



### SKU : 100083

The machines of the BO 130 CNC series are large milling and boring mills that are designed for heavy-duty machining of large and heavy workpieces. The powerful Siemens 828D CNC control and the rotary table for multi-sided machining of workpieces in one clamping offer solutions for a wider range of milling and drilling work.

- Increased table support in X-axis
- Powerful main motor with high torque
- CNC rotary table with 1° steps indexing
- Siemens 828D control for advanced machining

## TECHNICAL SPECS

### WORKING AREA

Drilling capacity	50 mm
Counterbore diameter (max.)	250 mm
Table set up area	1350 mm x 1000 mm
Table load capacity	5000 kg
Spindle center-to-table distance	0 mm - 1200 mm
Number of T-slots	7 positions
T-slots, width	22 mm
T-slots, spacing	125 mm
Table indexing	1 deg

### TRAVELS

Travel X-axis	1600 mm
Travel Y-axis	1200 mm
Travel Z-axis	1200 mm
Travel W-axis	550 mm

### HEADSTOCK

Speed range	12 1/min - 1500 1/min
Spindle diameter	130 mm
Spindle torque (max.)	1500 Nm
Spindle mount	BT 50 JIS (MAS 403)

### RAPID FEED

Rapid feed X-axis	10000 mm/min
Rapid feed Y-axis	10000 mm/min
Rapid feed Z-axis	10000 mm/min
Rapid feed W-axis	5000 mm/min
Rapid feed B-axis	5.5 mm/min

### FEED

Feed X-axis	5 mm/min - 2000 mm/min
Feed Y-axis	5 mm/min - 2000 mm/min
Feed Z-axis	5 mm/min - 2000 mm/min
Feed W-axis	5 mm/min - 2000 mm/min

### ACCURACIES

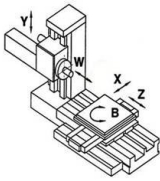
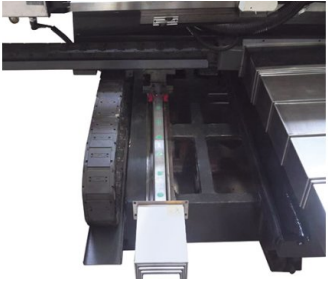
Positioning accuracy X-axis	0.04 mm
Positioning accuracy Y-axis	0.04 mm
Positioning accuracy W-axis	0.04 mm
Positioning accuracy Z-axis	0.04 mm
Repeatability X-axis	0.02 mm
Repeatability Y-axis	0.02 mm
Repeatability T-axis	0.02 mm
Repeatability W-axis	0.02 mm
Work table rotation accuracy	10 "
Work table repeatability	4 "

### DRIVE CAPACITY

Motor rating main drive	18.5 kW
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### MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	6 m x 5.6 m x 3.6 m
Weight	18500 kg



## PRODUCT DETAILS

- The large, heavily ribbed box-column base is made of premium cast-iron to ensure stability and rigidity even under very heavy machining loads
- The massive machine frame features wide guideways and is designed for table loads up to 5 tons
- The CNC work table indexing in 1° steps allows flexible 4-sided complete machining of the workpiece without retooling
- The powerful motor ensures constant torque across the entire infinitely variable speed range
- The Siemens 828D CNC-ensures high productivity and precision during production
- Excellent functional interaction between hardware and software ensures high dynamics, while motors and drive technologies provide the necessary precision
- Telescoping stainless steel covers protect the guides from chips and dirt
- Precision preloaded ball screws in all axes ensure high accuracy with low wear and maintenance
- Easy maintenance due to standard central lubrication system
- Optionally, the machine can also be equipped with additional 400mm travel in the Y-axis and a tool changer

## CONTROLS & SOFTWARE

### Siemens 828D control

## **SINUMERIK 828 D – The workhorse in the compact class of CNCs**

### **Highlights**

- Compact, robust, maintenance-free control panel-based CNC
- Comfortable program and parameter input via QWERTY keyboard
- Maximum machining precision
- Intelligent kinematic transformations for machining of cylindrical parts, and for angled workpiece levels
- SINUMERIK MDynamics with the new Advanced Surface feature: for perfect part surfaces and shortest machining times in mold making applications
- ProgramGUIDE: fastest machining time and maximum flexibility for large series productions
- Unique spectrum of technology cycles - from milling contours with residual material recognition to process measurements
- Animated Elements: unique operation and programming assistance with animated sequences
- Modern data transfer options via USB stick, CF card and network (Ethernet)

### **CNC hardware**

- Control-panel based high-performance CNC Control
- Robust front control panel made of magnesium die-casting
- Integrated full-size QWERTY keyboard
- Maintenance-free design (no buffer battery required)

### **CNC performance data and functions**

- Dynamic feed-forward control
- Linear, circular and helical interpolation
- Tapping without compensating chuck, plus thread cutting
- Toggle between inch and metric units
- FRAME concept for individual coordinate transformations, rotations, scaling and mirroring
- 100 adjustable zero offsets
- Synchronous actions and quick help function output

### **CNC technology cycles**

- Large selection of drilling cycles
- Large selection of milling cycles for standard geometry
- Large selection of position patterns for drilling and milling operations
- High-speed settings for mold making applications
- Geometry calculator for free contour input
- Machining cycle for contour pockets / contour spigots with isolated contours

### **Graphic features**

- Graphical online help system, similar to PC system
- Graphical CNC simulation with level display

### **CNC tool management**

- Display of tool and magazine data on one screen
- Tool management with plain-text tool names
- Loading/unloading feature for easy magazine assignment
- Tool management with tool life monitoring
- 10.4" TFT color monitor

## **STANDARD EQUIPMENT**

Siemens 828D control  
Electronic hand-wheel  
1° indexing CNC work table  
RS-232 interface  
Work lamp  
Central lubrication  
Coolant system  
Operator manual  
Machine guard screen system

## OPTIONAL EQUIPMENT

- Arm type ATC, 24 Tools, SKU : 253427
- Increase Y-axis travel with extra 400 mm BO T 130 (L) CNC, SKU : 253431