



Surface Grinding Machine SSM

The grinding machine type SSM is designed for grinding flat and spherical components up to $\varnothing 500\text{mm}$. With the appropriate options, the machine can also be used for grinding of aspheric lenses and prisms or precision contour grinding.

The SSM is available with 1 to 5 axes. The basic equipment consists of a vertical NC axis (Z), a belt-driven spindle with internal flushing and a work-piece spindle.

An optional HSK spindle is available, which can also be connected with an automatic tool changer. The axes are separated from the working area in order to perfectly protect them from grinding swarf. The complete machine cover is made of stainless steel to provide an easy to clean environment and a long life time of the machine.

The work-pieces are hold by vacuum or pneumatic clamping devices. The grinding process can optionally be controlled and managed by a force measurement system or by the spindle power. The control of the machine features different feed rates during grinding and a dwell time at the end of the grinding process for smoothing the surface.

<http://www.dama.ch>
phone ++41 71 988 34 20
fax ++41 71 988 29 18

dama technologies ag
Romanshorerstrasse 7
CH – 9308 Lömmenschwil
Switzerland

The B&R CNC control system offers an easy to work environment. Specific dialogues simplifies the set up and shortens the programming. The touch screen gives a good process overview and is a comfortable interface.

The machine is based on the modulare machine concept from dama technologies ag. A wide range of options, such as tool measurement device, coolant pressure monitoring system, optical working control system and fixation plate etc. guarantee to match perfectly the required specifications.

Technical data SSM

X-axis	Traversing path Digital display Speed	470 mm 0,001 mm 0 - 5'000 mm/min
Y-axis	Traversing path Digital display Speed	200 mm 0,001 mm 0 - 5'000 mm/min
Z-axis	Traversing path Digital display Speed	400 mm 0,001 mm 0 - 5'000 mm/min
B-axis (optionally)	Swivel range Digital display	+/- 45° 0,001°
Spindle	4 kW, programmable from 500 – 5'000 rpm	
Workpiece spindle	1.5 kW, programmable from 20 – 200 rpm Carrying plate with vacuum clamping up to ø550	
Force measuring system (optionally)	0 – 200 (2000) Newton for feed control for Z-axis	
Control	for X, Y, and Z-axis movement B&R PP520 - Touch Screen as operator interface - Force indication optionally - Spindle load indication - Emergency stop B&R CNC control - Logic unit for 3 axes and 1 spindle - Hand wheel	
Splashing protection	doors with windows, complete stainless steel enclosure	
Dimensions	Length Width Height Weight	ca. 2'000 mm ca. 1'800 mm ca. 2'400 mm ca. 3'100 kg
Electrical connection	3x400V / 50Hz, 3L+N+PE / max. 32A	
Compressed ari connection	6bar	
Colour	RAL 7035 / 3003	
CE-conformity	The machine complies with the European directives of the CE regulation	

