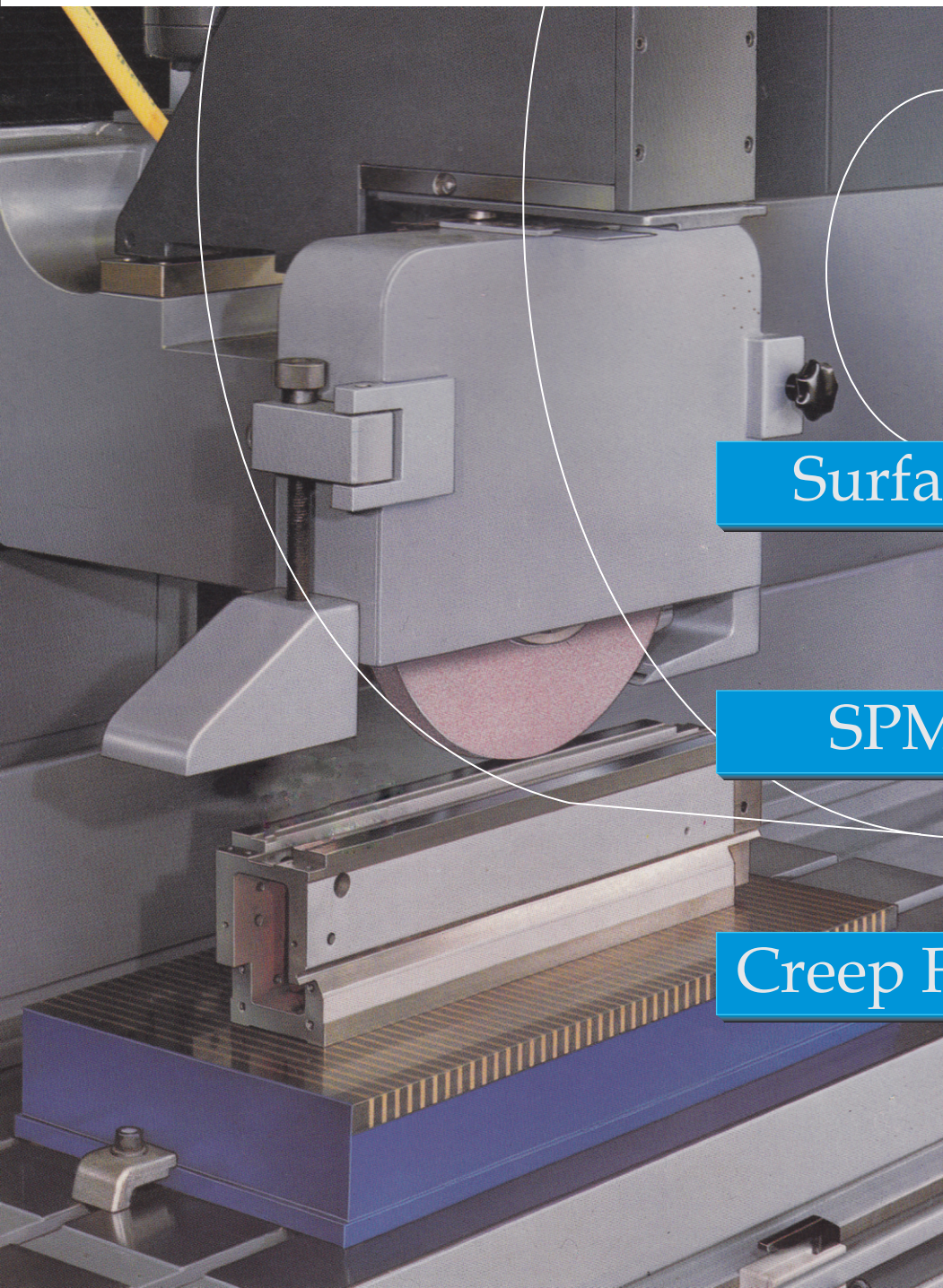


Precision Grinding Machine



Surface Grinding

SPM Grinding

Creep Feed Grinding

Precision grinding machines manufactured by **SCHLIFF MASCHINEN FABRIK** incorporating hydraulic table drive which are characterized by their high static and dynamic stability.

Spindle with ultra precision class angular contact bearing greased for life.

- | | | |
|---|--|----------------------------------|
| G High precision execution. | G Ball screws for vertical & cross axis. | G Servo motor for vertical axis. |
| G For precise controls, of 0.001 min in feed. | G Auto grinding cycle through NC Controls. | G Elegant operating pendant. |
| G PLC for logic control. | G Operator friendly programming. | G Colour Touch Screen. |

FEATURES

- G RIGID CONSTRUCTION**
All Main elements are of GRADED castings which have been stress relieved for long lasting accuracy and stability. Rib reinforced box type construction of main parts to ensure high rigidity.
- G HIGH PRECISION**
Prism Flat Guide ways for all axis and are lined with "Tutcite B" and Precision hand scraped to provide high accuracy and eliminate stick slip.
- G AUTOMATIC LUBRICATION SYSTEM**
The lubrication pump works as soon as the power is switched on. Lubrication system continuously lubricates ways, vertical lead screw and its' bearings and gears.
- G ADVANCED HYDRULIC CIRCUIT DESIGN**
Improved hydraulic provide vibration-free reversing motion of table, External, independent hydraulic tank provide with no heat transferred to the base.
- G TABLE HYDRAULIC FEED**
Speed range from 1m/min to 25m/min provides easy operation of the machine. Stroke is Adjustable by a pair of dogs in front side of the table. Non-contact proximity Switch are used.
- G AUTOMATIC CROSS FEED**
A combination of precision ball screw and a electric motor drive systems provides quick, smooth automatic cross feed.

HIGH PRECISION SURFACE GRINDING MACHINE

COMPACT

600 x 300



HIGH PRECISION SURFACE GRINDING MACHINE

S SUPER

Technical Data, Model:	SS 735	SS 84	SS 104	SS105	SS 154	SS 155
Grinding area (mm)	700 x 350 x 375	800 x 400 x 375	1000 x 400 x 500	1000 x 500 x 500	1500 x 400	1500 x 500 x 500
Table speed adjustment (m/min.)	1-28	1-28	1-28	1-28	1-28	1-28
Dist. table-spindle centre (mm)	525 mm	525 mm	525 mm	700 mm	700 mm	700 mm
Max. table cross setting (mm)	350 mm	400 mm	400 mm	500 mm	400 mm	500 mm
Spindle Motor (kw)	3.7 kw	3.7 kw	4.5 kw	5.5 kw	5.5 kw	5.5 kw
Grinding wheel (rpm)	1400 rpm	1400 rpm	1400 rpm	1400 rpm	1400 rpm	1000 rpm
Table load (kg)	280 kgs.	300 kgs.	450 kgs.	500 kgs.	600 kgs.	750 kgs.
Grinding wheel dimension (mm)	φ300 x 50 φ76.2	φ300 x 50 φ76.2	φ300 x 50 φ76.2	φ350 x 65 φ127	350 x 65 φ127	4000 x 100 φ127
Machine weight (kg)	3800	4000	4700	5000	5500	8500
Total power consumption (kw)	9 kw	9 kw	12 kw	12 kw	12 kw	18 kw
Spindle cone	36 mm	36 mm	36 mm	45 mm	45 mm	60 mm



HIGH PRECISION SURFACE GRINDING MACHINE

Technical Data, Model:	SS 1060	SS 1560	SS 1070	SS1570	SS 2070
Grinding area (mm)	1000 x 600 x 500	1500 x 600 x 500	1000 x 700 x 500	1500 x 700 x 500	2000 x 700 x 500
Table speed adjustment (m/min.)	1-25	1-25	1-25	1-25	1-25
Dist. table-spindle centre (mm)	700 mm	700 mm	700 mm	700 mm	700 mm
Max. table cross setting (mm)	600 mm	600 mm	700 mm	700 mm	700 mm
Spindle Motor (kw)	5.5 / 7.5 option	5.5 / 7.5 option	7.5 / 11 option	7.5 / 11 option	7.5 / 11 option
Grinding wheel (rpm)	1000	1000	1000	1000	1000
Table load (kg)	700 kg	1000 kg	850 kg	1100 kg	1100 kg
Grinding wheel dimension (mm)	φ400 x 127 x φ100	φ400 x 127 x φ100	φ400 x 127 x φ100	φ400 x 127 x φ100	φ400 x 127 x φ100
Machine weight (kg)	6000	7200	6800	8000	10000
Total power consumption (kw)	20	20	22	25	25
Spindle cone	60 mm	60 mm	60 mm	60 mm	60 mm

FEATURES

- G High precision execution, VVW accuracies, as per DIN 8632.
- G Rigid construction clearing full passage for loading component on table
- G Electro - mechanical table drive
- G High precision and high power at spindle
- G Close pole pitch electromagnetic chuck with power variator
- G Hand-tacho/ MPG mode of operation for precise controls, of 0.001 mm in feed.
- G Auto Grinding cycle through NC Controls.
- G DIGITAL READOUT of 0.001 mm resolution for vertical/ infeed axis.
- G Spindle is rigid enough to take Diamond & CBN wheels
- G Variety of Dressing attachment can be adopted
- G High productive machine compare to oscillating type
- G Excellent parallelism & surface finish



HORIZONTAL SERIES

- G Constant surface speed of table
- G AC Servo drives for Y & Z axis for accurate and precise controls.

VERTICAL SERIES

Any Rotary table Grinding Machine with a vertical grinding-wheel.
In this case You can do the work of a cylindrical grinding machine with a very large diameter

- G AC servo drives for Y axis for accurate and precise controls.
- G Cup wheel or segmented wheel could be used



MODEL ROTARY

Technical Data, Model:		SS R400	SS R600	SS R1000
Grinding Dia = R	mm	400	600	1000
Grinding width = Z	mm	200	300	500
Grinding height = Y	mm	375	375	500
Maximum table load	kg	350	500	800
Distance between table to spindle centre	mm	525	525	700
Cross Travel	mm	200	300	500
Spindle cone	mm	36	36	60
Spindle Drive	kw	3.7	3.7	5.5/7.5(Option)
Grinding wheel	mm	300x50x76.2	300x50x76.2	400x100x127
Speed	rpm	1400	1400	1000
Machine weight,	kgs.	4000	5200	7500

HIGH PRECISION SURFACE GRINDING MACHINE

FUTURA

FEATURES

- G Great number of CNC-functionalities in an economically priced machine. A color-display is built in for best output and ergonomics.
- G Machine can dress several contours or outlines into the grinding-wheel, such as convex or concave radiuses, chamfers or angles.
- G Also you can combine different contours in one dressing-job.
- G Furthermore it can do several grinding-jobs in one cycle.
- G All machine axis utilize precision ball screws and A.C. servo-motors, controlled by SIEMENS or FANUC 3 axis CNC system.
- G Machine has compact design clear cut operator friendly concept, and easy accessibility to working area.
- G Machine has dual advantage of having profiles are ground either in surface grinding mode or creep feed grinding
- G High pressure coolant system & closed guarding is in built feature of machine
- G This machine will be available either horizontal or vertical configuration and best suitable for fuel injection components, automobile components, & aeronautical component manufacturing.
- G The more powerful CNC Machine offers working areas of 600 x 250 mm up to 1500 x 500 mm and grinding spindle drives with 2.2 kw up to 22 kw.

SALIENT FEATURES

- G Graded cast iron bed for superior grinding.
- G Extremely High static and Dynamic stiffness
- G High precision execution, VVV accuracies, as per DIN 8632.
- G Sophisticated CNC Siemens/FANUC Control.
- G Hand-tacho/ MPG mode of operation for precise controls, of 0.001 mm in feed.
- G Auto Grinding cycle through CNC Controls.
- G Vertical & Cross movement CNC Axis.
- G Recirculation ball screw for all Axis
- G Play free Preloaded Linear Guide System For All Axis
- G 3 Point dresser for dressing different profiles as standard accessory with machine
- G Adequate Spindle power for using Diamond & CBN wheels
- G Infinitely variable spindle speed from 1000- 4000 Rpm
- G Diamond roll dressing Or steel crush roll can be adopted on the machine
- G High pressure coolant system for creep feed application



The same configured machine will be available in 2 Axis CNC, longitudinal axis is Hydraulically operated In several applications profiled wheel is essential & grinding could be done in normal surface grinding mode

HIGH PRECISION SURFACE GRINDING MACHINE

SPM

FEATURES

We have developed several special purpose machine specially for

- | | |
|--|---|
| G Machine tool Harden guide way grinding | G Nicking for Broach |
| G Hydraulic chuck grinding | G Ceramic Grinding |
| G Gas turbine blade grinding | G Epoxy Insulators Grinding |
| G Fuel injection components | G Large Range machines for Tiles Industry |
| G Blade Grinding | G Auto component manufacturing |
| G Carbide Cutting as well Grinding | G Tap Set Flute Grinding |

These machines are configured with horizontal or vertical, High frequency spindle, Diamond and CBN grinding wheels, High pressure coolant system, auto component loading, Component holding fixtures and proving the component for statistical evaluation. (CPK 1.6 - 2)



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Dealer

Precision

Grinding
Machine