

Conventional Grinding Machines RSM 1000 C



SKU : 302445

The models of the RSM C series are precision cylindrical grinding machines designed for long and heavier workpieces. The series is suitable for processing individual parts as well as for small series production and offer additional flexibility with the internal grinding device. The classic design with a large machine bed, ground guides, and powerful drives for the work spindle, grinding spindle and hydraulic unit, make these machines a cost-effective solution for the precision grinding of larger workpieces.

- Internal and external grinding
- Hydrostatic bearings for high surface quality
- Heavy machine frame to support large workpieces
- Swiveling headstock for conical grinding of short parts
- Integrated rapid feed on X-axis with manual return
- Extensive package of standard accessories

TECHNICAL SPECS

WORKING AREA

Center height	180 mm
Grinding diameter	8 mm - 320 mm
With steady rest	60 mm
Grinding length	1000 mm
Inside grinding diameter with rest	35 mm - 100 mm
Inside grinding diameter without rest	30 mm - 100 mm
Inside grinding depth	125 mm
Workpiece weight between centers (max.)	150 kg
Grinding wheel feed (min.)	0.0025 mm
Chuck diameter	200 mm
Table swivel range (max.)	-3° / +7°
Wheel speeds	35 m/s
Work spindle speeds	50 Hz: 25-220 1/min

TRAVELS

Grinding head travel	250 mm
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FEED

Table feed, infinitely variable	0.1 m/min - 4 m/min
Feed per hand-wheel rotation X-axis	2 mm
Feed per scale division X-axis	0.0025 mm

HEADSTOCK

Working headstock swivel range	0 deg - 45 deg
Working spindle taper	4 MT

GRINDING HEADSTOCK

Grinding spindle speed	1670 1/min
Grinding headstock swivel range (r+l)	30°
Inside grinding spindle speed	10000 1/min

TAILSTOCK

Tailstock taper	4 MT
Tailstock quill stroke	25 mm

DRIVE CAPACITY

Motor rating - grinding spindle / hydraulic pump	5,5 / 0,75 kW
Motor rating inside grinding	1.1 kW
Motor rating - headstock / coolant pump	1,5 / 0,125 kW

MEASURES AND WEIGHTS

Grinding wheel dimensions	400 mm x 50 mm x 203 mm
Grindstone dimensions, inside grinding (max.)	50 mm x 40 mm x 16 mm
Grindstone dimensions, inside grinding (min.)	45 mm x 35 mm x 10 mm
Overall dimensions (length x width x height)	3.61 m x 1.81 m x 1.52 m
Weight	3700 kg



Wet grinding with rotating part



RSM Series Grinding Spindle

PRODUCT DETAILS

- Large machine bed in a heavy design accommodates workpieces with lengths up to 2000 mm and diameters up to 320 mm
- Wide, precision-ground guideways ensure maximum accuracy across the entire workpiece length and accommodate high workpiece weights
- The table features large dimensions and swivels in two directions - table movement via hand-wheel or automatically via linear hydraulic feed
- The robust feed valve allows very precise micro-feed control on the Z axis, including a user-adjustable dwell time at the end of the longitudinal table travel
- Automatic feed in 2 steps – limited by an adjustable stop
- The grinding spindle features hydrostatic bearings and provides for maximum precision and surface quality, plus extraordinary tool life and rigidity
- The powerful grinding spindle motor is designed for continuous operation
- The heavy-duty spindle head swivels 30° to the left and to the right; the work spindle head swivels 45°
- Inside grinder included
- Integrated rapid feed on X axis with manual return

STANDARD EQUIPMENT

3-axis position indicator X.Pos 3.2
Internal grinding equipment
Open rest
Closed rest
3-jaw chuck Ø 200 mm
Coolant system
Grinding wheel dresser
Balancing station
Balancing mandrel
Grinding wheel flange
Center point
Front and rear splatter guard
Drivers
Operating tools
Operator manual
Test certificate