



## MASTEEL CNC HYDRAULIC BRAKES

**MBHSA-16600**

**List Price:**

<b>Max. Capacity Tons</b>	600
<b>Max. Bending Length</b>	16'
<b>Distance between Frames</b>	170"
<b>Height of Bed</b>	36"
<b>Bed Below Floor</b>	30"
<b>Depth of Throat</b>	15 – ¾"
<b>Length of Ram Stroke</b>	12"
<b>Fast Approach Speed IPM</b>	190
<b>Press Speed IPM</b>	17
<b>Fast Return Speed IPM</b>	188
<b>Max. Open Height</b>	24-7/8"
<b>Main Motor</b>	50
<b>Back gauge Travel</b>	28"
<b>Weight Lbs</b>	76,000
<b>Dimensions L x W x H</b>	200x 80x128



### 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 Siemens CNC control: X – axis
  - One axis manual adjustment: R – axis
  - Precision-made backgauge fingers can be easily & accurately positioned along gauge bar
- ☞ Compact SIEMENS control system provides hydraulic, electrical and CNC control in one for best reliable performance.
- ☞ Push button rapid and fine adjustments on backgauge and bending position.
- ☞ 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 with no cost
- ☞ Deep 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
- ☞ Standard SIEMENS two-axis CNC controller
- ☞ North-American made hydraulic & electrical system
- ☞ North-American standard hydraulic fittings and hoses

### OPTIONAL EQUIPMENTS:

- ☞ KV-2004 or Delem control DA-56 or up model
- ☞ Offline program software for KV-2004 or Delem control
- ☞ Servo CNC back gauge with ball screw and linear guide way
- ☞ Optional multi axis control: R, Z1, Z2 up to 6 axis
- ☞ Manual WILA Anti-Deflection system,
- ☞ 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,
- ▣ One-shot slide greasing system,
- ▣ Special throat depth (500,600 and 750 mm),
- ▣ Special top and bottom tools