**Press facts for TUBE 2020**

**Premiere at TUBE**

Cold-formed hollows for use in automotive engineering

**AMBA: Cold-forming replaces multi-step manufacturing processes**

Cycle time of one second sets new standard

**Alsdorf, Germany, 24 January 2020 TUBE 2020 will see the unveiling of AMBA’s (Aachener Maschinenbau GmbH) new cold-forming machines for hollow ends. Thanks to their unique operating principle, these machines are the first to guarantee precise alignment of the hollow ends, while achieving highest throughput rates.**

For the transmission of torques, mechanical engineering solutions rely increasingly on hollow sections because they save significantly on weight compared to solid sections, for example, in automotive applications such as shafts for seat back rests or as drive shafts.

In order to ensure a perfect, backlash-free fit of the hollow ends in the receiving mounting part, the hollow ends have to be manufactured with paramount precision. It is critical for the hollow ends to be perfectly aligned in the axial direction in order to preclude any risk of the components being distorted during the assembly process. Until now the hollow ends used to be shaped by machining, or as weldments to achieve the desired shape of the hollow ends. However, with those methods, production rates of up to 60 items per minute were not realistic.

In contrast to this, the new RH 08 synchronous machine from AMBA forms both ends simultaneously. This operating principle ensures that during forming both hollow ends stay perfectly aligned with each other. With a cycle time of approximately one second, the machine achieves an extraordinarily high output. The hollow sections leave the machine ready to be installed, requiring no additional machining.

The first machine of this type - which will be supplied in the spring of 2020 to a component manufacturer for the automotive industry - will be designed with upsetting force of up to 25 t at either end, enabling the machine to process steel and stainless steel hollows with outside diameters of up to 20 mm. The two forming stations arranged in the axial direction of the work piece feature fully automatic, high-precision positioning systems, which allow for hollows in lengths between 450 and 800 mm to be processed on the machine.

Manfred Houben, one of the Managing Directors of AMBA, sees significant cost benefits for the customers: “Cold-forming both hollow ends in one synchronous process guarantees their perfect alignment. And with through-put rates of about 60 pieces per minute we are definitely raising the bar. The machine’s perfect synergy of high precision and high speed enhances the reliability and efficiency of the manufacturing process. At the same time, production costs are dramatically reduced as process steps such as machining or welding – and the related handling – will be eliminated.”

**430 words including the introduction**

**AMBA at TUBE/WIRE 2020:**

**Düsseldorf, Germany, 30 March - 3 April 2020**

[**Hall**](https://www.wire.de/hallenplan?oid=2370186&lang=1&action=showExhibitor&actionItem=2541648&_event=witu2018) **16 / Stand E50**

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**About AMBA**

Aachener Maschinenbau GmbH – generally referred to as “AMBA” – was founded in 1908, at a time when Aachen was world famous for its high-quality needle production. The company has evolved into an internationally renowned builder of machines specialized into cold-formed metal components.

Today AMBA focuses in machines for the production of long parts with varying cross-sections, such as bolts between 60 and 2,500 mm long, tubes and spokes.

With its all-in-one design, AMBA is worldwide the only manufacturer of machines capable of producing such long and complex parts within one single machine and set up. All process steps, from the input stock – wire or tube blanks – all the way down to the finished, packaged product, are handled by one machine, which is unique in the industry.

At its headquarters in Alsdorf near Aachen, Amba employs 80 people in its development and design departments, in the workshops and in the after-sales service.

Figures and captions

High-resolution image files are available for downloading at: [Pressefotos AMBA](https://www.vip-kommunikation.de/amba.html)

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| Fig. 1: The hollow sections are fed from a magazine (top), up to 60 pieces per minute leave the machine ready for installation.  File name: amba\_KS500011715713\_kl.jpg |  |
| Fig. 2: The first machine, which will be delivered to a manufacturer in the automotive supply chain in spring 2020, is designed for steel and stainless steel profiles with an outer diameter of up to 20 mm.  File name: amba\_KS500011715713.jpg |  |

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