Modular Grinding Concept for SiC Puck Production

SIC
GRINDING
MACHINES

MODULAR GRINDING CONCEPT

The **GH SEED DOME GRINDER** is used to grind the flat surfaces of the boule. The surfaces can be ground precisely in alignment with the crystal lattice structure – without any angled clamping of the workpiece. This reduces setup time, increases accuracy, and ensures maximum process stability.

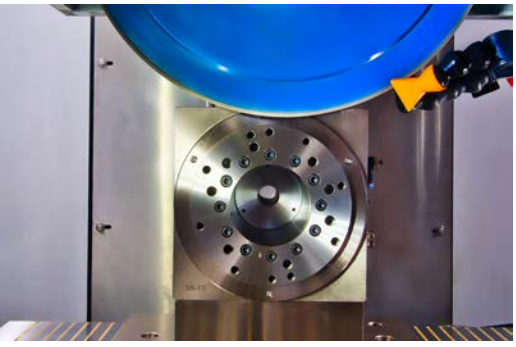
Lower Investment
Up to 50% cheaper than All-in-One systems

Smart Software
Automatic transfer of workpiece to process parameters

Customized Setup
Flexible workholding solution up to your requirements

High Uptime
No single point of failure – production continues despite downtime

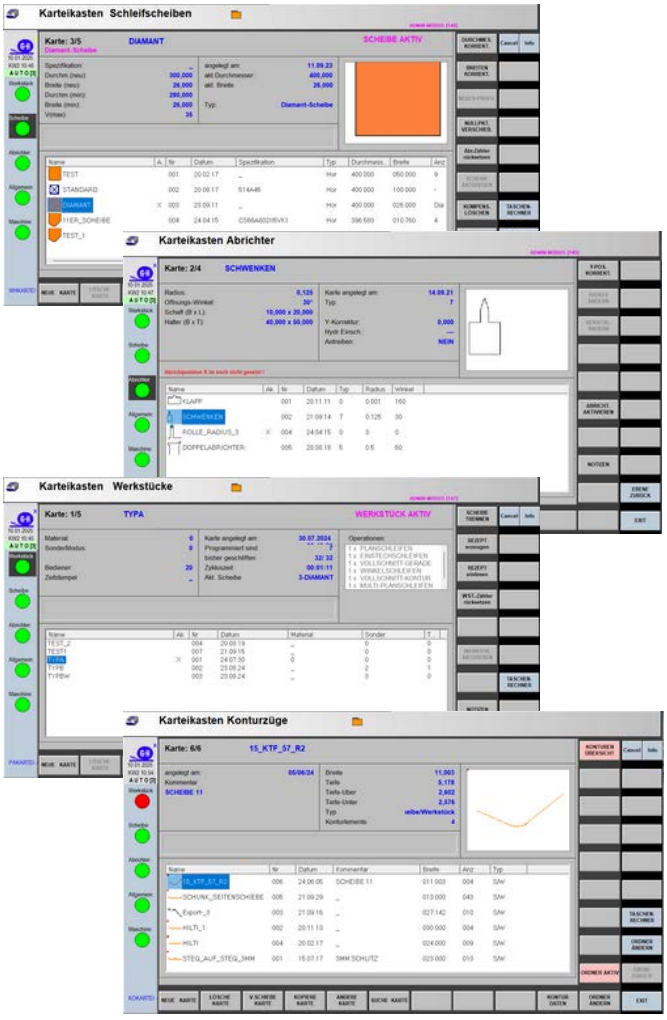
The **GH OD NOTCH GRINDER** is used to precisely grind the diameter of the boules. The exact position of the reference surface is determined based on the measurement results. Depending on customer requirements, either a notch or a flat is applied there. This creates a reliable reference surface for the subsequent process steps in wafer production.

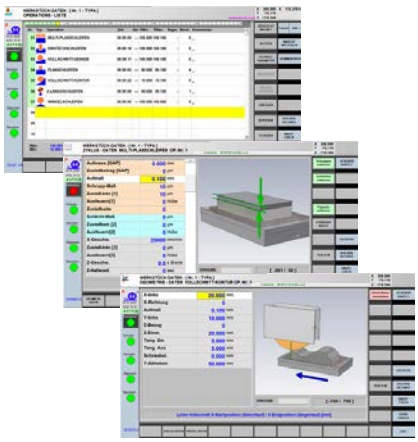


CNC CONTROL: HIGHEST STANDARDS, MAXIMUM FLEXIBILITY

The CNC control system offers flexible adaptation to a wide range of production requirements. Process data such as workpiece, grinding wheel and dressing information are clearly stored in virtual index cards and available for quick changeovers. This function minimizes downtime, increases productivity and ensures a continuous production process.
The control system supports dialog-guided entry of geometry data, which can be entered as absolute dimensions or using the teach-in method. This flexibility facilitates adaptation to different workpieces, from individual parts to series production. The user-friendly structure also enables intuitive operation, even for more complex machining processes.
Thanks to expansion options such as additional axes and grinding spindles, the machine can be individually adapted to specific requirements. Network functionality and a remote maintenance option make the control system future-proof and ideal for use in a networked manufacturing environment.

- **Efficient handling**
- **Teach-in function**
- **Quick setup**
- **Flexible contour creation**
- **Scalable performance**
- **Future-orientated**





TECHNICAL DATA

Type		GH OD NOTCH GRINDER	GH SEED DOME GRINDER
Grinding length	mm	1.000	800
Grinding width	mm	500	400
Grinding height	mm	425	375
Table load (max.)	kg	1.380	700
X-axis – longitudinal movement			
Longitudinal movement	mm	20 – 1.050	20 – 850
Longitudinal speed	mm / min	1 – 35.000	1 – 35.000
Y-axis – vertical movement			
Distance table to grinding spindle	mm	180 – 625	140 – 515
Vertical speed	mm / min	1 – 4.000	1 – 4.000
Z-axis – transverse movement			
Transversal movement (max.)	mm	500	400
Transverse speed	mm / min	1 – 4.000	1 – 4.000
C-axis – workpiece spindle			
Center height	mm	150	
Spindle speed	min^{-1}	1 – 400	
Spindle clamping		hydraulically	
Horizontal grinding spindle			
Grinding spindle speed	min^{-1}	100 – 2.380	100 – 3.180
Grinding wheel peripheral speed	m / s	10 – 35	10 – 35
Grinding spindle motor power	kW	11	11
Grinding wheel, standard	mm	400x100x127	300x50x76,2
Vertical grinding spindle			
Grinding spindle speed	min^{-1}	100 – 6.000	
Grinding wheel peripheral speed	m / s	10 – 35	
Grinding spindle motor power	kW	9	
Grinding wheel, standard	mm	max. 200	

Subject to technical changes.

Who we are

At our site in Homberg (Ohm), Hesse, precision grinding machines and accessories have been manufactured since 1956. Today, more than 12,000 of our machines are in operation worldwide.

Every Geibel & Hotz machine is assembled, commissioned, and subjected to thorough quality control at our headquarters. This ensures the highest standards of precision and reliability.

Our service is centrally coordinated and strengthened by a global network of authorized partners. Working closely with our experienced factory fitters, they provide expert support and dependable service wherever you are in the world.

Geibel & Hotz GmbH

Frankfurter Str. 102–104
D-35315 Homberg (Ohm)
Germany

Tel. +49 6633 1 81 –0
Fax +49 6633 1 81 –18

vertrieb@geibelundhotz.de
www.geibelundhotz.de

Grinding Tailored to You.