

# Conventional Milling and Boring Machines **BO 110**



# SKU: 301499

The BO series of conventional boringmilling 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 4 x 90° rotatable set-up table •
- Telescoping stainless steel covers on all guides

# **TECHNICAL SPECS**

#### WORKING AREA

Drilling capacity	1.97 in
Table set up area	43 in x 38 in
Table load capacity	5500 lbs
Table rotation range	4 x 90°
Spindle axis-to-table surface distance	0 in - 35.43 in
Rotation speed of rotary table	1 rpm

#### TRAVELS

Travel X	35.4 in
Travel Y	35 in
Travel Z	35 in
Travel W	24 in
Facing slide travel	7 in

#### HEADSTOCK

Speed range	8 rpm - 1000 rpm
Spindle diameter	4 in
Spindle torque (max.)	904 ft.lb.
Spindle mount	Taper 50
Facing slide speed	4 rpm - 200 rpm
Feed force, axial (max.)	12.25 kN
Facing slide torque (max.)	1445.62 ft.lb.

### **RAPID FEED**

Rapid feed X-axis	98.43 in/min	
Rapid feed Y-axis	98.43 in/min	
Rapid feed W-axis	98 in/min	

#### FEED

Feed X-axis	0.00039 in/R - 0.23622 in/R
Feed Y-axis	0.00039 in/R - 0.23622 in/R
Feed Z-axis	0.00039 in/R - 0.23622 in/R
Feed W-axis	0.00039 in/R - 0.23622 in/R
Facing slide feed	0.003 in/min - 0.472 in/min

#### ACCURACIES

Read-out accuracy (optic)	0.0004 in
Counter-bore accuracy	H7 Ra-1,6 µm

#### **DRIVE CAPACITY**

Motor rating main drive	10.1 Hp
Motor rating hydraulic	0.5 Hp
pump	

#### **MEASURES AND WEIGHTS**

Overall dimensions (length x width x height)	193 in x 97 in x 109 in
Weight	25300 lbs

# **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
- Table rotates 4 x 90°
- 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: 0.0004 / 0.0002"
- 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 Alignment wedges Central lubrication Work lamp Foundation bolts Operating tools Operator instructions