: Silke Sommer, Fraunhofer Institute for Mechanics of Materials, Germany	Session Chair: Christian Schäfers, Hochschule Osnabrück, Germany	
On the effect of bolted joint parameters on the fatigue performance of bolted assemblies in high strength steel *Okan Yilmaz,* ArcelorMittal Global R&D, Belgium; Dimitri Debruyne; Sam Coppieters, Katholieke Universiteit Leuven, Belgium	***Lightweight potential in commercial vehicle due to the use of quadratic and rectangle hollow profiles out of high and higher strength steels*** *Andre Siegrist;* Christian Schäfers, University of Applied Sciences Osnabrück, Germany	
Recommendations on the application of high-strength steel bolted connections from the perspective of fatigue performance *Okan Yilmaz,* ArcelorMittal Global R&D, Belgium; Carlos Jiménez-Peña; Dimitri Debruyne ; Sam Coppieters, Katholieke Universiteit Leuven, Belgium	***New generation of propeller shaft precision steel tubes*** *Steffen Zimmermann;* Stephanie Siegfanz, Salzgitter Mannesmann Forschung GmbH, Germany	08:55
Numerical simulation of the punching process for the assessment of high strength steel bolted connections *Silke Sommer;* Hemanth Janarthanam, Fraunhofer Institute for Mechanics of Materials, Germany	***Innovative steel tubes for lighter, safer and more sustainable automobiles*** *Marcus Bistron;* Thomas Säuberlich; Leonhard Rose, Benteler Steel/Tube GmbH, Germany	09:20
Fatigue assessment of HSS bolted connections considering effects of manufacturing process *Igor Varfolomeev,* Fraunhofer Institute for Mechanics of Materials, Germany; Leif Bäckman; Mattias Clarin, SSAB, Sweden; Sergii Moroz, Fraunhofer Institute for Mechanics of Materials, Germany	***Advantages of steel tubular solutions in front crash management systems*** *Gorka Iglesias,* ArcelorMittal Europe, Luxembourg	09:45
Coffee / tea break in the Exhibition		10:10

	Scala 3	Scala 4
10:40	Formability and processes II	Hybrid joining
	Session Chair: Thomas Petzold, inpro Innovationsgesellschaft für fortgeschrittene Produktionssysteme in der Fahrzeugindustrie mbH, Germany	Session Chair: Sven Jüttner, Otto-von-Guericke-Universität Magdeburg, Germany
	Process related material choice workflow for advanced automotive seat structures *Klaus Unruh,* Faurecia Automotive GmbH, Germany; Martin Heuse; Martin Meyer; Michael Schwarzenbrunner; Matthias Flume, voestalpine Stahl GmbH, Austria	***Expanding the application possibilities of arc brazed steel-aluminum-hybrid compounds*** *Pascal Österreich,* RWTH Aachen University, Germany; Thorsten Twiehaus; Alexandros Pipinikas; Matthias Angerhausen, FEF Forschungs- und Entwicklungsgesellschaft Fügetechnik GmbH, Germany; Uwe Reisgen, RWTH Aachen University, Germany
11:05	***Innovative process chain for complex profile forming on adapted rotary draw bending machine*** *Matthias Hermes;* Viktor Holstein, University of Applied Science South Westphalia, Germany	***Dissimilar joints of ultra high strength steel 22MnB5 and aluminum AW 6016 prepared by projection welding with insert elements*** *Vincent Schreiber;* Sven Jüttner; Anastasiia Zvorykina; Moritz Ullrich, Otto-von-Guericke-University, Magdeburg, Germany
11:30	***Sheet metal hot forging for automotive seating components: innovation for global CO_2 reduction*** *David Even,* Faurecia Automotive GmbH, France; Camille Eudeline; Tose Buzalkovski, Faurecia Automotive Seating, France	***Door ring solution with advanced new line concept*** *Mario Padovani,* Baosteel Tailored Blanks, Italy

Arena 3	Arena 4	
Design of properties	Tube components for automotive applications II	10:40
Session Chair: Hardy Mohrbacher, NiobelCon bvba, Belgium	Session Chair: Christian Schäfers, Hochschule Osnabrück, Germany	
Towards integration of advanced material models of steels into digital product development *Uwe Diekmann;* Alex Miron; Petra Becker; Igor Alperovich, Matplus GmbH, Germany	***Injection line solutions for 3.000 bar pressure systems for low emission diesel engines*** *Sebastian Brust,* Mannesmann Precision Tubes GmbH, Germany; Hossein Karbasian, Salzgitter Mannesmann Forschung GmbH, Germany; Steffen Zimmermann; Karl Meiwes, Mannesmann Precision Tubes GmbH, Germany	
ICME-based design of damage tolerant microstructures *Yannick Sparrer;* Wenqi Liu, RWTH Aachen University, Germany; Junhe Lian, Aalto University, Finland	***Evolution of tubes for rear torsion-beam axles*** *Gorka Iglesias,* ArcelorMittal Europe, Luxembourg	11:05
Hierarchic multiscale simulations including texture and yield surface updates for deep drawing simulation in automotive development *Thomas Petzold,* inpro Innovationsgesellschaft für fortgeschrittene Produktionssysteme in der Fahrzeugindustrie mbH, Germany; Franz Roters, Max-Planck-Institut für Eisenforschung GmbH, Germany; Dirk Roose, Katholieke Universiteit Leuven, Belgium; Helmut Richter, thyssenKrupp Steel Europe AG, Germany; Kim Kose, inpro Innovationsgesellschaft für fortgeschrittene Produktionssysteme in der Fahrzeugindustrie mbH, Germany; Piet Kok, Tata Steel Europe, The Netherlands; Leo Kestens, Delft University of Technology, The Netherlands; Fengbo Han, Max-Planck-Institut für Eisenforschung GmbH, Germany; Hadi Ghiabakloo; Albert Van Bael, Katholieke Universiteit Leuven, Belgium; Carola Celada-Casero, Tata Steel, The Netherlands; Monireh Azimi, Delft University of Technology, The Netherlands	Heat treatment I Session Chair: Marie-Therese Perrot-Simonetta, ArcelorMittal Europe, Luxembourg ***Alternatives to Mo-added carburizing steels*** *Simon D. Catteau;* Frédéric Marchal; Thomas Sourmail, Ascometal France Holding, France	11:30

	Scala 3	Scala 4
11:55	***Manufacturing of high strength sheet metal parts with enhanced mechanical properties by using tailored embossed blanks*** *Pascal Heinzelmann;* Mathias Liewald; Stefan Walzer, University of Stuttgart, Germany	***Disjoining and repair strategies of structural joints in automotive lightweight structures*** *Nick Chudalla,* University of Paderborn, Germany; Tim Michael Wibbeke, Hamm-Lippstadt University of Applied Sciences, Germany; Gerson Meschut, University of Paderborn, Germany; Aurélie Bartley, Hamm-Lippstadt University of Applied Sciences, Germany; Jan Ditter, University of Paderborn, Germany
12:20	Lunch in the Exhibition	
13:10	3rd generation AHSS	Decarbonization of steel industry
	Session Chair: Nico Langerak, Tata Steel, The Netherlands	Session Chair: Oliver Schauerte, Volkswagen AG, Germany
	3G AHSS and high elongation DP/CP grades, development of a consistent and complementary offer *Henri Guyon,* ArcelorMittal Global R&D, France; Alain Magoariec; Antoine Moulin, ArcelorMittal, France	***Life cycle analysis of the decarbonized steel making route in Salzgitter*** *Kai Köhler,* Salzgitter Mannesmann Forschung GmbH, Germany
13:35	***3rd generation AHSS – status and perspective at Baosteel*** *Aldo Ajmar,* Baosteel, Italy; Ricky Rosi, Tiberina Group, Italy; Matteo Ferrea, Centro Ricerche Fiat, Italy	***Reducing the GHG footprint of cars and trucks manufacturing: the role of special bar quality steels*** *Thomas Sourmail;* O. Nodin; Y. Zbaczyniak, Ascometal CREAS, France
14:00	***3rd generation advanced high strength steels for high crashworthiness automotive applications*** *David Frómeta,* Fundació Eurecat, Spain; Daniele De Caro, Centro Ricerche Fiat, Italy; Johannes Rehrl; Clemens Suppan, voestalpine Stahl GmbH, Austria; Thomas Dieudonné; Pascal Dietsch, ArcelorMittal Maizières Research SA, France; Jörgen Kajberg; Simon Jonsson, Luleå University of Technology, Sweden	***ArcelorMittal's smart steels deliver more sustainable cars*** *Jerome Favero,* ArcelorMittal, Belgium; Frédéric Painchault, ArcelorMittal, France
14:25	Coffee / tea break in the Exhibition	

Arena 3	Arena 4	
Development of cold-rolled and galvannealed (GA) Steels with martensitic structure for safety applications *BongJune Park;* Sang Wook Lee; Min Suh Park; Jin Sung Park; Seong Kyung Han, Korea, Republic of, Tae Woo Kwon, Korea, Republic of	***Air-hardening martensites: quench and tempering steel properties at the expense of a precipitation hardening ferritic-perlitic steel.*** *Alexander Gramlich;* Wolfgang Bleck, RWTH Aachen University, Germany; Wiebke Hagedorn; Ulrich Krupp, RWTH Aachen University, Aachen	11:55
Lunch in the Exhibition		12:20
Modern steel design	Heat treatment II	13:10
Session Chair: Uwe Diekmann, Matplus GmbH, Germany	Session Chair: Marie-Therese Perrot-Simonetta, ArcelorMittal Europe, Luxembourg	
Wear resistance and formability properties of cladded steels for clutch disc carriers *Hinrich Lührs,* Volkswagen AG, Germany; Thomas Niendorf, University of Kassel, Germany	***Improving materials and manufacturing routes of components subjected to low pressure carburizing (LPC)*** *Volker Heuer;* Klaus Loeser, ALD Vacuum Technologies GmbH, Germany	
Potential of orbital formed tailored blanks for industrial application *Andreas Hetzel;* Marion Merklein; Michael Lechner, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany; Alexander Aman, Otto Vollmann GmbH & Co. KG, Germany; Kai Büdicker, ZF Friedrichshafen AG, Germany	***Control of austenitic grain size during high temperature carburizing*** *Véronique Smanio,* ArcelorMittal Global R&D, France; François-Xavier Hoche, ArcelorMittal, France	13:35
New microalloyed hot rolled steel with uniform property profiles and improved elongation for car parts *Christian Mertin;* Georg Paul; Ilya Materko; Arne Schreiber; Achim Peuster, thyssenkrupp Steel Europe AG, Germany	***Low temperature surface hardening of stainless steels in automotive applications*** *Simon Schlei;* Alexandra Bauer, Bodycote Specialist Technologies GmbH, Germany	14:00
Coffee / tea break in the Exhibition		14:25

	Scala 3	Scala 4
15:20	High-ductility steels	Joining III
	Session Chair: Nico Langerak, Tata Steel, The Netherlands	Session Chair: Sven Jüttner, Otto-von-Guericke-Universität Magdeburg, Germany
	Dual-phase steel grade with an improved local-global ductility balance *Richard Thiessen;* Patrick Kuhn; Georg Paul, thyssenkrupp Steel Europe, Germany	***Development of a crash behaviour prediction method for resistance spot welded 3-steel sheet joints*** *Viktoria Olfert;* Gerson Meschut, Paderborn University, Germany; Lilia Schuster; Silke Sommer, Fraunhofer Institute for Mechanics of Materials IWM, Germany; David Hein, Paderborn University, Germany
15:45	***Development and characterization of new low alloyed ultra high strength steel for structural body components*** *Uwe Diekmann,* Matplus GmbH, Germany; Ansgar Hatscher, Volkswagen AG, Germany; Petra Becker, Matplus GmbH, Germany; Jaromir Dlouhy; Zbysek Novy, COMTES FHT a.s., Czech Republic	***Influence of curing-induced pre-deformations on the mechanical properties of adhesively bonded joints in steel-intensive mixed-material structures*** *Felix Beule;* Dominik Teutenberg; Gerson Meschut, Paderborn University, Germany; Tobias Aubel; Anton Matzenmiller, University of Kassel, Germany
16:10		***Robustness and reliability assessment of single-sided spot welding as a process for sheet to profile joinings for body in white vehicle structures*** *Pedro Bamberg;* Uwe Reisgen; Alexander Schiebahn; Gregor Gintrowski, RWTH Aachen University, Germany

18:00 Bus transfer to Conference dinner

20:00 Conference dinner at Museo Diocesano

Sustaining the tradition built during the previous editions of SCT, platinum sponsor ArcelorMittal warmly invites all SCT participants to this year's conference dinner. The glamorous evening event takes place at the Museo Diocesano, close to Porta Ticinese in the city center of Milan. In the patio of the Chiostri di Sant'Eustorgio we welcome you to an unforgettable networking evening with aperitivo and multi-course menu.

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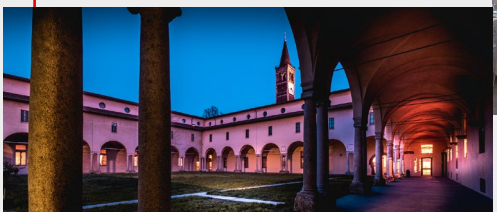
SCT participants will have the chance to visit the Museo, which is part of the oldest monumental complex in Milan and includes the entire Basilica and the old Dominican monastery, and which over the centuries has become a particularly significant area of Milan's Christian history.

Arena 3	Arena 4	
Bending	Additive manufacturing	15:20
Session Chair: Hosen Sulaiman, Faurecia Autositze GmbH, Germany	Session Chair: N.N.	
Assessment of bendability of HSS, AHSS and UHSS *Sebastian Heibel;* Johannes Stier; Thomas Schweiker, Mercedes-Benz AG, Germany	***Improved live cycle of automotive components by new steel grades and additive manufacturing*** *Hans-Günter Krull;* Svenja Richert; Frank van Soest; Horst Hill, Deutsche Edelstahlwerke Specialty Steel & Co KG, Germany	
3D-swivel-bending – flexible forming through adjustable tooling technology *Michael Schiller;* Bernd Engel, University of Siegen, Germany	***About the cyclic behavior of additively manufactured structures*** *Matilde Scurria;* Tobias Melz; Rainer Wagener, Fraunhofer Institute for Structural Durability and System Reliability, Germany	15:45
Contact-Bending-Fatigue (CBF) tests on high-strength steel for gears (effect of sliding in the circumferential direction) *Kenya Amikawa;* Shin Yasuda; Takumi Nakamura; Ichiro Moriwaki; Daisuke Iba, Kyoto Institute of Technology, Japan	***Air hardening steel - a well-known sheet material shows its innovation potential also for powder-based additive manufacturing*** *Christian Fritzsche;* Hans Schmale, Salzgitter Mannesmann Forschung GmbH, Germany; Ralf Mayer, Oerlikon AM GmbH, Germany	16:10

Bus Shuttle

Transport from the NH Congress Centre to Museo Diocesano is organized with a bus shuttle.

Transport will also be provided to take you back to the NH Hotel from 22.30h every 30 Minutes.



	Scala 3	**Scala 4**
08:30	Liquid metal embrittlement I	Surface properties I
	Session Chair: Max Biegler, Fraunhofer Institute for Production Systems and Design Technology, Germany	Session Chair: Carsten Lachmann, Volkswagen AG, Germany
	Advanced and ultra-high strength steel grades for the automotive industry in the trade off of local and global ductility and weldability *Katharina Steineder;* Thomas Hebesberger; Christian Walch; Austria, Robert Sierlinger, voestalpine Stahl GmbH, Austria	***Reduction of tool pollution and galling during stamping of automotive panels*** *Carel ten Horn;* Chiel Dane, Tata Steel, The Netherlands
08:55	***The role of the material in the LME sensitivity of zinc-coated AHSS for automotive applications*** *Ellen van der Aa,* Tata Steel Europe, The Netherlands	***Influence of tailored surfaces on the surface properties of sheet-bulk metal formed parts*** *Thomas Wild; Marion Merklein, Friedrich-Alexander-University Erlangen-Nürnberg, Germany*
09:20	***Liquid metal embrittlement: status of analysis and countermeasures*** *Dominique Cornette,* ArcelorMittal Global R&D, France; Sriram Sadagopan, ArcelorMittal, United States; Thomas Dupuy; S Sriram, ArcelorMittal, France	***Investigation of tailored tool surfaces for improving the component quality of sheet-bulk metal forming parts produced by a combined deep-drawing and upsetting process*** *Johannes Henneberg;* Robert Schulte; Marion Merklein, Friedrich-Alexander-University Erlangen-Nürnberg, Germany
09:45	***Development of a VDA test standard for quantification of LME sensitivity of zinc coated automotive steels*** *Ellen van der Aa,* Tata Steel Europe, The Netherlands; Juergen Hover, Ford Werke GmbH, Germany; Thomas Dupuy, Arcelor Mittal, France	***New wire coatings for high performance cold heading applications and corrosion protection*** *Nils Köhler,* Saarstahl AG, Germany
10:10	Coffee / tea break in the Exhibition	

Arena 3	Arena 4	
Testing	Component properties	08:30
Session Chair: Hans-Günter Krull, Deutsche Edelstahlwerke Specialty Steel GmbH & Co KG, Germany	Session Chair: Christian Bruch, Saarstahl AG, Germany	
Temperature and stress state dependent fracture phenomena of a high-strength dual-phase steel in an impact tensile test *Markus Könemann;* Manuel Henrich; Sophie Stebner; Sebastian Münstermann, RWTH Aachen University, Germany	***Improving the isotropy of steels for automotive components subjected to multiaxial loadings*** *Diego Herrero;* Jacinto Albarran, Sidenor I+D, S.A., Spain; Taina Vuoristo; Irma Heikkilä, Swerim AB, Sweden; Tobias Seelbach, RWTH Aachen University, Germany	
Experimental validation of the flow curve determination with the help of the plane strain compression test on selected high-strength sheet steels *Ilya Peshekhodov;* Klaus Unruh; Geoffrey Delwarde, Faurecia Autositze GmbH, Germany	***Improved bainitic TRIP wire rod properties by materials and process design*** *Marc Ackermann,* RWTH Aachen University, Germany; Bertrand Michaut, ArcelorMittal Maizières, France; Wolfgang Bleck, RWTH Aachen University, Germany; Pascal Buessler; Bernard Resiak, ArcelorMittal Maizières, France	08:55
Effect of hydrogen on the formability and fracture behaviour of high strength multiphase steels under multiaxial loading *Silke Klitschke;* Ken Wackermann; Johannes Preussner; Dominik Discher; Fabien Ebling, Fraunhofer Institut für Werkstoffmechanik IWM, Germany	***Improvement of the microstructural characteristics of wire rod by means of optimized rolling equipment*** *Barbara Ebel-Wolf;* H. Robert Ehl; Martin Graus; Thomas Nikolay; Andreas Gergen; Volker Kinsinger, Saarstahl AG, Germany	09:20
Non-destructive detection of near surface defects in steel products using induction thermography *Tanja Eisele;* Hermann Lücken, Esslingen University of Applied Sciences, Germany	***Two steel grades for ultra-high strength bolts/screws with improved hydrogen resistance*** *Lucie Leclair,* ArcelorMittal Global R&D, France; Caroline Persem; Bernard Resiak, ArcelorMittal Gandrange, Luxembourg	09:45
Coffee / tea break in the Exhibition		

	Scala 3	Scala 4
10:40	Liquid metal embrittlement II	Surface properties II
	Session Chair: Franz Androsch, voestalpine Stahl GmbH, Austria	Session Chair: Carsten Lachmann, Volkswagen AG, Germany
	Investigation of liquid metal embrittlement avoidance strategies for dual phase steels via electro-thermomechanical finite element simulation *Max Biegler,* Fraunhofer Institute for Production Systems and Design Technology, Germany; Christoph Böhne; Gerson Meschut, Paderborn University, Germany; Michael Rethmeier, Fraunhofer Institute for Production Systems and Design Technology, Germany	***New type of coating process and product in steel industry*** *Young Jin Kwak;* S.J Hong; M.J Eom; H.S Han; K.P Ko; W.S Jung; Y.H Jung; K.H Nam; D.Y Lee; S.H Lee, POSCO, Korea, Republic of
11:05	***Novel microalloying and electrode solutions to avoid liquid metal embrittlement during resistance spot welding of galvanized DP1200HD steel*** *Konstantin Prabitz,* Materials Center Leoben Forschung GmbH, Austria; Thomas Antretter, Montanuniversitaet Leoben, Austria; Holger Schubert; Benjamin Hilpert, Mercedes-Benz AG, Germany; Martin Gruber; Robert Sierlinger, voestalpine Stahl GmbH, Austria; Michael Mark, Plansee SE, Austria; Werner Ecker, Materials Center Leoben Forschung GmbH, Austria	Fatigue behaviour Session Chair: Hardy Mohrbacher, NiobelCon bvba, Belgium ***Fatigue life of cold formed steel wheels: an experimental study*** *Giorgio Gallio,* MW Italia s.r.l., Italy; Luca Actis Comino, MW Italia (CLN group), Italy
11:30	Press hardening steels I Session Chair: Franz Androsch, voestalpine Stahl GmbH, Austria ***Hydrogen embrittlement susceptibility investigation of PHS 2000*** *Renzo Valentini,* University of Pisa, Italy; Serena Corsinovi; Linda Bacchi, Letomec, Italy; Michele Tedesco, Centro Ricerche FIAT, Italy	***Surface and internal crack initiation during very high cycle fatigue (VHCF) of high-strength steels*** *Ulrich Krupp;* Sebastian Wesselmecking, RWTH Aachen University, Germany; Kevin Koschella; Alexander Giertler, University of Applied Sciences Osnabrück, Germany
11:55	Lunch in the Exhibition	

Arena 3	Arena 4	
Novel hot-rolled steels	Springs for automotive applications	10:40
Session Chair: Michael Braun, Salzgitter Mannesmann Forschung GmbH, Germany	Session Chair: Christian Bruch, Saarstahl AG, Germany	
Hot rolled and galvanized steel sheet for high strength automotive components *Ingwer Denks,* Salzgitter Mannesmann Forschung GmbH, Germany; Patrick Witteler, Salzgitter Flachstahl GmbH, Germany; Marco Witte, Salzgitter Mannesmann Forschung GmbH, Germany	***The performance of leaf springs at an end or are there future potentials?*** *Eckehard Müller,* Bochum University of Applied Sciences, Germany	
Docol HE-grades with excellent edge ductility *Vili Kesti;* Pasi Suikkanen, SSAB, Finland; Antti Kaijalainen, University of Oulu, Finland; Päivi Rautio; Raimo Ruoppa; Raimo Vierelä, Lapland University of Applied Sciences, Finland; Pekka Plosila, University of Oulu, Finland	***Application of sound measurements for quality control of wires during the production of technical springs*** *Mathias Lorenz;* Daniela Schwerdt; Natalia Lesnych; Mohammed Salih, University of Applied Sciences Technology Wismar, Germany	11:05
Hot-rolled high-strength steel grades for automotive applications *Martin Schickinger; Gottfried Hribernig; Helmut Spindler; Johannes Krammerbauer, voestalpine Stahl GmbH, Austria*	***Production of Si-Cr-spring steels for suspension and valve springs in direct continuous casting*** *Simon Ferner;* Christian Bruch; Martin Graus; Barbara Ebel-Wolf, Saarstahl AG, Germany	11:30
Lunch in the Exhibition		11:55

	Scala 3	**Scala 4**
12:45	Press hardening steels II	Improved properties I
	Session Chair: Franz Androsch, voestalpine Stahl GmbH, Austria	Session Chair: Uwe Diekmann, Matplus GmbH, Germany
	Development of a tailor welded hot stamped side frame member *Cameron Tolton;* S. Lee; M. Tummers; J. Imbert; C. Butcher, University of Waterloo, Canada; S. Malcolm, Honda R&D Americas Inc., United States; J Boettger, Prometek Research Center Cosma International, Canada; W. Bernert; D. Papalazarou; C. Brown, ArcelorMittal Dofasco, Canada; E. Famchon, Mittal Global R&D, Montataire, France	***Performance leaps through intelligent technology solutions*** *Kristin Helas,* GMT – Gesellschaft für metallurgische Technologie- und Softwareentwicklung mbH, Germany; Linda Oberli, Steeltec AG, Switzerland; Michael Kruse, FRIEDRICH KOCKS GMBH & CO KG, Germany
13:10	***Multi Part Integration (MPI) new concept of PHS solutions*** *Jesse Paegle,* ArcelorMittal, France; Joel Wilsius, Arcelor Mittal R&D, France	***Martensitic cold forming steels with 1700MPa tensile strength: forming properties that may change the industry*** *Manuel Otto,* SSAB, Germany
13:35	***Development of TWB body-in-white parts with 1.0 GPa hot stamping material*** *DongYul Lee;* Byung Gil Yoo; Chang Yong Lee, Hyundai Steel Company, Korea, Republic of	***Tuning microstructure and mechanical properties of B2-strengthened lightweight steels*** *Nack Joon Kim,* Pohang University of Science and Technology, Korea, Republic of; Nack J. Kim, Graduate Institute of Ferrous Technology, POSTECH, Korea, Republic of; C.H. Nam; G. Park; O. Lee, Pohang University of Science and Technology, Korea, Republic of
14:00	Coffee / tea break in the Exhibition	

Arena 3	Arena 4	
Components in heavy vehicles Session Chair: Thomas Müller, SSAB, Germany	Modelling and simulation Session Chair: Ulrich Krupp, RWTH Aachen University, Germany	12:45
Twist-beam axle and disc brake caliper for commercial vehicle suspension – through standardization and simulation to new applications for hot strip *Jörg Ebert,* Ebertconsulting GmbH, Germany; Ming Tong, Zhenjiang Baohua Semi-Trailer Parts Co,.Ltd, China	***Microstructure-sensitive modeling of the damage mechanisms of various multi-phase steels*** *Junhe Lian,* Aalto University, Finland; Ude Hangen, Bruker Nano GmbH, Germany; Sebastian Muenstermann; Yannik Sparrer; Wolfgang Bleck; Yuling Chang, RWTH Aachen University, Germany; Wenqi Liu, Aalto University, Finland	
New designed lightweight bus frames *Barbara Mundt,* Outokumpu Nirosta GmbH, Germany; *Klemens Rother,* Munich University of Applied Sciences, Germany	***Fracture toughness to assess the fatigue notch factor of high strength steels for chassis parts*** *Sergi Parareda,* Fundació Eurecat, Spain; Henrik Sieurin, Scania CV AB, Sweden; Daniel Casellas; David Frómeta; Antoni Lara, Fundació Eurecat, Spain	13:10
Optimized steel grades and solutions for heavy truck cabins and frames *Fayçal Nabil;* Arnaud Cocu, ArcelorMittal, France	***Prediction of spring-back and residual stresses in spring coiling simulations by the use of combined isotropic and kinematic hardening models*** *Philipp Rethmann;* A. Erman Tekkaya; Felix Kolpak, Technische Universität Dortmund, Germany	13:35
Coffee / tea break in the Exhibition		14:00

	Scala 3	Scala 4
14:30	Press hardening steels III	Improved properties II
	Session Chair: Ulrich Krupp, RWTH Aachen University, Germany	Session Chair: N.N.
	Design and processing of next generation press-hardening steels for car body applications *Ansgar Hatscher,* Volkswagen AG, Germany; Agim Ademaj, Metakus GmbH, Germany; Markus Loecker, Kirchhoff Automotive Deutschland GmbH, Germany; Robert Thomas; Oliver Schauerte, Volkswagen AG, Germany; Uwe Diekmann; Petra Becker, Matplus GmbH, Germany; Christoph Ostwald, Volkswagen AG, Germany	***Mechanical properties of Q&P steels for safety-relevant car body applications*** *Yannik Sparrer;* Kevin Bissa, RWTH Aachen University, Germany; Junhe Lian, Aalto University, Finland; Sebastian Münstermann, RWTH Aachen University, Germany
14:55	***Emerging PHS success stories*** *Ludovic Dormegny;* Henri Guyon; Pascal Drillet; Sebastian Cobo, ArcelorMittal, France	***Quenching and partitioning response of vanadium microalloyed TRIP-assisted steel*** *Olli Oja,* SSAB, Finland; Pasi Peura; Madan Patnamsetty, Tampere University, Finland; Petri Jussila, SSAB, Sweden; Shahroz Ahmed, Tampere University, Finland
15:20	***Improved geometric accuracy of press hardening parts with tailored properties*** *Rico Haase;* Verena Psyk; Julia Schoenherr; Matthias Nestler, Fraunhofer Institute for Machine Tools and Forming Technology, Germany	***Mechanism controlled rolling of high Mn steels for crash relevant parts*** *Sebastian Wesselmecking;* Marco Haupt; Ulrich Krupp; Wolfgang Bleck, RWTH Aachen University, Germany

Thank you for beeing part of the
6th International Conference
on Steels in Cars and Trucks.
Have a nice journey!

Arena 3	Arena 4	
Chassis	Joining IV	14:30
Session Chair: Michael Braun, Salzgitter Mannesmann Forschung GmbH, Germany	Session Chair: Hosen Sulaiman, Faurecia Autositze GmbH, Germany	
New steel grade for demanding chassis applications *Georg Paul;* Annette Bäumer; Arne Schreiber; Stefan Woestmann; Alexander Lange, thyssenkrupp Steel Europe, Germany	***A new methodology to validate crashworthiness of hot stamped laser welded blanks*** *Sadok Gaied;* Ivan Viaux, ArcelorMittal, France	
Innovative and sustainable lightweight solutions while staying cost-competitive *Lukas Christopher Schröder;* Barbara Mundt, Outokumpu Nirosta GmbH, Germany	***Use of lockbolt joints for vehicle construction*** *Mathias Schwarz,* Fraunhofer Institute for Large Structures in Production Engineering, Germany; Ralf Glienke, University of Applied Sciences Technology Wismar, Germany; Christoph Blunk, Howmet Fastening Systems – Industrial Fastener Division, Germany; Knuth-Michael Henkel, Universität Rostock, Germany	14:55
S in motion® Rear chassis for BEV: lightweight steel solutions for battery electric vehicle *Georges Lovato,* ArcelorMittal Global R&D, France; Zakariae Abdeddine, ArcelorMittal, France	***Use of slotted holes in bolted connections for commercial vehicle construction*** *Maik Dörre;* Knuth-Michael Henkel, Fraunhofer Institute for Large Structures in Production Engineering, Germany; Ralf Glienke, Hochschule Wismar, University of Applied Sciences, Germany; Justus Mantik, Fraunhofer Institute for Large Structures in Production Engineering, Germany	15:20

See you in June 2025
in Stockholm, Sweden

SCT2025

Participation fees

The conference fee includes get-together, networking event, the conference dinner and conference proceedings.

For detailed information please visit
www.sct-2022.com
Registration is only possible online.

Visit: www.sct-2022.com (Registration)

	3-days-card	1-day-card
Speaker	680,00	280,00
Speaker (member of university)	440,00	220,00
Participant (early bird until April 15, 2022)	980,00	----
Participant	1230,00	490,00
Member of university	740,00	290,00
Student (with student id; age < 25 years)	350,00	----

All participant fees are net. The Italian VAT (22 %) will be added.
Conference registration includes catering, it is not possible to register without catering.

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The antitrust guidelines "Guidelines on Adherence to Cartel-Law Regulations" have to be observed throughout the whole event. No illegal antitrust topics may be dealt with within the context of this meeting. In particular no agreements on prices or quantities may be concluded.

It is not permitted to take pictures or films of any slides. Audio recordings are also not allowed.

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Arrival, hotel address and map

Accommodation:

SCT 2022 will take place at NH Milano Congress Centre.

A special offer for attendees of the SCT 2022 is available at the conference website.

www.sct-2022.com (Information → Hotel Reservation)

NH Milano Congress Centre
Strada 2, 7, 20090 Assago MI, Italy
www.nh-hotels.com

Conference Dinner at Museo Diocesano
Corso di Porta Ticinese 95
20123 MILAN, Italy
www.museodiocesano.it/en/

www.openstreetmap.org/#map=13/45.4288/9.2168

From the Linate Airport,

Catch bus 73 (Aeroporto-San Babila) and get off at San Babila. Take metro 1 (red line) in the direction of Bisceglie/Rho fiera and get off in Cadorna stop. Transfer to metro 2 (green line) toward Assago Forum to the last stop. The conference centre is about 400 meters from the metro station. to Assago Milanofiori Forum.

From the Malpensa Airport

From the Malpensa Airport Take the express train from Malpensa to Cadorna station ans transfer to metro 2 (green line) toward Assago Milanofiori Forum and get off at the end of line. Aerobus shuttle: Take the MalpensaShuttle to Central Station, then take the underground to Assago Milanofiori Forum.

From central station

Walk 300 metres from v to metro station Caiazzo and board metro 2 (green line, direction Assago Milanofiori Forum). Jump of at Assago Forum, the conference centre is about 400 meters from there.

By car

The hotel's GPS Coordinates: 45.40096°N 9.149292 00000006°E Take Strada Statale 336 in Somma Lombardo, follow until Assago, take the A7 exit Assago-Milanofiori. Follow Via Milanofiori/V.le Milanofiori and take the first exit at the first traffic circle to stay on V.le Milanofiori. Take the third exit at the second traffic circle to stay on V.le Milanofiori and keep to the right. The congress centre is on the right.

Contact

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