

PRESS RELEASE for the Aluminum USA 2019

Machining of aluminium ingots

Heinrich GEORG Maschinenfabrik: The first fully automatic milling machine for aluminium ingots

Highly automated system cuts machining-cycle times by more than 30 percent.

Kreuztal, Germany, 29 July 2019 GEORG will be unveiling its new ultramill series of portal-type milling machines for milling of aluminium ingots at the 2019 Aluminum USA. It machines all surfaces, including the end and side faces, in just two clamping cycles. A high level of automation and a high machining speed achieve a significant increase in system throughput compared to machines customary up to now.

In this machine, GEORG pursues a concept new in the milling of ingots: all handling and machining operations, from clamping to unclamping of the ingot, take place automatically. The machine thus achieves, on the one hand, exceptionally short processing times and, on the other hand, high machining accuracy.

The ingots are loaded automatically using a crane, precisely aligned on the milling table, and then hydraulically clamped. Following the also unmanned milling of the top surface and side faces, the ingot is automatically turned, reclamped and then finish-milled.

The machine thus achieves high productivity: the first example, manufactured by GEORG for a customer in Germany, will machine around fifteen to twenty ingots, with widths ranging up to 2,200 mm and lengths of up to 4,000 mm, in the course of a three-shift day.

Dr.-Ing. Wieland Klein, Technology Director at GEORG, considers it important that, ultimately, the man has the process under his control: "The new ultramill is our first milling machine for aluminium ingots to have such a high level of automation. We thus not only drastically reduce unproductive downtimes, the sensor system, in addition, provides the user with extensive feedback and in this way assures control of the process at all times."

The optionally integrated GMS (GEORG Maintenance System) diagnosis system permanently monitors the entire installation; it also, inter alia, detects tool wear. The machine data is relayed to the master computer, with the result that the machine is closely networked with other processes taking place in the plant.

GEORG will also be showing its slitting and cut-to-length lines for aluminium strip, which are notable for high production and throughput rates as well as for high production speeds and the resultant minimisation of setting-up times.

350 words including introduction

**Heinrich GEORG at the ALUMINUM USA 2019
Nashville, Tennessee
12 to 13 September 2019
Stand 1123**

Heinrich GEORG Maschinenfabrik

GEORG is a partner globally in demand for efficiency-boosting high-tech solutions in mechanical engineering and process optimisation. Its advanced strip lines and machine tools, and also its production lines,

PRESS RELEASE

for the Aluminum USA 2019

machines and equipment for the transformer industry, are in service with highly respected companies in numerous countries.

This third-generation family-managed company with its nearly 500 employees predominantly serves the energy, mobility and industrial sectors with its broadly based range of products and services, and its global marketing/sales and service centers.

For further information, visit: georg.com

<p>Contact: Heinrich Georg GmbH Maschinenfabrik Thomas Kleb Head of Marketing & Communications Langenauer Strasse 12 57223 Kreuztal, Germany Tel.: +49.2732.779-539 www.georg.com e-mail: thomas.kleb@georg.com</p>	<p>Press Contact: VIP Kommunikation Dr.-Ing. Uwe Stein Dennewartstrasse 25-27 52068 Aachen, Germany Tel.: +49.241.89468-55 www.vip-kommunikation.de e-mail: stein@vip-kommunikation.de</p>
<p>Contact in USA: Georg Northamerica Inc. 307 Eastpark Drive Roanoke, VA 24019, USA Phone: +1 540 977 0404 Fax: +1 540 977 2781 northamerica@georg.com</p>	

Illustrations:

→ To download high resolution image files:

[Georg Press Photos](#)

<p>Figure 1: GEORG's new ultramill portal-type milling unit machines all surfaces of aluminium ingots, including the end and side faces, in only two clamping cycles.</p> <p>File name: Georg 5734 Gesamtmaschine_01</p>	
<p>Figure 2: The milling head can swivel, enabling it to machine all the surfaces of the ingots.</p> <p>File name: GEORG 5734 Fräskopf_01 a.jpg</p>	

Photo credits: Heinrich Georg Maschinenfabrik works photos