

## Press Information

20.07.2015

### **The Lightweight Forging Initiative at the IAA Cars in Frankfurt** Focus on weight savings in light commercial vehicles / New Research Network

The Lightweight Forging Initiative will exhibit at the International Motor Show (IAA) Cars in Frankfurt from 15 - 18 September 2015. In Hall 4.1, booth J16, designers and developers from automotive companies, OEMs and Tier 1 suppliers in particular, will have the opportunity to bring themselves up to speed on the current state of research and to make many contacts. Some partners of the Initiative will also be present with their companies as individual exhibitors and will be available to answer questions.

The project entitled "Phase II: Light Commercial Vehicle" of The Lightweight Forging Initiative has been well received, with 28 companies having joined forces to participate in it since the beginning of 2015. Under the auspices of the German Forging Association (Industrieverband Massivumformung e. V.), the consortium comprises 17 forging companies, ten companies from the steel industry (manufacturers of wire and bar) and an engineering service provider. Two studies are analyzing the lightweight potential of a light commercial vehicle (with a permissible total weight of 3.5 t).

These studies follow on from the extremely successful study of lightweight potential entitled "Lightweight Forging Phase I: Passenger Car", which was carried out in 2013/2014. A central result of Phase I was determining potential weight savings of 42 kilograms in the powertrain and chassis of a passenger car, which in turn is associated with a significant reduction in CO<sub>2</sub> emissions. The results attained will continue to be examined for feasibility together with designers and developers at the OEMs.

The goal of Phase II is for forging companies and steel manufacturers to make a concerted effort to effectively demonstrate the potential of forged parts for lightweight design in a light commercial vehicle. "When it comes to forging, the industry largely draws on suppliers. Further developments and innovations are difficult, however, because a multitude of partners participate in the supply chain, from the steel material to the finished component. With The Lightweight Forging Initiative, we are demonstrating that cooperation between forging companies and steel manufacturers gives rise to new synergies. Cost-efficient, high-strength steels with lean, reliable production operations across all processing stages open up concrete advantages over competing production processes and materials," says Dr.-Ing. Hans-Willi Raedt, Chairman of the consortium and Vice President Advanced Engineering at the Hirschvogel Automotive Group. "The results attained are just as relevant and transferable to similar passenger car components."

## **New “Lightweight Forging” Research Network**

In May 2015, the new Research Network entitled “Lightweight Forging – Innovation Network for Technological Progress in Part, Process and Material Design for Forged Parts in Automotive Technology” was brought to life. Over a period of three years, research will be carried out across Germany. These efforts will be coordinated by the Research Association for Steel Application (Forschungsvereinigung Stahlanwendung e. V. – FOSTA) and the Production Technicians of the Foundation Institute of Materials Science (Institut für Werkstofftechnik – IWT) at the University of Bremen.

The goal of the Research Network is to use new steel materials, part designs and production methods to make the car powertrain – from the engine to the transmission and wheel bearings – even lighter while still fulfilling stringent requirements with regard to service life. The project is being financed by the Federal Ministry for Economic Affairs and Energy (BMWi) as part of the “Pre-Competitive Cooperative Industrial Research Project” (“Industrielle Gemeinschaftsforschung IGF”) via the German Federation of Industrial Research Associations (Arbeitsgemeinschaft industrieller Forschungsvereinigungen „Otto von Guericke“ e.V. – AiF). Ten research institutes from five German federal states are currently participating in five subprojects. A mentoring group comprising 58 companies is accompanying the projects from the industrial side.

Further information may be found at [www.massiverLEICHTBAU.de](http://www.massiverLEICHTBAU.de)

(approx. 4,145 characters)

### **The Lightweight Forging Initiative**

In The Lightweight Forging Initiative Phase II: Light Commercial Vehicle, 17 forging companies, 11 steel manufacturers and an engineering service provider joined forces at the beginning of 2015 under the auspices of the German Forging Association (Industrieverband Massivumformung e. V. – IMU) and the Steel Institute VDEh (Stahlinstitut VDEh). The goal of this Initiative, which is unparalleled worldwide, is to achieve weight savings in light commercial vehicles using innovative components made of steel. This project represents the continuation of what was by far the largest pre-competitive joint project of these two industries, namely “The Lightweight Forging Initiative Phase I: Passenger Car” from 2013.



#### **Caption**

Dr.-Ing. Hans-Willi Raedt, Chairman of the consortium and Vice President Advanced Engineering at the Hirschvogel Automotive Group.

#### **Press Contact:**

Industrieverband Massivumformung e. V.  
Dorothea Bachmann Osenberg  
Head of Press and Public Relations  
Goldene Pforte 1 - 58093 Hagen - Germany  
Telephone: +49 (0) 23 31 / 95 88 30  
E-mail: [info@massiverleichtbau.de](mailto:info@massiverleichtbau.de)  
[www.massiverLEICHTBAU.de](http://www.massiverLEICHTBAU.de)

**The German Forging Association (Industrieverband Massivumformung e. V.)**

*The German Forging Association has 120 member companies and represents the interests of the industry which has sales of 6.5 billion euros and almost 30,000 employees. A core task is organising collaboration across the member companies, most of which are medium-sized businesses, with the aim of working together to increase the competitiveness of the individual companies. Germany is the technology leader when it comes to forging and, after China, is the world's largest producer of forged parts.*

**Steel Institute VDEh (Stahlinstitut VDEh)**

*The association promotes technical, technical/scientific and scientific cooperation among engineers during the further development of steel technology and steel as a material. The Steel Institute VDEh achieves this with joint research projects and exchange of know-how. System manufacturers and suppliers are also involved in the international collaborative projects. Today, the Steel Institute VDEh has around 6,600 members with a university degree in technical, scientific and business management subjects or with a leading position in industry and trade. Furthermore, 150 companies from the area of iron, steel and related materials have joined the association..*