**PRESS RELEASE**

Graebener®

October 2021

**Hydrogen technology: Building national manufacturing capacity**

The current chip shortage in the automotive industry clearly shows the negative consequences when global supply chains for core components fail or the required quantities are not available. Having our own suppliers nearby is a strategic advantage especially when it comes to economically significant future projects such as the environmentally friendly hydrogen technology.

With its "National Hydrogen Strategy", the German government has laid the foundations for assuming a global leadership role in climate-protecting energy generation. This also includes ensuring innovative and reliable production and supply chains for the core components.

The machine building company Graebener® Bipolar Plate Technologies offers concrete solution. Graebener® develops and manufactures production lines for the manufacturing of bipolar plates - the heart of fuel cells. "In the Asian region, especially in Japan, South Korea and China, the development is much more dynamic. If we want a place among the leaders, we must significantly shorten the time from development to series production now," explains Fabian Kapp, Managing Director of Graebener®.

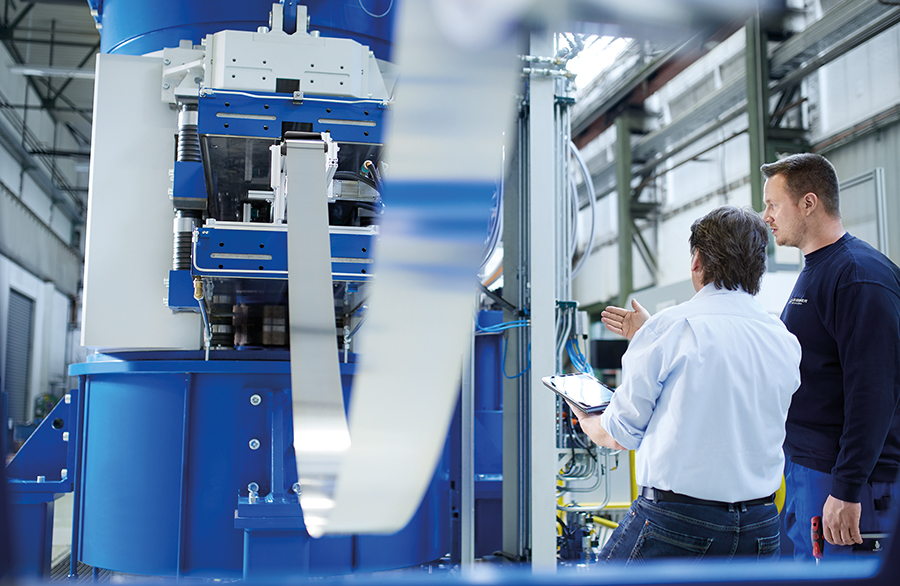
For customers to enter the market for bipolar plates safely and successfully, Graebener® has set up the so-called application laboratory. It reflects the manufacturing processes and production line under real conditions, i.e. from forming to cutting to welding, all machines for testing and optimizing prototypes of bipolar plates for suitability for series production are available.

Fabian Kapp: "With our application laboratory, we create investment and production security in advance and then accompany the customer with flexible, scalable solutions for the implementation of complete production lines for bipolar plates."

**About Graebener® Bipolar Plate Technologies**

Graebener® Bipolar Plate Technologies (BPT) is part of Graebener® Maschinentechnik, a medium-sized, family owned machine building company with locations in Netphen (Germany), Houston (USA) and Shanghai (China) as well as various international representatives. For almost 20 years, Graebener® BPT has been one of the first companies to focus on the research and development of hydroforming-based manufacturing processes for bipolar plates. With its Bipolar Plate Technologies division, the company has dedicated itself to setting the quality standard for bipolar plate manufacturing technologies. To achieve this, Graebener® BPT develops innovative processes that help to manufacture components for hydrogen-based energy generation that are tailor-made, integrable, scalable and thus economically efficient.

Graebener® BPT accompanies all strategically important steps towards the optimally designed production plant: Starting from engineering with a view to plate design and plant technology via prototyping and pre-buy service in the in-house application lab up to the customized production plant or line. Experience from almost 100 years of metal processing and worldwide customer-specific special solutions are incorporated into the holistic development partnership with the customer.

* Press picture 1:   
  The hydroforming press builds an integral part of the process chain at Graebener® for the gentle and high-precision forming of metallic bipolar plates.
* Press picture 2:  
  Laser cutting is precision work. In the Graebener® Application Lab, customers can already ensure investment and manufacturing security for their production in advance.
* Press picture 3:  
  Graebener12118: To enable customers to enter the market for bipolar plates safely and successfully, Graebener® has installed the so-called Application Lab. Among other things, it simulates the laser cutting and welding processes under real conditions. In the picture: Testing of a bipolar plate prototype in the Graebener® Application Lab.