5th International Conference

HOT SHEET METAL FORMING
of HIGH-PERFORMANCE STEEL

CHS²

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Proceedings
Presently, we are facing the biggest paradigm change in metal forming technology since more than half a century. The driving force behind this remarkable change is a strong demand for safety: environmental safety, energy safety, resource safety, and individual safety. In the case of individual transportation, these safety aspects lead to a strong demand for new solutions to reduce the weight of vehicle structures, and to increase passenger safety. For current body-in-white designs, these requirements can only be met by utilizing hot-stamped/press-hardened, ultra-high strength steel components. They are the key to providing the requested superior crash performance and significant weight reduction.

Although the globalization of hot stamping technology began more than a decade ago, there are still extremely promising "blank spots" on the map concerning the remaining market and innovation potential. In order to identify chances, evaluate risks, and, finally, make proper decisions regarding whether to and how to occupy one or more of the aforementioned spots, comprehensive access to reliable information is crucial.

In the rapidly growing market of press hardening, the essentiality of the availability of comprehensive knowledge and operational skills for the exploration of the corporate economical potential of this technology, and to gain and sustain competitiveness is no secret.

To maintain this positive trend and harness the full potential of this technology, further innovation in press hardening steel technology is essential. Research and development, at both the academic and industrial levels, is one of the most important prerequisites for continuing innovation. This is what CHS² 2015 is aiming at in the 5th in the series of purely PHS-related international conferences.

Kurt Steinhoff
Mats Oldenburg
Braham Prakash
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