



**ATTENTION – SPECIAL OFFERS NOW AVAILABLE !!!  
SO PRICES ARE CURRENTLY REDUCED BY 20% !!!**

## Offer

### Universal Cylindrical Grinding Machine MSO FM 165/500 with internal grinding attachment



manufacturer: MSO  
type: FM 165 / 500  
mach.-nr.: M 26214  
year of construction: ??? / 11.2018 tüp.  
comm.-Nr.: 3990400/009  
stock-nr.: 1908

**Special Price: ~~8.850,- €~~ | now 7.080,- €**

**The machine is suitable for:**

- external grinding
- internal grinding
- surface grinding
- taper grinding
- chamfering
- angled flat grinding

## **Technical Data**

**(According to manufacturer)**

**centre height:** 180 mm

**swing-Ø:** 360 mm

**grinding length:** 500 mm

**between centres:** 550 mm

### **grinding wheel**

**diameter:** 300 mm

**bore-Ø:** 127 mm

**largest width of grinding wheel for plunge grinding:** 40 mm

**largest total width of a grinding wheel set:** 80 mm

**largest sum of single widths:** 40 mm

**grinding wheel speed:** 1.650 / 2.150 rpm = 30 m/s

### **grinding head**

**largest grinding head hub:** 209 mm

**largest hub by hand wheel:** 67 mm

**additional hub:** 142 mm

**autom. interval feed:** 0,005 – 0,020 mm

**feed by one revolution of hand wheel:** rough 25 mm / fine 2,5 mm

**feed by one hand wheel graduation mark:** 0,0025 mm

**setting by tip-switch regarding diameter:** 0,00125 / 0,0025 mm

### **internal grinding attachment**

**largest distance from front edge spindle headstock to grinding spindle carrier:** 750 mm

**bore for carrying the spindle:** 60 mm

**largest grindable bore:** 125 mm / maybe larger

### **headstock spindle**

**6 work-piece speeds, adjustable:** 40 – 305 rpm

**rotatability of headstock spindle against the grinding wheel:** 90°

**spindle cone or inner taper of headstock spindle:** MK 4

### **tailstock**

**inner cone of quill:** MK 3

**quill travel:** 20 mm

**table**

**largest table incline:** 10°

**largest cone angle:** 20°

**table speed:** 0,2 – 1,1 m/min

**rough travel by hand wheel:** 1 revolution 25 mm, 1 graduation mark 0,25 mm

**fine travel by hand wheel:** 1 revolution 2,5 mm, 1 graduation mark 0,025 mm

**total connected load:** ca. 4 kW

**weight:** ca. 1.800 kg

**standing area:** W 2,10 x D 1,20 x H 1,60 m

**color:** blue / grey-white / red

## Features

- rotatable internal grinding attachment
- manual or automatic operation
- self-feeding up to 0-limit
- grinding wheel fine adjustment 0,00125 / 0,0025
- automatic feed works as piercing feed, without feed, table-dependant feed
- only RIGHT / LEFT and RIGHT / only LEFT
- upper table for tamper grinding with fine feed and measuring clock
- bedway is lubricated by re-oil
- tailstock can be activated by mechanical lever
- attachment with measuring clock for table pivoting up to 10°
- headstock spindle pivotable up to 360°
- grinding head pivotable up to 360°, in 2 layers
- grinding head two speeds
- free-standing liquid cooling system, mobile
- splash guards
- 3 pieces grinding wheel flanges with wheels
- internal grinding spindle with cone attachment and extraction threading
- internal grinding spindle with fastening clamp attachment and fastening clamp Ø 6 mm
- internal cooling through work spindle on work piece during internal grinding
- 2. driving pulley to adjust the internal grinding spindle rpm setting
- adjustable straight and radial matching device with quick-fastening lever
- adjustable dressing device for grinding wheel, at tailstock
- adjustable side and diagonal dressing device with scale, for grinding wheel, with quick-release lever
- open lunette, adjustable
- Three-Chuck-fastening buffer forkhardt Ø 125 mm, with spindle receiver flange
- collet attachment for direct spindle reception
- fastening clamp device with spindle receiver
- 10 collet chucks for collet from Ø 3 mm - 22 mm
- 5 vibration-dampening standing bars
- of internal grinding spindles in various sizes
- operating manual

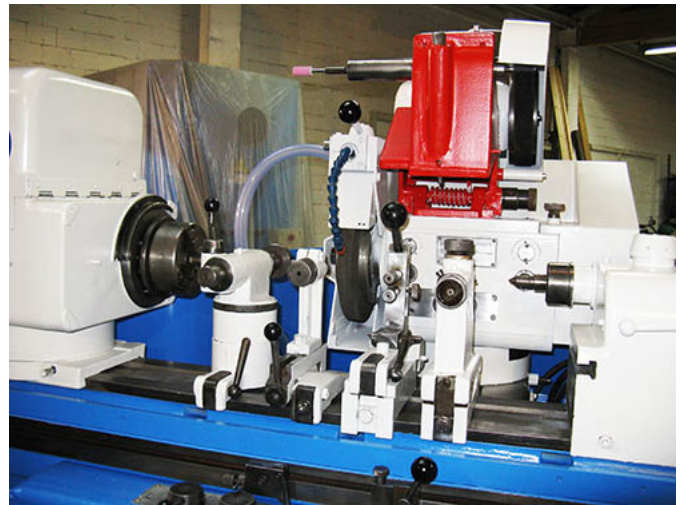
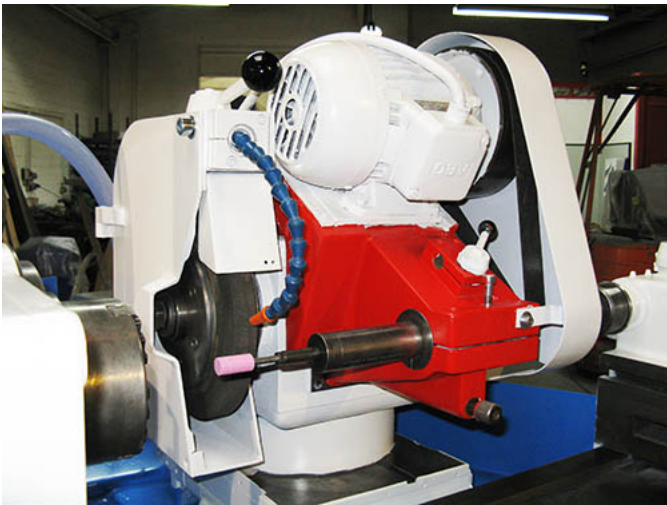
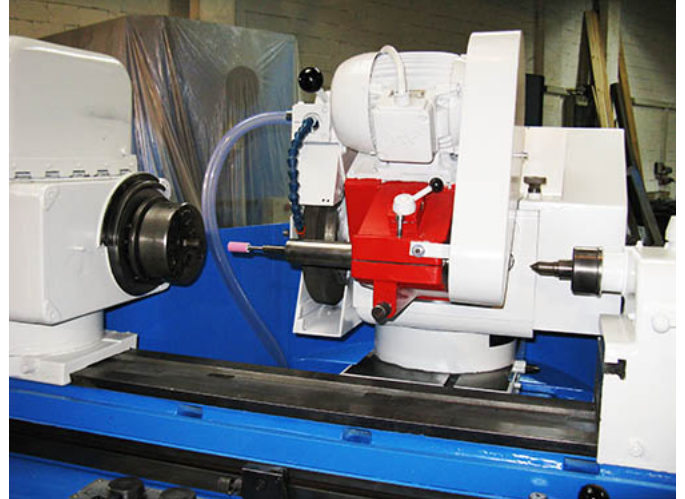
**The seller informed us this has been used in a teaching environment.**

- If the year of construction has a "tüp."-date, that means the machine has been electrically and

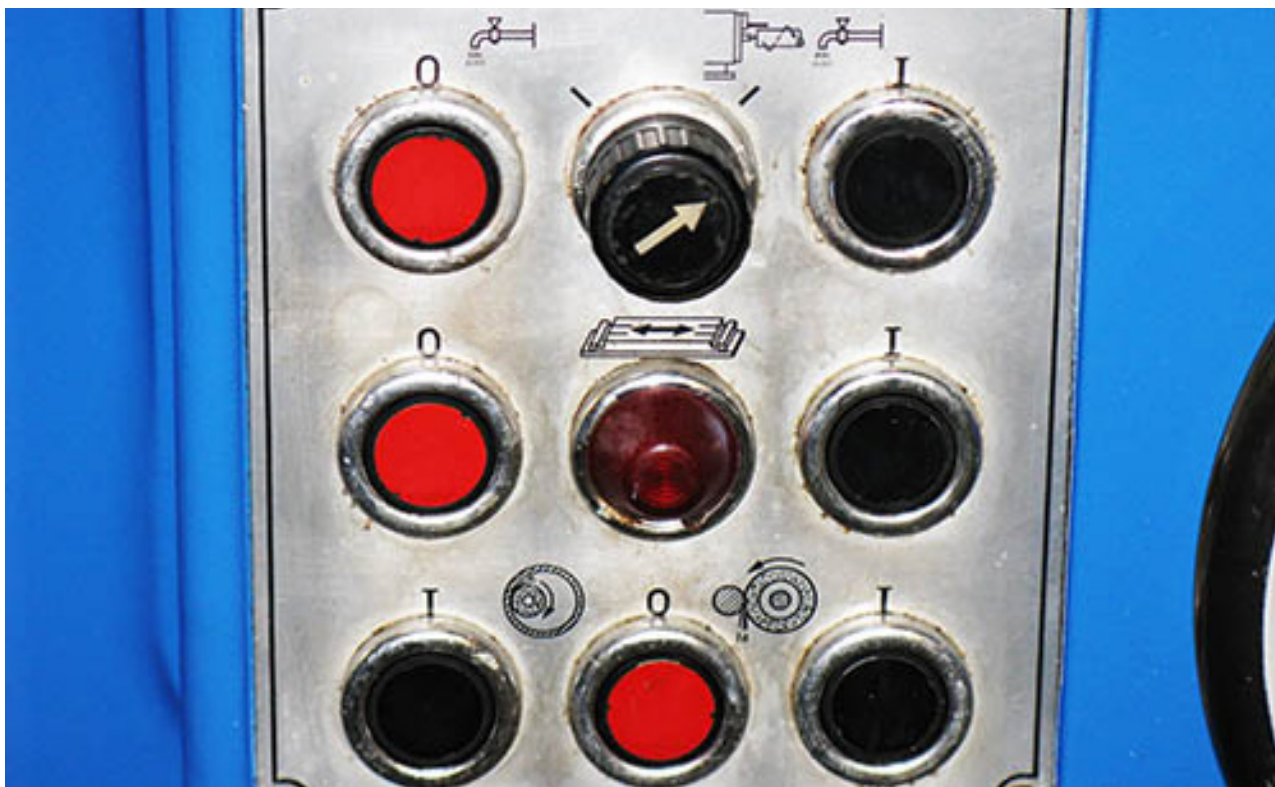


technically inspected by us on that date.

- If the year of construction has a "tüb."-date, that means the machine has been partially overhauled on that date according to the prior owner.
- If the year of construction is marked "\*\*", it is the information the prior owner relayed to us or our own estimation.







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