

Model HDH-100 10 Foot Heavy Duty Two-Roll Bending Machine



Rugged design and the latest technology
low skilled operator to produce the highest
rolled precision tubes.

enables
quality

- Easy set up
- Digital pressure control
- Highly repeatable round tubes
- Heavy duty design
- Front and rear safety triggers
- 100% hydraulically controlled
- Quick change mandrels
- 24 hour operation
- Automation options
- Virtually no flats



WELDLOGIC, INC.

HDH-100 10 Foot Heavy Duty CNC Four Roll Hydraulic Plate Forming System



FEATURES OF CNC CONTROL SYSTEM

HARDWARE

The CNC control system consists of a SIEMENS S7-200 PLC for the machine control and a SIEMENS OP-27 operator interface. The S7-200 PLC features 3 axis closed loop control. The three axes controlled by the PLC are material feed, front and rear forming roll positioning. The three axes are closed-loop hydraulic. A DC hydraulic directional control valve is used on each axis. The position of each axis is sent back to the PLC by optical encoders to ensure accurate positioning. In addition to the three axes the PLC also features digital input and output for controlling the hydraulic drop-arm and the manual mode control functions.

PROGRAMMING SOFTWARE

Programming the machine is performed by way of the SIEMENS OP-27 operator interface. The OP-27 features recipe based programs. The programs are generated by sequentially entering position data for front and rear form rolls based upon material feed distance. Up to 100 programs can be stored and edited. Compensation factors can also be entered for various material, yield, strength and thickness.

OPTIONS

- Remote Control Variable Speed Control System
- Cone Rolling Attachment
- Digital Roll Position Indicators
- Induction Hardened and Ground Rolls HRC 50-54
- Rolls Can be Machined For Special Sectional Forming
- Rear and Top Part Supports
- Material in Feed Table
- Rolled Material Ejection Gantry
- Automatic Feeder/Ejector

WELDLOGIC, INC.

Automated Two Roll Bending Machine



HDH Models (Heavy Duty Hydraulic)

Our HDH models are designed for continuous production of both thin and thick gauge tubular assemblies.

This model is selected for manual feed and expands to offer automatic roll and automatic tube ejection.

The HDH models include a remote operator console, digital pressure control, safety guarded sequencing foot pedal, front and rear safety triggers.

This model can be customized with a CNC to form a variety of shaped tubes.

HDA Models (Heavy Duty Automatic)

Our HDA model two-roll urethane rollers are designed specifically for labor cost reduction and automation.

PLC Control sequences the vacuum lift material feeder to place the unformed sheet on the squaring table. The sheet is squared and fed into the roller. On completion of the roll, the support pivot is lifted and the conveyor lifts and ejects the rolled tube.

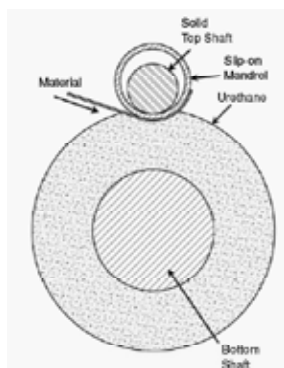
The One-Pass Two-Roll Advantage

- Roll parts with virtually no flats on leading/trailing ends
- Higher quality roll enables faster, more consistent seam welding
- Produces a higher quality product
- Roll perforated and specialty alloys without deformation
- Eliminates post roll material damage and scratches
- Easy set-up and short training requirements

How It Works

Under programmable hydraulic control the top steel roll acts as a rotary press penetrating into the bottom urethane roll.

The hydraulically driven urethane roll provides a constant pressure and rotation speed, wrapping the sheet around the top roll. The rotation of the rolls produce accurately formed cylinders in a single pass.



Automated Two Roll Bending Machine

Quality Cylinders Made In One Pass



Weldlogic's full range of two-roll bending machines are designed and built for a production environment that requires high precision, productivity and reliability.

WELDLOGIC, Inc.

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