Conventional Cylindrical Grinders

# 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 Z-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 |

### 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 |



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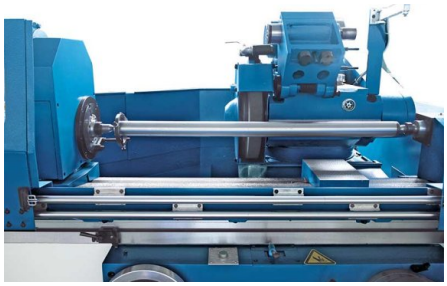
*Wet grinding with rotating part*



*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

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



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