



### SKU : 302447

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 Z-axis with manual return
- Extensive package of standard accessories

## TECHNICAL SPECS

### WORKING AREA

Center height	180 mm
Grinding diameter	15 mm - 320 mm
With steady rest	60 mm
Grinding length	2000 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° / +5°
Wheel speeds	34.2 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

### ACCURACIES

Run-out deviation	0.003 mm
Cylindrical deviation	0.01 mm
Roughness	<=0,32 µm Ra

### HEADSTOCK

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

### GRINDING HEADSTOCK

Grinding spindle speed	1305 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

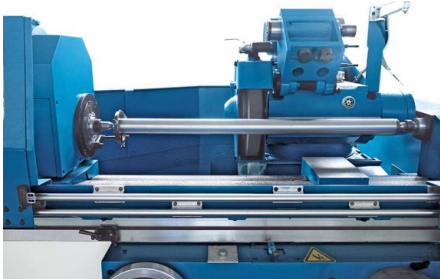
Motor rating - grinding spindle / hydraulic pump	7,5 / 0,75 kW
Motor rating inside grinding	1.1 kW
Motor rating - headstock / coolant pump	1,5 / 0,125 kW

### MEASURES AND WEIGHTS

Grinding wheel dimensions	500 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)	5.61 m x 1.81 m x 1.52 m
Weight	6600 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 X 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 Z axis with manual return

## STANDARD EQUIPMENT

2-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