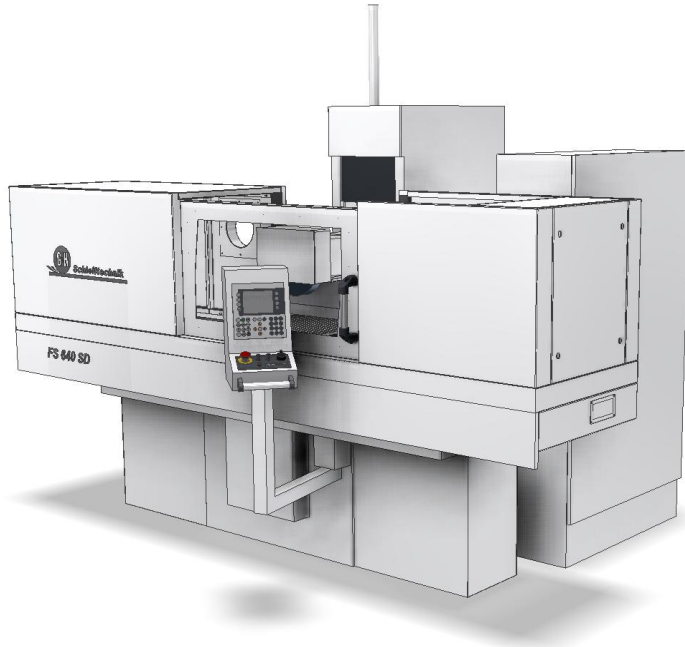


SD

Precision Surface Grinding Machines

FS 640 SD with standard accessories



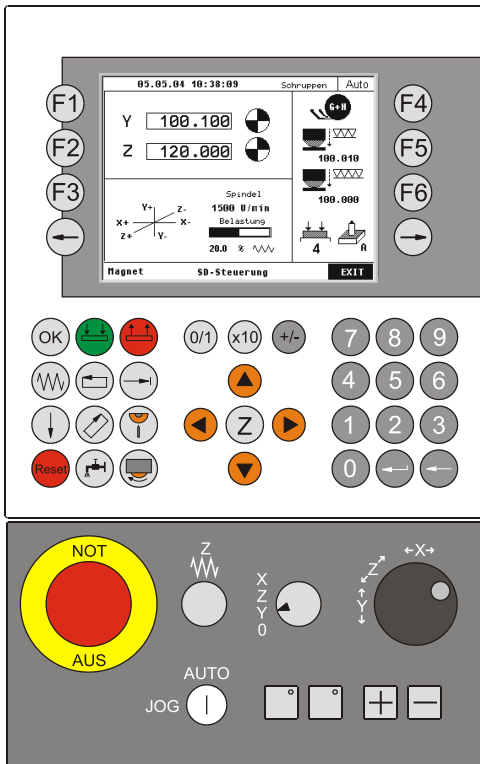
- part encapsulation
- grinding wheel
- grinding wheel mount
- levelling elements
- cooling liquid reservoir
- cleaning set
- magnetic chuck with regulable adhesive force
- automatic dressing from the table with compensation

Part encapsulation

The part encapsulation with a large sliding door is a standard feature of the machine. The right part of the housing can be opened for a better accessibility to the work area and loading of voluminous work pieces.

FS 1050 SD





SD control for surface grinding

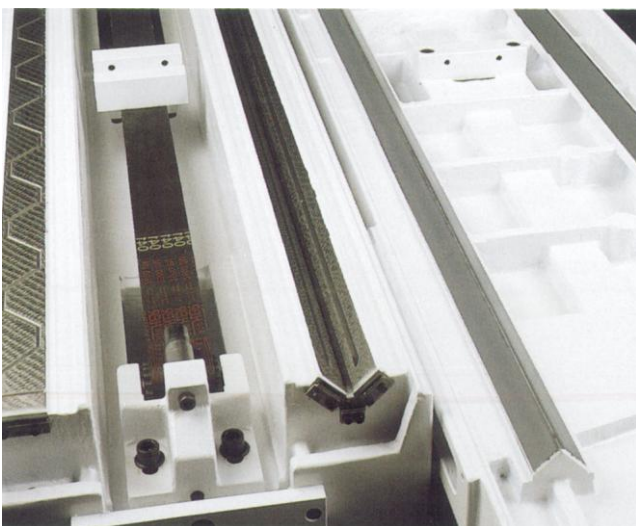
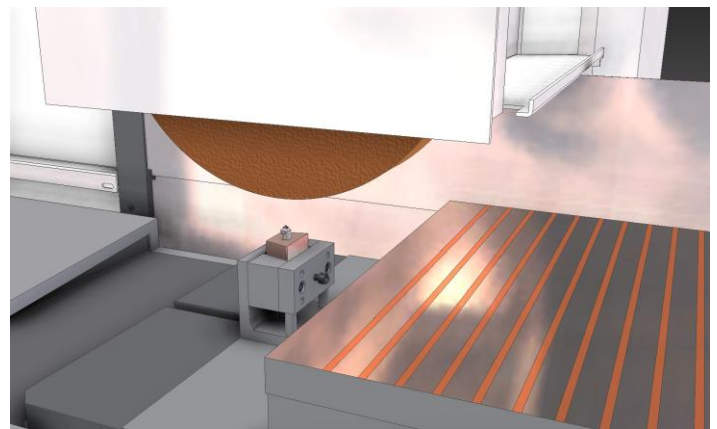
- clear arrangement of control elements
- numerical input of values
- electrical hand wheel
- transfer of machine positions with teach-in-keys
- surface grinding, plunge grinding, multi-surface grinding

In a workshop many persons frequently operate on one and the same grinding machine. For this reason, the function is simple and the configuration clearly arranged. No programming skills are necessary.

The G+H modular construction system allows different modifications on the basis of the standard equipment.

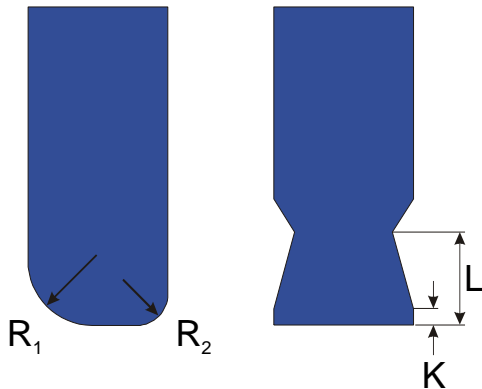
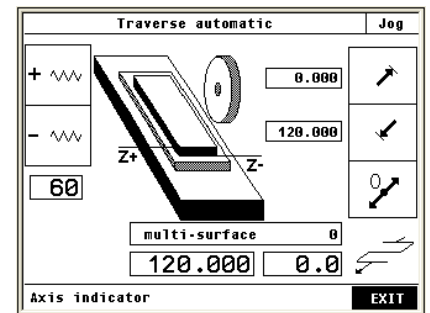
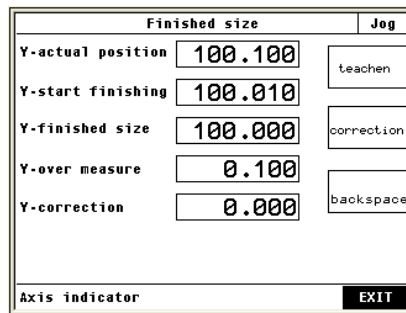
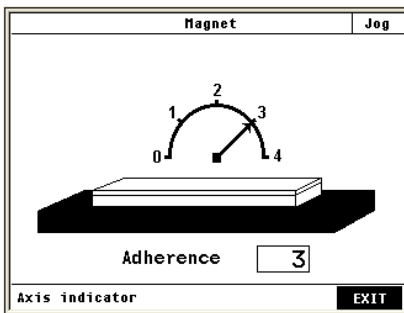
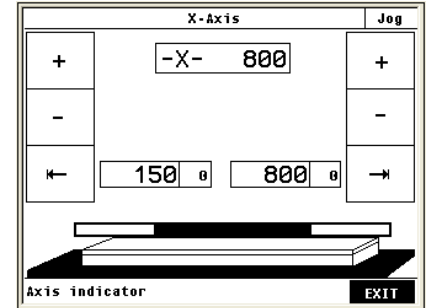
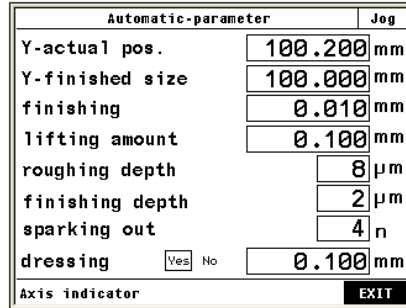
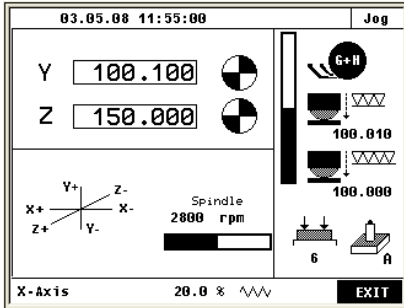
Dressing with compensation

Automatic dressing from the table allows highest precision. The respective dressing amounts are compensated. In combination with the continuous variable rotation speed of the grinding spindle, the peripheral speed of the grinding wheel remains constant. If required, the dressing cycle can be started manually during the grinding process.



Guideways

All guideways are constructed as V-flat slide ways. The moving elements are coated with TURCITE-B. This coating guarantees a high absorption to reach best surface finishes. The casting side is ground and rubbed.



Extension of control (Option)

The undercutting of the grinding wheel for front or flute grinding is program-controlled. The edges of the grinding wheel can be provided with radii. The respective dressing amounts are compensated as well for the diameter as for the gauge of the grinding wheel.

This control system contains a larger screen and an electrical manual wheel installed onto a satellite command board.

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Precision Surface Grinding Machines with SD-Control

MODELS OF MACHINES		FS 420 SD	FS 640 SD	FS 840 SD	FS 850 SD	FS 1050 SD	FS 1250 SD	FS 1550 SD
Grinding length	mm	400	600	800	800	1.000	1.200	1.500
Grinding width	mm	200	400	400	500	500	500	500
Grinding height	mm	300	375	375	425	425	425	425
Grinding height (Option)	mm	300	575	575	625	625	625	625
Table load	kg	150	600	700	1.100	1.380	1.650	1.970

X-AXIS = LONGITUDINAL MOVEMENT OF THE WORKING TABLE

Table longitudinal movement	mm	10 - 420	10 - 650	10 - 850	20 - 850	20 - 1050	20 - 1250	20 - 1550
Table speed	m/min	2 - 28	2 - 28	2 - 28	2 - 28	2 - 28	2 - 28	2 - 28

Y-AXIS = VERTICAL MOVEMENT

Distance table to grinding spindle	mm	90 - 415	140 - 525	140 - 525	180 - 625	180 - 625	180 - 625	180 - 625
Distance table to spindle (Option)	mm	90 - 415	140 - 725	140 - 725	180 - 825	180 - 825	180 - 825	180 - 825
Vertical speed	mm/min	100 - 1.000	100 - 1.000	100 - 1.000	100 - 1.000	100 - 1.000	100 - 1.000	100 - 1.000

Z-AXIS = TRANSVERSAL MOVEMENT

Cross motion max.	mm	190	400	400	500	500	500	500
Cross speed	mm/min	100 - 1.000	100 - 1.000	100 - 1.000	100 - 1.000	100 - 1.000	100 - 1.000	100 - 1.000

C-AXIS = GRINDING SPINDLE

Power of the grinding spindle motor	kW	2	3,7	3,7	9	9	9	9
Power of the spindle motor (Option)	kW	3,7	7,0	7,0	11 / 22	11 / 22	11 / 22	11 / 22
Speed of the grinding spindle	min ⁻¹	2.800	1.400	1.400	1.400	1.400	1.400	1.400
Speed of the grinding spindle (Option)	min ⁻¹	1.000 - 4.000	1.000 - 3.000	1.000 - 3.000	800 - 2.400	800 - 2.400	800 - 2.400	800 - 2.400
Grinding wheel, standard	mm	225 x 25 x 51	300 x 50 x 76,2	300 x 50 x 76,2	400 x 100 x 127	400 x 100 x 127	400 x 100 x 127	400 x 100 x 127

Dimensions	m	2,0 x 2,3 x 2,3	3,0 x 2,8 x 2,5	3,6 x 2,8 x 2,5	3,9 x 3,4 x 2,7	4,0 x 3,4 x 2,7	6,3 x 3,4 x 2,7	6,4 x 3,4 x 2,7
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Precision Surface Grinding Machines with SD-Control

MODELS OF MACHINES		FS 1060 SD	FS 1260 SD	FS 1560 SD	FS 2060 SD	FS 1070 SD	FS 1570 SD	FS 2070 SD	FS 3070 SD
Grinding length	mm	1.000	1.200	1.500	2.000	1.000	1.500	2.000	3.000
Grinding width	mm	600	600	600	600	700	700	700	700
Grinding height	mm	700	700	700	700	800	800	800	800
Grinding height (Option)	mm	900	900	900	900	1.000	1.000	1.000	1.000
Table load	kg	1.560	1.850	2.380	3.110	1.560	2.380	3.110	3.110

X-AXIS = LONGITUDINAL MOVEMENT OF THE WORKING TABLE

Table longitudinal movement	mm	20 – 1.050	20 – 1.250	20 – 1.550	20 – 2.050	20 – 1.050	20 – 1.550	20 – 2.050	20 – 3.050
Table speed	m/min	2 – 28	2 – 28	2 – 28	2 – 28	2 – 28	2 – 28	2 – 28	2 – 28

Y-AXIS = VERTICAL MOVEMENT

Distance table to grinding spindle	mm	180 - 800	180 - 800	180 - 800	180 - 800	240 – 900	240 – 900	240 – 900	240 – 900
Distance table to spindle (Option)	mm	180 – 1.000	180 – 1.000	180 – 1.000	180 – 1.000	240 – 1.100	240 – 1.100	240 – 1.100	240 – 1.100
Vertical speed	mm/min	100 – 1.000	100 – 1.000	100 – 1.000	100 – 1.000	100 – 1.000	100 – 1.000	100 – 1.000	100 – 1.000

Z-AXIS = Transversal movement

Cross movement max.	mm	600	600	600	600	700	700	700	700
Cross speed	mm/min	100 – 1.000	100 – 1.000	100 – 1.000	100 – 1.000	100 – 1.000	100 – 1.000	100 – 1.000	100 – 1.000

C-AXIS = GRINDING SPINDLE

Power of the grinding spindle motor	kW	9	9	9	9	11	11	11	11
Power of the spindle motor (Option)	kW	11 / 22	11 / 22	11 / 22	11 / 22	18	18	18	18
Speed of the grinding spindle	min ⁻¹	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400
Speed of the grinding spindle (Option)	min ⁻¹	800 – 2.400	800 – 2.400	800 – 2.400	800 – 2.400	600 – 1.900	600 – 1.900	600 – 1.900	600 – 1.900
Grinding wheel, Standard	mm	400 x 100 x 127	400 x 100 x 127	400 x 100 x 127	400 x 100 x 127	500 x 100 x 203	500 x 100 x 203	500 x 100 x 203	500 x 100 x 203

Dimensions	m	4,7 x 3,5 x 3,2	6,3 x 3,5 x 3,2	6,4 x 3,5 x 3,2	7,3 x 3,5 x 3,2	4,8 x 4,0 x 3,5	6,4 x 4,0 x 3,5	7,3 x 4,0 x 3,5	12,3 x 4,0 x 3,8
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