3rd PHS COMPACT TRAINING
ON TAILORED PROPERTY ADJUSTMENT IN HOT STAMPING

25/26 September + 23/24 October 2017
METAKUS PHS Training Center, Kassel, Germany

> Tutorial by Professor Steinhoff, University of Kassel (GER)!
> Workshops in small learning groups (max. 8 persons)!
> Access to the unique METAKUS PHS Training Center in Kassel (GER)!
> Hands-on experience on highly specialized PHS laboratory equipment!
> Certified training units!
> Daily shuttle transfer from the hotel to the training venue!

organized by PHS University – Nº1 Worldwide Supplier Of PHS Trainings
Don’t miss out on the chance to get in touch with the very people, who made press hardening “fly” globally!
Tailoring multiple, varying properties, e.g. Soft Zones, Tailor-Rolled-Blanks or Tailor-Welded-Blanks, constitutes one of the biggest challenges in contemporary hot stamping.

Making the right decisions to adjust the process parameters and perform appropriate measures for product quality and process control requires very special skills and knowledge.

Take the chance to acquire these valuable skills by gaining first-hand experience from the very people who made press hardening “fly” globally!

Prof. Dr. Kurt Steinhoff
The training starts with an explanation of the technological driving force behind the variation of physical and/or chemical part properties in contemporary body-in-white design (BIW). A comprehensive overview of different tailoring strategies will be provided, and exemplary applications of tailored property BIW-parts used in different car models and by various manufacturers will be shown.

The fundamentals of heat treatment of press hardened steel (PHS) will be provided in a combination of workshop and practical lab experience. In particular, the focus will be on the basic influence of selected time-temperature courses on phase compositions, microstructures, and mechanical properties of different PHS material systems.

The creation of functionally graded PHS components using different strategies which are time-dependent and have locally variable temperature controls, e.g. differential heating and differential cooling, will be explained comprehensively. This includes in-die tempering as well as intermediate cooling on air, and in-furnace partial austenitization variants.
Using their acquired knowledge and skills, participants will be capable of making appropriate **process parameter choices** for different material systems so as to utilize **tailored property settings** to achieve defined mass and/or mechanical property gradation patterns.

Methodological skills for selecting appropriate measures for **product quality and process control** will be trained.

The target audience are typically engineers, technicians, and foremen in the fields of production and quality assurance, as well as individuals working in maintenance, production planning and control, marketing and sales, and tool design and manufacturing.
Program
As indicated in Figure 3, the training contents are divided into 3 topical units.
### Schedule

The training consists of two full days of seminars and lab internships, as is shown in the Figure. It takes place at the METAKUS PHS Training Center in Kassel (GER).

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<th>2nd Day</th>
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<td><strong>AM</strong></td>
<td>Welcome &amp; Introduction</td>
<td><strong>Lab Internship</strong></td>
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<td><strong>Noon</strong></td>
<td>Lunch break</td>
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<td><strong>PM</strong></td>
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= METAKUS PHS Training Center, Kassel  = METAKUS PHS Laboratory, Baunatal
Leaders in PHS technology are those, who have access to reliable knowledge sources.
Hotel Recommendation

La Strada Kassel
Raiffeisenstraße 10, 34121 Kassel
www.lastrada.de

RAMADA Hotel Kassel City Centre
Baumbachstraße 2, 34119 Kassel
www.h-hotels.com/de/ramada/hotels/ramada-hotel-kassel
Registration

For registration please visit www.metakus.com/events

Limited places available – first-come, first-served!

Fees

1,950.00 EURO per participant
incl. training facilities, documentation (English), consumables, on-site catering
excl. expenses for travelling and accommodation of participants

Course Language: English
Next Event
4th PHS Compact Training on Heat Treatment and Heating Technology – February 2018!
Contact

contact@metakus.com

Tel. +49 (0)561 9883 8906
Fax +49 (0)561 9883 8907

Organized by

PHS University, the Postgraduate Training Division
of Steinhoff Engineering Consultants