

SPECS SHEET



Description

The press brakes of the AHK-H series are among Knuth's bestsellers. This series meets all expectations in terms of stability, precision, and durability. Developed with the latest construction technology and built on the latest production lines, the AHK-H series is equipped with a graphic touchscreen control from DELEM. This offers powerful CNC programming and full control over the entire bending process. In combination with the various options for the back gauge, these press brakes can be adapted to a wide range of requirements.

Features

- **Machine Frame and Male Die**
 - The machine frame is made of a high-precision, stress-relieved steel weldment
 - The machine frame has been machined on a state-of-the-art 5-axis milling machine in one single setup to ensure more precise bending and maximum reliability
 - All components subject to tensile loads have been carefully constructed and designed with large radii to eliminate the risk of welding cracks
 - Male die and table have been optimized to reduce deformations to the lowest minimum possible
 - The male die has been designed for optimum vertical load absorption by the guides, piston bearings and seals
 - All components were treated in a modern paint and drying system and feature two coats of paint, each coat with a minimum thickness of 60 micron
- **Work Area**
 - A large throat, long stroke, and narrow table ensure plenty of free space to accommodate complex bending sequences
- **Crowning**
 - All machines include a manual crowning system inside the table; a motorized crowning version is available as an option
 - The crowning provides a uniform distribution of bending forces to ensure precise bending angles across the full workpiece length
- **Hydraulics**
 - Polished, hard chrome-plated pistons on both hydraulic cylinders feature superior 2 micron surface grades, ensuring a long seal life.
 - Cylinder bodies are forged from solid SAE 1040 material
 - Perfectly matched hydraulic components and measuring systems ensure exact synchronization of work cylinders
- **Back Gauge**
 - The back gauge of a press brake is the most important factor for machining precision
 - The entire back gauge system is very robust and perfectly suited for rough production environments
 - Linear guides and large preloaded ball screws are mounted in a protective enclosure to ensure smooth operation even under the most difficult environmental conditions
 - Exact adjustment of back gauge finger height
 - Positioning of back gauge fingers on dual, smooth-running linear guides
- **Front Support Arms**
 - Rigid linear guide and ball bearings for boom ensure maximum stability and easy positioning
 - Each support arm can be adjusted in height, is easy to handle and extremely sturdy

- **Bending Tools**
 - Promecam (European) tool mounts accommodate an extensive selection of bending tools
 - All tools are hardened and ground, and allow precise setup
 - Manual quick-action clamping system for tool mount shortens tool changing times
- **Safety and Productivity**
 - Safety concept based on the latest CE standards
 - The manual AKAS Laser Safety System is known for excellent reliability and functionality without the limitations that are typical for light curtains

Standard Equipment

- Delem 53 T 2D control
- X-axis back gauge with servo motor
- Manual lower table crowning
- Quick-action clamping of male die
- Manual akas laser safety LC II M FMSC safety system
- Light barrier
- 2 front support arms
- Foot pedal with E-stop button
- Operator instructions
- European type male die H = 3 inch
- European type female die 4V H: 2 x 2 inch
- 2 height-adjustable back-gauge fingers
- European tool mount

Delem 53 T 2D Control

- Touch Screen
 - The DA-53T Touch CNC is a modern, versatile solution for a wide range of press brake applications, featuring a compact design without compromising functionality.
 - The new compact DA-53T is a highly advanced complete touchscreen control solution for synchronized press brakes.
 - The 10.1" Multi-Touch Color TFT screen features high resolution and provides access to the proven Delem user interface.
 - The touchscreen allows direct navigation between product programming and the current production via hot-keys. Functions and options are located conveniently where they are needed.
 - This ensures optimum ergonomics throughout its operation.

- Machine settings and test bends are reduced to a minimum thanks to a fast and simple program-to-production sequence.
- A USB port is provided for quick product and tool backups via USB memory sticks.
- Standard machine control functions include Y1-Y2, X, R-axis, and crowning.
- The second back gauge axis also can be set as Z axis.
- DA-53T Function:
 - • “Hotkey”-Touch-Navigation • TandemLink (Option) • USB Memory Stick • Profile-53TL Offline-Software
- Standard:
 - – Bright LCD Color Display - 10.1" TFT screen - LED backlight - 1024 x 600 pixel - Industrial grade touchscreen monitor - Storage capacity 1 GB - Data back-up and restoring via USB - USB Flash memory stick - Integrated valve amplifier - Shut-down memory -
- Specifications
 - General - Industrial grade Multi-Touch monitor - Instant shut-down Electric / Interface - Power supply: 24V - Opto isolated digital I/O - Integrated valve amplifier Y1,Y2,P - Encoder inputs (single/diff. 5V/12V) - RS232 for Safety PLC - USB input Control

Specifications

- Working Area
 - Throat: 16"
 - Pressure force: 66 t
 - Stroke: 10.4"
 - Brake length: 59"
 - Distance between columns: 51"
 - Clear opening: 19.09"
 - Table width: 4"
- Travels
 - Travel in X-axis: 20"
- Feed
 - Bending speed: 0.35"/s
 - Rapid feed: 6"/s
 - Return speed: 4.33"/s
- Drive Capacity
 - Motor rating main drive: 10.1 Hp
- Measures and Weights
 - Overall dimensions (length x width x height): 95" x 69" x 101"
 - Weight: 9,460 lbs.
 - Hydraulic tank volume: 26.4 gal