

# Small point – big impact

## Haas grinding machines set the tone with Hegedüs marking



Market leaders and quality manufacturers stand by their brand. The products that leave their production plants for worldwide use are unique, high quality and unmistakable. The Trossingen-based company Haas Schleifmaschinen GmbH is a prime example of „Made in Germany“. With casings from Hegedüs, Haas has found a new way in the industry to effectively label its tools with its own logo. As a result, as so often, the Haas company is one of the pioneers in the industry.



Company building of Haas Schleifmaschinen GmbH in Trossingen.

The history of the industrial settlement in the Black Forest is based on clocks, precision engineering and medical instruments. They all need high-precision grinding technology to create the finest surfaces. Adelbert Haas recognized this need in 1934 and made special machines for demanding customers from the start. The principles of that time still apply today: universally applicable, absolutely reliable and highly innovative. Whereby the innovative strength does not stop at the machine by any means.

During the 84 years of its existence, incredible knowledge has been combined with a wealth of experience in all aspects of the entire grinding process. This is exactly what users benefit from today. When asked about the Haas success story, Marketing Manager Zita Bader defines the basis: „Innovation is the courage to discover something new instead of resting on one’s laurels. The aim is to constantly reinvent yourself and the industry. Haas Schleifmaschinen GmbH has embodied this courage and the associated inventive spirit for over 80 years and today it is a global manufacturer of 5-axis grinding machines.“



The Multigrind® grinding machines from Haas.

## Solution instead of machine

Haas customers need more than just a grinding machine. They are interested in a solution to meet their requirements. This includes many factors that are individually tailored to the respective project. Therefore, the engineers from Haas master the entire process chain, which leads to an optimum grinding result.

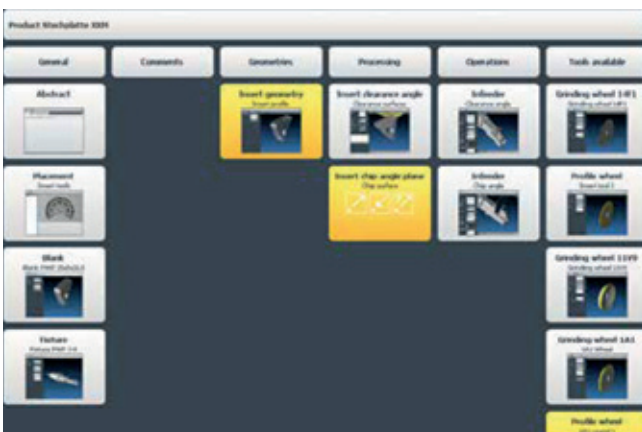
It begins with the knowledge of the material to be ground, extends across the entire range of grinding media including the liquid auxiliary materials, culminates in clamping devices, speeds, feeds, tool magazines and goes well beyond the installation. It makes no difference whether the grinding task involves the smallest tool parts and components from precision engineering, a knee prosthesis or even a gear cutting tool for winches in container ships. Haas provides the solution.



A solution for every requirement.

## Well-conceived integration

Automated feeds and discharges with robots ensure efficiency and availability. The modern machines of the Multigrind® series have a modular structure and can be expanded to almost any size. At the same time, they need a minimum of space. The control of the machines is also remarkable:



Proprietary software with visualized user interface.

Haas was one of the first in the industry to use a visualized user interface with pictograms, even before Apple and Microsoft recognized this for themselves.



Tool magazine on the machine.



Project manager Timo Zepf: „Hegedüs casings make our tools unique.“

Today an entire department of in-house software specialists ensures smooth communication between man and machine. In addition to the operating software, a comprehensive simulation program is also available.

The Haas developers have succeeded in creating a CAM for grinding tasks. The virtual twin simulates processing in advance and generates the corresponding control program in parallel. A valuable protection against unpleasant surprises in production.

Users are trained in the modern training centre at the Trossingen site. Despite the diversity and enormous range of products, Haas machines are ingeniously simple to use.

### **Desire for individuality**

The tools in the Haas machines are special features, which are photographed repeatedly by customers during the processing of their workpieces.

Timo Zepf is the project manager at Haas and is responsible for the product management of the clamping devices: „We have dreamed of having the Haas logo clearly visible on our tools for a long time. However, the conditions in the industrial environment are so harsh that even laser engravings are difficult to recognize after a short time.“ From his previous work in the field of medical technology, he knew about Viktor Hegedüs GmbH from Wehingen. Hegedüs stands for high quality and permanent colour markings of medical instruments and implants.



Brand set - the Haas casings on the tools.



Each tool is elegantly marked.

## Indestructible material

The HegeDüs casings are framed ceramic dots that can be inserted by the customer himself. The motif of the ceramic dots can basically be freely selected. Logos, QR codes, letters, colours or signs - there are almost no limits to the application.

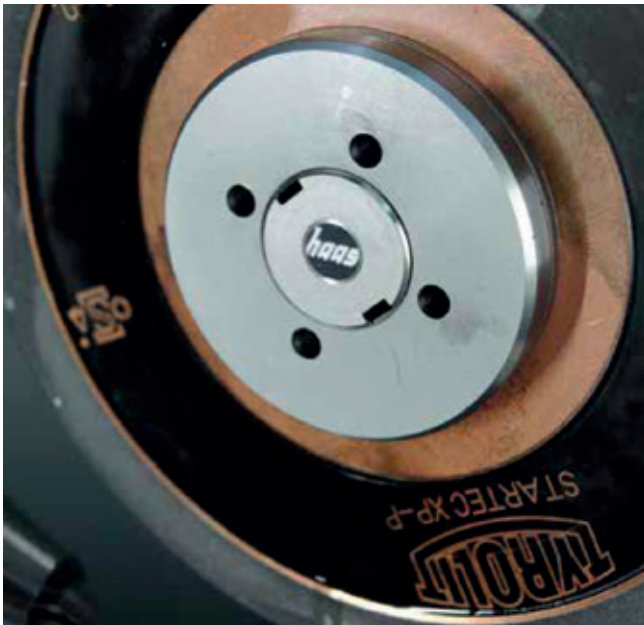
For this reason, Timo Zepf had the idea of unmistakably refining Haas tools in this way: „I asked HegeDüs for casings with the Haas logo. We carried out the initial tests and were thrilled. The so-called ART-tech® ceramic was indestructible and our tools were given an elegant „stamp“, which makes them unmistakably Haas products.“

## Wide range of applications

In addition to the aesthetic effect, counterfeit protection is another benefit, as Timo Zepf explains: „Once inserted, the HegeDüs casings can no longer be removed without destroying them. This sparked our interest in using it as a kind of seal for original Haas products. We are currently discussing with HegeDüs whether to add fibres to the special ceramic that glow under UV light. Another idea is to use QR codes with which the tools can be clearly identified.

In conjunction with a tool database, it is possible to follow the entire life cycle. Specific tool data such as downtimes, maintenance intervals and special properties can be easily documented. At the same time, they are stored with no risk of confusion.

Such data is also interesting for a quality assurance system. In view of the increasing automation, it is easy of course for the sensors to recognize and assign tools that have an industrial QR code with HegeDüs casings.“



Beautiful and indestructible even under harshest industrial conditions.



Haas tools are delivered in high-quality wooden boxes.

## Pioneer Haas thinks ahead

The full industrial suitability and versatility of the Hegedüs casings make them so interesting. The ART-tech® filling material can also be inserted into holes without a border. The result is completely flat colour dots that blend seamlessly into the surface. In medical technology, colour codes are generated with this method, which give the user the greatest possible safety within seconds when assigning sizes, properties or pairings. „We know this in the industry as ‚Poka-Yoke‘“, explains Timo Zepf.

„Colour dots made from ART-tech® correspond to the Japanese principle for immediate error prevention. We are currently considering the application scenarios for combinations in conjunction with our tools. The ART-tech® material completely adapts to the surface and can be smoothed over easily. This is important for revision work. Furthermore, it is insensitive to the cooling lubricants and temperatures used in the machine tools.“ The use of casings and Hegedüs ART-tech® is therefore an obvious benefit. Once again, Haas-Schleifmaschinen GmbH is one of the first to bring innovations to the heart of the matter.



The titanium front label also originates from Hegedüs.