

4TH EXECUTIVE SUMMIT - EFFICIENT CAR BODY PARTS PRODUCTION FROM HIGH PERFORMANCE MATERIALS 2nd - 3th October, 2024 - PRESENTATIONS

DAY 1: WELCOME	
09:30 a.m	OPENING / REGISTRATION / NETWORKING
SESSION 1	Trends in Automotive Industry
10:00 a.m	INTRODUCTION - EFFICIENT CAR BODY PARTS PRODUCTION FROM HIGH PERFORMANCE MATERIALS Frank Schieck (Fraunhofer IWU, Chemnitz, Germany)
10:20 a.m	PRIORITIZING FUNDAMENTAL PRACTICES Rick Teague (Telos Global, Caryville, TN, USA)
10:40 a.m	THE EVOLUTION OF GIGA HOT STAMPING Thomas Ausmann (NSM Magnettechnik GmbH, Olfen, Germany)
11:00 a.m	Break
SESSION 2	Applied R&D in Material
11:30 a.m	RELIABLE IN PRODUCTION AND SUSTAINABLE IN USE - LIGHTWEIGHT DESIGN BY COATED MBW HOT FORMING STEELS Janko Banik (Thyssen Krupp, Dortmund, Germany)
11:50 a.m	THERMOBOOST- INDUSTRIALIZATION OF AN ALSI COATED PRESS HARDENING STEEL WITH REDUCED HEATING TIME, HYDROGEN INTAKE & CO2 FOOTPRINT Patel Parth (ArcelorMittal Dofasco G.P, Hamilton, ON, Canada)
12:10 p.m	STUDY OF THE CORROSION BEHAVIOR OF A SAF 2507 DUPLEX STAINLESS STEEL WITH LOW MOLYBDENUM CONTENT AND HEAT TREATMENT Prof. Efrain Almanza (Instituto Tecnológico de Saltillo · Metal Mecánica, Mexico)
12:30 p.m	Lunch Break

SESSION 3	Equipment & Machinery 1
02:00 p.m.	FORMING TECHNOLOGIES FOR LIGHTWEIGHT MATERIALS Aitor Ormaetxea (Fagor Arrasate, Mondragon, Spain)
02:20 p.m	GIGATRENDS IN HOTSTAMPING Paul Thom (Schuler Pressen, Gemmingen, Germany)
02:40 p.m	GREEN TECHNOLOGY FOR FURNACE APPLICATIONS IN PRESS HARDENING Gerhard Schöfl (EBNER Industrieofenbau, Leonding, Austria)
03:00 p.m	Break
SESSION 4	Equipment & Machinery 2
03:30 p.m	OPTIMIZED FURNACE TECHNOLOGY FOR SUSTAINABLE AUTOMOTIVE AND AEROSPACE INDUSTRIES Manoj Kumar (EBNER Industrieofenbau, Leonding, Austria)
03:50 p.m	IMPROVED OEE THROUGH COATED ROLLER TECHNOLOGY IN FURNACES OF PHS LINES Thorge Gasser (Saint-Gobain, Roedental, Germany)
04:10 p.m	LATEST DEVELOPMENTS ON GAS SPRINGS AND HYDRAULIC CYLINDERS FOR PRESS HARDENING Ignatio Garcia Acha (Azolgas, Vitoria, Spain)
04:30 p.m	End of Day 1

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DAY 2: WELCOME	
09:30 a.m	OPENING / REGISTRATION / NETWORKING
SESSION 5	Parts Manufacturing
10:00 a.m	PRACTICAL STAMPING SOLUTIONS David Ventura (VCS Cicoon, Puebla, PB, Mexico)
10:20 a.m	RECENT DEVELOPMENTS FOR HFQ ALUMINIUM HOT FORMING FOR AUTOMOTIVE APPLICATIONS INCLUDING BATTERY BOXES, REPLACING CASTINGS AND VALIDATION OF HIGH-SPEED MANUFACTURING CAPABILITY Jonathan Watkins (HFQ Technology Associates, Coventry, UK)
10:40 a.m	HOT STAMPING MARKET DEVELOPMENTS AND INDUSTRY CHALLENGES Edward Schleichert (Magna Automotive Services GmbH, Munich, Germany)
11:00 a.m	Break
SESSION 6	Quality Assurance
11:30 a.m	FROM PROCESS MONITORING TO ROBUST PROCESS CONTROL Michael Selent (SELMATEC, Scharnebeck, Germany)
11:50 a.m	INTELLIGENT SENSORSYSTEMS - FRAUNHOFERS PROCESS MONITORING INNOVATION Christian Conrad (Fraunhofer IZFP, Saarbrücken, Germany)
12:10 p.m	INDUSTRY 4.0 APPLIED IN WELDING PROCESSES Angel Rocha (Fronius Mexico, Monterrey-Salttillo, NL, Mexico)
12:30 p.m	Lunch Break

SESSION 7	Tooling & Post Processing
02:00 p.m.	HOT STAMP PROCESSES TODAY Eduardo Cedillo (Magna Formex, Saltillo, NL, Mexico)
02:20 p.m	THE DEVELOPMENT OF HOT STAMPING TOOLS OVER THE LAST TWO DECADES – FORGED, CAST AND PRINTED J.J. Wilzer (Dörrenberg Edelstahl, Engelskirchen, Germany)
02:40 p.m	NEW PRODUCTION STRATEGIES FOR PHS PARTS TRIMMING BASED ON 5-AXIS CUTTING SYSTEMS Richard Davis (TRUMPF Inc., Plymouth, MI, USA)
03:00 p.m	CONCLUSION & FAREWELL Chrisitian Kovacs (EBNER & digicon Academy, Leonding, Austria)
04:30 p.m	End of Day 2

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4th October, 2024 - COMPANY VISIT

DAY 3: COMPANY VISIT - FRONIUS MEXICO	
09:00 a.m	REGISTRATION / ARRIVAL
09:15 a.m	WELCOME AND PRESENTATION OF FRONIUS COMPANY
09:45 a.m	LIVE DEMONSTRATIONS OF FRONIUS WELDING SOLUTIONS <ul style="list-style-type: none">Data extraction and analysis + product traceability (WeldCube Premium)Efficiency and quality improvements on robotic welding processes
10:40 a.m	Coffee Break
11:00 a.m	LIVE DEMONSTRATIONS OF FRONIUS WELDING SOLUTIONS <ul style="list-style-type: none">Automated welding solutions (FCP, CWC-S, etc.)High performance welding (TPS/i Twin)Safety equipment (Vizor Air, Exento Low-Vac, Exento HighVac)
12:30 a.m	WRAP-UP AND GOODBYE
12:45 p.m	END OF EVENT



During the past 15 years, press hardening has become a fully established and recognized technology in both science and industry for the production of ultra-high-strength structural components. Specifically within the automotive industry. Apart from the obvious and valuable improvement in car performance, such as safety and lightweight design, the production process is also one focus of trends in technology development in the field of press hardening.

Owing to the additional process parameter of temperature, the energy and resource efficiency of such processes is one of the most important challenges. These include alternative process steps and process chains as well as zero defect manufacturing by intelligent process control. Alongside the high energy effort required for heating up the blanks to austenitization temperature; the production floor space requirement is also comparably high, particularly for heating devices. Due to the growing product variety in automobile production, combined with shorter product life cycles, the flexibility of production processes becomes more and more significant, which is also true for press hardening.

This includes production organization as well as flexibility of production devices. However, it has become clearly understood and obvious during these years of appliance in industrial scale, that press hardening is an inevitably knowledge-driven technology.

Without an accurate and clear understanding of the governing thermo-mechanical mechanisms, paired with systems and tool engineering, it is perhaps possible to move along to the “low-end” of technology but impossible to reach the “high-end”. The acquisition of substantial knowledge, therefore, constitutes the main “key” to be successful in the aforementioned sense.

The digicon Academy PHS-Trainings, each focusing on a particular aspect of technology, provides comprehensive access to valuable and extensive knowledge on hot sheet metal forming.

Dipl.-Ing. Frank Schieck

- born 1968
- 1984-1986 Professional training as a Toolmaker (VEB Formenbau Schwarzenberg)
- 1986-1989 Army service, training as Airplane Mechanic
- 1989-1990 General qualification for University entrance
- 1990-1995 Study of Mechanical Engineering at Chemnitz University
- 1995-1998 Engineering Office Richter in Berlin, Design and Planning Engineer
- 1998-2006 KUKA Werkzeugbau Schwarzenberg, Engineering & Development Manager Hydroforming Section
- since 2006 Fraunhofer Institute for Machine Tools and Forming Technology (IWU) in Chemnitz, various functions: Group leader Hydroforming, Head of Department Hydroforming and Basics, Division Director Sheet Metal Forming, today CBDO Tool Making
- Main working fields: Advanced Tool Concepts in Sheet Metal Forming Hot Stamping Hydroforming



Dipl.-Ing. Frank Schieck

ADDITIONAL TRAININGS

The additional trainings offer a wide range of suitable add on courses referring to the technology in complex metal forming, press hardening and hot stamping.

ONSITE EXECUTIVE TRAININGS

These trainings consist of concentrated and specific knowledge transfer in the form of seminar lectures and discussions, including joint field visits in the relevant fields (including the production, materials laboratory, receiving stock, finished goods, etc.).

ADVANCED TRAININGS

These trainings combine theoretical explanations of the respective core area with experimental internship in the laboratory and final analytical examination of generated press hardened parts.

FOUNDATION TRAINING

The range of this training begins with the stages of the art press hardening process, through solution-based problem solving approaches and finishes with new innovative ideas in the hot forming sector.



“We work continuously to set the standards in further education, to include the newest technology and in doing so retain the innovative ability for our partners.”

Christian Kovacs, Senior Manager Training Development, digicon Academy
www.digicon.cc

