



## MASTEEL CNC HYDRAULIC BRAKES

### MBHS-16190

List Price:

Max. Capacity Tons	190/175
Max. Bending Length	16'
Distance between Frames	170"
Height of Bed	36"
Bed Below Floor	—
Depth of Throat	12 – ¾"
Length of Ram Stroke	8"
Fast Approach Speed IPM	237
Press Speed IPM	25
Fast Return Speed IPM	245
Max. Open Height	14-1/6"
Main Motor	20
Back gauge Travel	28"
Weight Lbs	30,800
Dimensions L x W x H	200x 60x100



### STANDARD CONTROL FEATURES:

- ☑ Standard KV-2004 CNC control with 11" TFT Screen display
- ☑ 0.0004" high resolution linear scales provide precision dual ram position feedback.
- ☑ Bosch-Rexroth Closed-loop proportional Hydraulic position control: repeatability at  $\pm 0.0004"$  and parallelism at  $\pm 0.0004"$
- ☑ Y1, Y2 Programmable independently in angle or position. Ram tilt capacity at  $\pm 0.5"$
- ☑ Hydraulic Synchronized ram parallelism control compensates uneven force on the bend by means of hydra-electrical technique.
- ☑ Programmable ram delay control at bending position under adjustable pressure
- ☑ Servo CNC back gauge with precision ball screw and double linear guide way ensures high rigidity capability and high productivity speed.
- ☑ Back gauge position speed at 1000IPM, repeatability at  $\pm 0.002"$
- ☑ Automatic or programmable back gauge retract feature.
- ☑ Auto and programmable pressure control
- ☑ Programmable ram top stop and slow bending position
- ☑ Programmable bending speed
- ☑ Automatic conversion: Inch / mm
- ☑ Promcam punch clamping system with quick release for less than 320Ton.

## **KV-2004 CONTROL FEATURES:**

- ▣ Interactive 2D graphic editor for work piece, parts and tool data entries
- ▣ 2D graphic display of machine frame, work-piece and tooling
- ▣ 2D graphic identification of optimum bending sequences
- ▣ Automatic calculation of crowning tonnage
- ▣ Automatically calculate back gauge position
- ▣ Automatically calculate material thickness and offset back gauge position according to the bend
- ▣ Optimum bend sequence and Collision detection: Simulation and optimum bending sequence with back gauge position. The optimized bending sequence can be simulated in the graphic window prior to the actual production of a part and avoid costly damage or collisions.
- ▣ Up to 4 tooling stations in each program: Excellent feature for various bending applications requiring different tooling setup within a single job under one program, no need to change program or re-set tooling
- ▣ Machine set-up preparation for pre-drawing and testing new fixture
- ▣ Programmable Y1, Y2 by position and angle
- ▣ Unlimited tool memory
- ▣ Unlimited job memory
- ▣ Off-line programming system with similar user interface as CNC Control
- ▣ Off-line programming system 2D profile view and simulation
- ▣ Up /down load program and tooling data and machine parameters from USB port
- ▣ Print-out capabilities
- ▣ Keyboard interface adaptor
- ▣ Built in Ethernet communication port for up/down load from office (require optional communication software)
- ▣ Web enabled monitoring function for service, trouble shooting and data transfer (require optional communication software)

## **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