

New Developments in Sheet Metal Forming

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Conference Proceedings of the

International Conference on “New Developments in Sheet Metal Forming”

in Fellbach (near Stuttgart) – Germany, held on May, 15th and 16th, 2018.

Conference Chairman: Univ.-Prof. Dr.-Ing. Dr. h. c. Mathias Liewald MBA

Director of the Institute for Metal Forming Technology (IFU) of the University of Stuttgart, in cooperation with:

Forschungsgesellschaft Umformtechnik mbH (FGU, Stuttgart / Germany)

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Preface

The International Conference “New Developments in Sheet Metal Forming” held in Stuttgart / Germany is organised every second year alternatingly with the International Conference “New Developments in Forging Technology”. Main goal of both conferences is to gather engineers and experts from the industry as well as scientists from universities to discuss the current state of the art, and future tendencies and targets in research and development of new sheet metal and/or bulk metal forming technologies.

Annually, the Institute for Metal Forming Technology (IFU / Stuttgart / Germany) organises this event in collaboration with the Forschungsgesellschaft Umformtechnik mbH (FGU Stuttgart / Germany). For many years, the concept of the conference was to focus on effectively transferring scientific results into value added chains of companies operating in the field of sheet metal forming and other sheet metal forming related market segments. Therefore, the topics of the papers selected to be presented at conference should have reference to current worldwide research activities in sheet metal forming, modern production technologies, tool design in general and new developments in the field of sheet metal material.

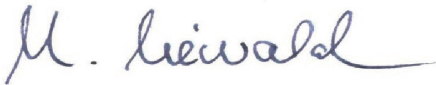
During this two-days conference, experts from both universities and industrial companies will present their papers and discuss their newly achieved results with experts from all over the world. Conference topics include investigations performed at several European metal forming institutes, at companies from industry, and at the Institute for Metal Forming Technology (IFU) of the University of Stuttgart. Thus, a balanced mix of practical and theoretical contributions will be presented. In 2018, special attention is paid to present and to publish modern practical solutions in cold forming of sheet metal materials, modern concepts of material compositions, as well as modern sheet metal forming simulation technologies and new approaches in order to integrate modern sensors into the tool structure to control process development during serial production. Furthermore, the technological potential of new material developments e.g. new sheet metal alloys will be disclosed to make attendees able to respond easily to occurring questions of today when running their day to day business in the sheet metal forming industry. Therefore, the opening presentations in particular pay attention to recent questions in metal forming technologies around car body manufacturing and other business as well as future manufacturing strategies!

Also a panel discussion will be held during late afternoon of first conference day. International experts in the field of establishing new startup companies encouraged by academia or business will discuss on chances, opportunities and threats of young entrepreneurs in Israel and Germany.

Company visits offered on Monday, May 14th, 2018 and contributions from numerous international acting market players and different technological research institutions in Germany are objecting and presenting an deep insight into the current developments and research work in the field of sheet metal manufacturing. During the conference, the visitors and speakers are given the opportunity of contributing professionally, analysing and observing trends, exchanging ideas, and cultivating personal networks. Therefore, the conference programme includes visits to industrial companies and a welcoming evening at IFU on the day before conference, the gala dinner on the 1st conference day, and exhibitions of more than 20 companies throughout the entire conference.

I appreciate to thank all authors in advance for contributing and feeling inspired on this conference! I am sure, this book comprising papers presented on May 15th – 16th, 2018 in Fellbach (near Stuttgart) Germany will be dispatched widely and will be available to all international experts involved.

Sincerely yours

A handwritten signature in blue ink, reading "M. Liewald". The signature is fluid and cursive, with a long horizontal stroke at the end.

Univ.-Prof. Dr.-Ing. Dr. h. c. Mathias Liewald MBA

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**International Conference “New Developments in Hydroforming”
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Hydroforming Machines

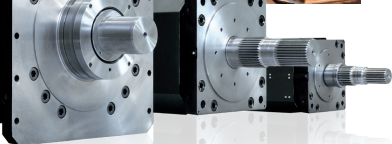
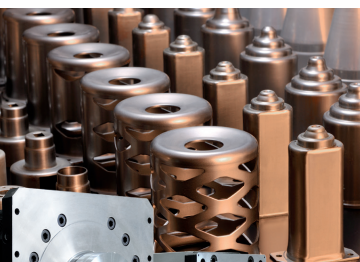
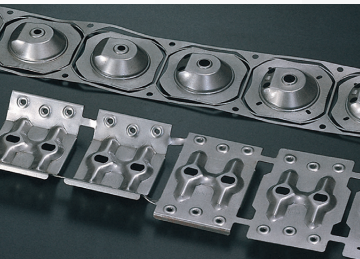
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