

## MASTEEL CNC HYDRAULIC BRAKES

 [Printable Version \(PDF\)](#)

**MBHSA-16440**

List Price:

Max. Capacity Tons	440
Max. Bending Length	16'
Distance between Frames	170"
Height of Bed	36"
Bed Below Floor	30"
Depth of Throat	15 – ¾"
Length of Ram Stroke	10"
Fast Approach Speed IPM	190
Press Speed IPM	17
Fast Return Speed IPM	188
Max. Open Height	20-1/2"
Main Motor	40
Back gauge Travel	28"
Weight Lbs	69,000
Dimensions L x W x H	200x 72x130



### STANDARD CONTROL FEATURES:

- ▣ **Standard SIEMENS TP-700 control with 6" Touch Screen display**
- ▣ **SIEMENS Two Axis CNC controls on back gauge and ram bending position**
  - Bosch-Rexroth Closed-loop proportional Hydraulic position control:
    - repeatability standard at  $\pm 0.0006$ ", optional at  $\pm 0.0004$ "
  - Backgauge position control:
    - Standard CNC backgauge: speed at 200 IPM as per Demo Video; repeatability at  $\pm 0.003$ "
    - Programmable backgauge retract feature
- ▣ **CNC bending angle control –Only** inputs of bending angle, material thickness & die opening
- ▣ **Two-way bending calibration controls** -allow inexperienced operator to achieve desired angles with no time consuming multiple test bends. Save on costly skilled labour and test bend material.
  - By correction of test-bending angle, control system automatically sets itself to achieve desired angle.
  - By correction of bending position calculated automatically by control system.
- ▣ **Dual ram position feedbacks with hydraulic Synchronized control compensates for uneven force on the bend**
- ▣ **Tool memory for quick recall of tool setup**
- ▣ **200 Job memory with average of 30 bends in each program**
- ▣ **Programmable pressure control**
- ▣ **Programmable ram delay control at bending position under adjustable pressure for bump bending or special heavy bending application**
- ▣ **Maintenance plan auto-prompts service schedule**

- ▣ Operating hour meter
- ▣ Operating prompts and Trouble shooting messages
- ▣ Inch / MM conversion

### **OPERATING FUNCTION:**

- ▣ **Ram speed control:**
  - Rapid approach and return speeds insure more efficient production.
  - Slow bending speed for better control of bending accuracy
- ▣ **Ram stroke control:**
  - Programmable ram top stop limit for more efficient production
  - Programmable slow working speed position and second stop position
- ▣ **Four Operating Modes:**
  - Jog mode: inching control of ram for tool setup
  - Single mode: one full bend cycle per control input.
  - Double stop mode: excellent for sight bend operations.
  - Follow bend mode: easy to follow bending and ram return on large sheet or with crane handling

### **QUALITY & VALUE STANDARD EQUIPMENT:**

- ▣ Two axis back gauge
  - One axis CNC control: X – axis
  - One axis manual adjustment: R – axis
  - Precision-made back gauge fingers
- ▣ Fully equipped with Masteel tooling and clamping system.
  - Floating-adjustable die clamping system for various die application
  - Hardened and precision ground tool steel gooseneck punch: 53-58RC; 100Ton/M(33Ton/Ft) capacity
  - Hardened and precision ground Masteel 10 openings, 4-way die: HB190-260.
- ▣ Masteel Crown Device for easy-adjusting tooling and machine wear intolerances
- ▣ Deeper throat depth with swing up clearance allows full length bend over bed up to 12"
- ▣ T- slotted bed for support arms or custom setups
- ▣ 2 - Front support arms

### **OPTIONAL EQUIPMENTS:**

- ▣ Delem control DA-56 or up model
- ▣ Offline program software
- ▣ Manuel WILA Anti-Deflection system,
- ▣ Optional multi axis control: R, Z1, Z2 up to 6 axis
- ▣ Motorized Wila Anti-Deflection System which operates automatically with DNC unit according to tonnage applied,
- ▣ Hydraulic CNC crowning bed for automatic anti-deflection according to the tonnage
- ▣ Safety light curtain
- ▣ Laser protection system for die area,
- ▣ Hydraulic top and bottom tool holding system,
- ▣ Quick- set front sheet support arm with linear bearing rollers,
- ▣ Hydraulic oil coolant,
- ▣ Automatic slide greasing system,
- ▣ Special throat depth (500,600 and 750 mm),
- ▣ Special top and bottom tools

