

Weldlogic 4-roll C.N.C. with Specialized Top Roll Beam Support



WORKING PRINCIPLE

Our heavy duty four roll machine is a symmetrical roll design. The material is entered into the pinch point between the top and lower pinch roll. The entry side form roll is then placed into position for pre-forming the leading edge of the part. The part is then fed into the machine forming the leading edge. After the leading edge is formed the entry side form roll is lowered and the exit side form roll is placed into position to finish forming the part. The total process is one entry one pass forming.



STANDARD FEATURES INCLUDE:

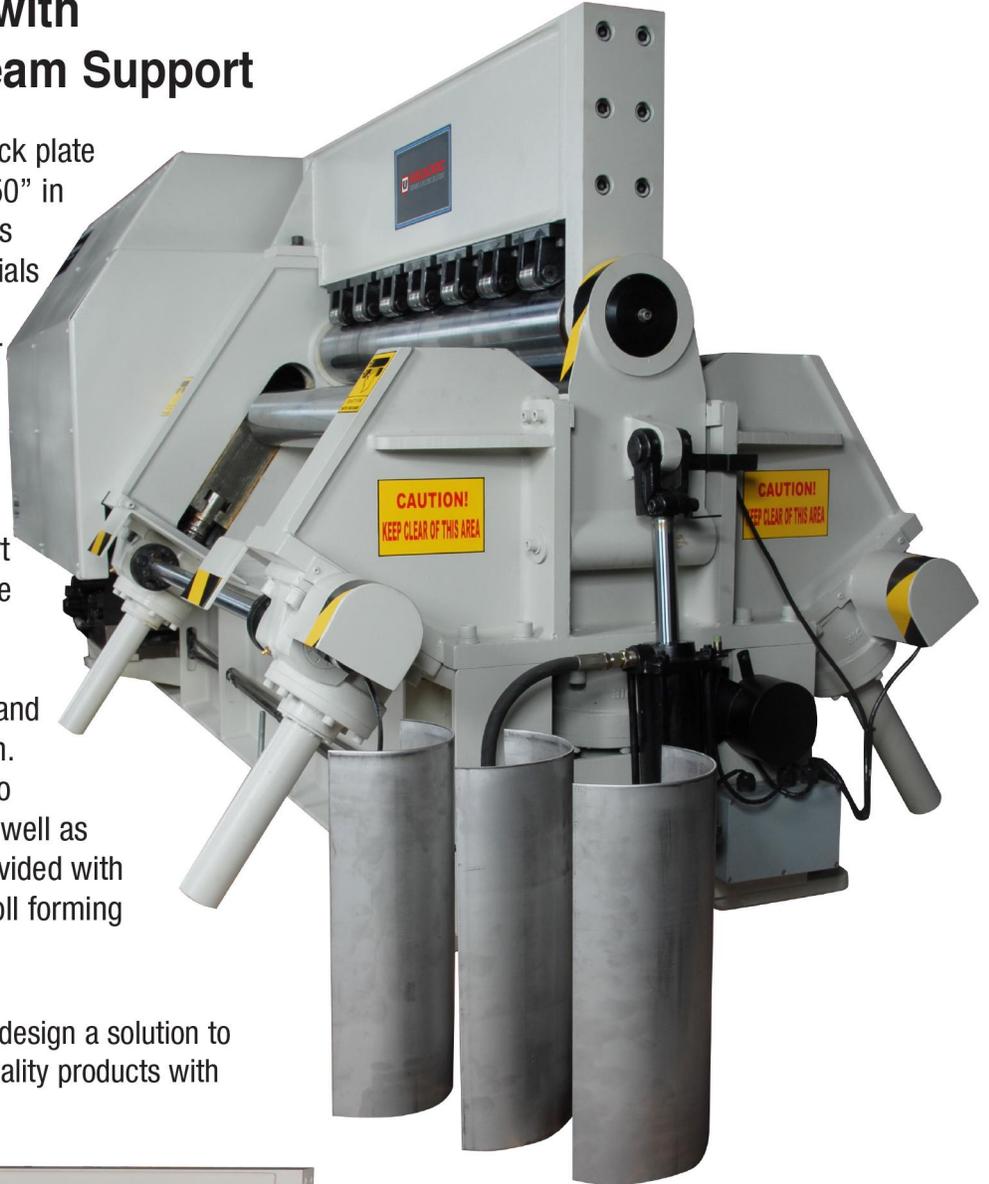
- Top And Bottom Rolls Driven by Hydraulic Motor / Planetary Transmission
- Hydraulic Roll Positioning System (optional Siemens PLC) on Form Rolls
- Hydraulic Drop End
- Remote Control Pedestal
- Variable Speed Adjustment of Form Rolls
- Spherical Roller Bearings On All Rolls
- Electrical Disconnect
- Welded Steel Construction
- 1040/1045 Solid Steel Rolls
- Safety Cut-off Switch
- Enclosed Drive
- Form Roll Position Indicators
- Pinch Force Overload Protection



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Application requirements to form 3/8" thick plate into a 3.5" radius over a length of up to 50" in both S.S. and Carbon Steel. To enable this forming requirement on such thick materials a small diameter top roll of no more than 4.75" was required. The top roll diameter of 4.75" would deflect over such a long length 50" and required Engineering to design a top roll support beam to eliminate any deflection. With hardened surfaces and a heavy duty top roll support beam and cam bearings it is now possible to form such a small diameter on a thick wall plate over the length of 50". This application had many sizes, thicknesses and lengths to consider in the machine design. We also make this top beam removable to enable the manufacture to roll rounds as well as 1/2 rounds. A second top roll was also provided with quick change ability to allow maximum roll forming flexibility for the future.

Weldlogic engineers are always looking to design a solution to enable a manufacture to produce better quality products with higher efficiency and lower capital costs.



3/8" thick SS plate bent to a 3.5" radius

Contact us to discuss your specialty forming needs.