

Technological edge through investments in the sintering workshop



Boehlerit, the Austrian expert for carbides and cutting materials, wants to stay ahead of technological developments in future and has thus committed to a growth programme that envisages investments in sales, products and manufacturing. Ever-more sophisticated materials place high demands on tools, with quality requirements also becoming more stringent all the time.

As part of their quality and automation offensive, Boehlerit has compiled an extensive investment package that addresses the three decisive factors for its products: substrate, cutting edge preparation and coating. By spring 2020, 90 percent of the investment package had already been implemented. Purchases included four sintering furnaces to replace several older machines by different manufacturers and a 5-axis milling/turning machine for the manufacturing of preforms. In addition,

six new machine tools for indexable inserts and tools ensure the long-term preservation of this high quality standard.

The new sintering furnaces

When it comes to production in the sintering workshop, Boehlerit has invested in four high-end machines (two pressure sintering furnaces and one vacuum sintering furnace for the Kapfenberg site as well as one pressure sintering furnace to expand capacities at the Turkish site), which are not just subject to a single maintenance schedule, but may also be monitored on a remote basis by means of digital interfaces.

The vacuum sintering furnace for

the dewaxing and pre-sintering of pressed parts offers a filling volume that is 35 % higher and shortens the cooling phase by one hour, thanks to an additional high-performance heat exchanger. In addition, the sintering furnace is also suitable for extrusion

moulding products. The pressure sintering furnace for dewaxing using hydrogen and for sintering carbide parts is compatible with the vacuum sintering furnace in terms of dimensions and comes with two dewaxing lines for even, speedy debinding. A special gas inlet valve, a double-walled plate heat exchanger of the latest COD generation and a cooling fan for improved gas circulation at the boiler door define the new sintering standard at Boehlerit.

Another technological advantage lies in the small pressure sintering furnace that holds its own compared to larger models in terms of functionality, but is highly flexible due to its small footprint. The program cycles comply with the most stringent quality standards and offer an enormous productivity advantage when it comes to smaller batches. Customer requirements may thus be implemented faster, more efficiently and with a higher quality. The identical facilities at the Istanbul site reduce



redundancies, safeguard production cycles during a crisis and facilitate development projects across several sites, thereby ensuring the speedy implementation of innovative ideas at production level and consistently high quality standards.

Martin Willinger/Manuel Hofstadler



Der integrierte Wärmetauscher der neue Vakuumsinteranlage bietet eine höhere Kühlleistung The integrated heat exchanger of the new vacuum sintering system offers a higher cooling capacity