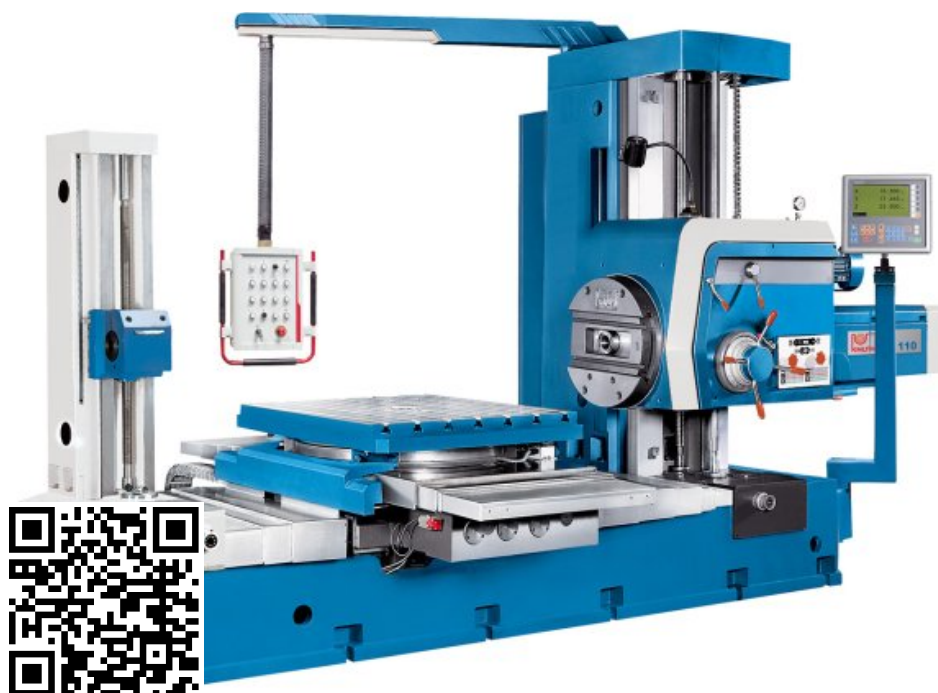


# Conventional Milling and Boring Machines

## BO 110



### SKU : 301499

The BO series of conventional boring-milling machines is designed for horizontal, multi-sided drilling and milling of workpiece weights of up to 2.5 tons. The stand is fixed, while the table can move and rotate 360°. The drill head moves on the column and the spindle has a long stroke on the W-axis. Conventional boring mills also have a facing slide with a long stroke, which extends the application to include boring. High drive power and automatic feeds on all axes with rapid traverse enable efficient machining and short non-productive times.

- Large work area with W-axis and facing slide
- Thread cutting unit
- Rotatable clamping table with sighting device for 4 positions
- Telescoping stainless steel covers on all guides

## TECHNICAL SPECS

### WORKING AREA

Drilling capacity	50 mm
Table set up area	1100 mm x 960 mm
Table load capacity	2500 kg
Table rotation range	4 x 90°
Spindle axis-to-table surface distance	0 mm - 900 mm
Rotation speed of rotary table	1 1/min

### TRAVELS

Travel X	900 mm
Travel Y	900 mm
Travel Z	900 mm
Travel W	600 mm
Facing slide travel	180 mm

### HEADSTOCK

Speed range	8 1/min - 1000 1/min
Spindle diameter	110 mm
Spindle torque (max.)	1225 Nm
Spindle mount	SK 50
Facing slide speed	4 1/min - 200 1/min
Feed force, axial (max.)	12.25 kN
Facing slide torque (max.)	1960 Nm

### RAPID FEED

Rapid feed X-axis	2500 mm/min
Rapid feed Y-axis	2500 mm/min
Rapid feed W-axis	2500 mm/min

### FEED

Feed X-axis	0.01 mm/R - 6 mm/R
Feed Y-axis	0.01 mm/R - 6 mm/R
Feed Z-axis	0.01 mm/R - 6 mm/R
Feed W-axis	0.01 mm/R - 6 mm/R
Facing slide feed	0.08 mm/min - 12 mm/min

### ACCURACIES

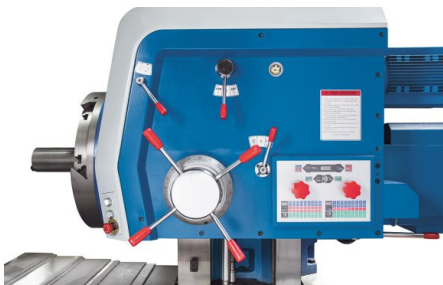
Read-out accuracy (optic)	0.01 mm
Counter-bore accuracy	H7 Ra-1,6 µm

### DRIVE CAPACITY

Motor rating main drive	7.5 kW
Motor rating hydraulic pump	0.37 kW

### MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	4.88 m x 2.45 m x 2.75 m
Weight	11500 kg



## PRODUCT DETAILS

- Rigid, hardened and precision-ground square guides ensure many years of accurate operation
- Mechanical functions that cannot be run simultaneously are provided with interlocks
- Headstock and feed gears are equipped with an overload clutch
- Lever-operated shift gears for positioning of the wheels in the desired position
- Faceplate and drill spindle with different task-specific speed ranges according to the various functions
- An optical sighting device enables fast positioning with maximum precision at 90°, 180°, 270° and 360°
- Telescoping steel cover protects the guides from chips and dirt
- BO 110 incl. tailstock (optional on BO 130)

### 3-axis position indicator

- More accuracy
- Lower error rate
- Increased productivity
- Resulting in valuable time savings
- For increased productivity
- Easy to read display
- Operator-specific features
- Convenient keyboard layout
- Resolution: 0.01/ 0.005 mm
- Default coordinates
- Axis position is maintained when display is turned off
- Hole circle pattern calculation
- Calculator function
- Storage for 10 tools
- Radius / diameter toggle
- Mm/inch conversion
- Easy expansion and maintenance-free operation

## STANDARD EQUIPMENT

3-axis position indicator X.Pos 3.2  
 Wedge strip  
 Central lubrication  
 Work lamp  
 Foundation bolts  
 Operating tools  
 Operator instructions

## OPTIONAL EQUIPMENT

- Drilling tool holder for faceplate, SKU : 252278
- Milling cutter holder for faceplate, SKU : 252279
- Boring head, SKU : 252280
- Position indicator at the rotary table, SKU : 252720



## KNUTH on YouTube

### Information to the point

On our YouTube channel you can find videos for nearly all machines from our program. We show the machines from current deliveries and you get an impression of the handling, the processing quality and the machining performance.

**Are you interested in a machine for which you cannot find a current video?  
Please feel free to contact us!**