

3 AXIS CNC PIPE BENDING MACHINE



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3 Axis CNC Pipe Bending Machine means that we have 3 Axis to perform one is bending and another one will be linear positional axis which is operated by electric servo motor & Third Axis will perform to rotate the pipe.

Linear positional Axis will give the accurate positional displacement between two bends. Rotational Axis will give the Accurate Degree of rotation of the pipe.





Our high efficiency 3D CNC automatic hydraulic pipe bending machine with a factory direct price sale using industrial touch screen, with the simple operation interface in English; high precision, high degree of automation and multi-function; each action of machine is controlled by PLC programmer control system.

MAIN FEATURES

- Colour LCD Touch Screen Provided for Data Entry and Editing
- Equipped with servo motor programmable axis, 2 axis 3 axis.
- Feeding: servomotor drive; rotation: servomotor drive
- Bending: hydraulic Cylinder and Bending Degree is encoder controlled.
- Highly Precise and Durable Hydraulic system and PLC unit.
- Multiple groups' pipe-bending information storage.
- Electric cabinet cooling fan and the hydraulic cooling system ensure the equipment long time work stably under the high temperature.
- Touch screen control provide user friendly operations with the safety precautions.
- Push, turn axes powered by AC servo motors
- Data entry values are in terms of the Bending Angle, Bending Distance & Rotation Angle.
- Programmable position control for bend and position-speed control for push and turn.
- Independent pressure Die assist (friction boost).
- Anticipated Mandrel Withdrawal system provided. So that your cycle time get reduce when bending doesn't need the mandrel for the bend.
- Automatic Oil Lubrication System is provided so that sliding parts get lubricated periodically and get more life of the slides.
- Oil Cooling Heat Exchanger is Provided with Machine.

Machine Photos



Supplied At Silvassa, Dadra Nagar Haveli



Supplied At Palsana, Surat, Gujarat



Supplied At Chhapi, Palanpur, Gujarat



Supplied At Muzaffarpur, Bihar







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Sr. No.	Detail	Specification	Specification	Specification
01	Machine Model	BENDTECH-1.5CNC	BENDTECH-2CNC	BENDTECH-3CNC
02	Pipe Size Max	38 mm	50 mm	75 mm
03	Pipe Size Min	10 mm	12.5 mm	12.5 mm
04	Pipe Wall Thickness	1.2mm to 2 mm	1.2mm to 3 mm	1.2mm to 3 mm
05	Bending Direction	Clockwise	Clockwise	Clockwise
06	Max. Bending Radius	3.5D	3.5D	3.5D
07	Mini Bending Radius	2D	2D	2D
08	Max Bending Angle	180 Degree	180 Degree	180 Degree
09	Bending Accuracy	±1.5%	±1.5%	±1.5%
10	Bending Speed	180/14 sec	180/14 sec	180/14 sec
11	Mandril Length	2800 mm	2800 mm	2800 mm
12	Max Hydraulic Pressure	150 bar	150 bar	150 bar
13	Operating Voltage	415v, 50Hz,3ph	415v, 50Hz,3ph	415v, 50Hz,3ph
14	Motor Power	5 Hp	7.5 Hp	10 Hp
15	Hydraulic Valves	Make: Yuken	Make: Yuken	Make: Yuken
16	Motor Make	Crompton Greaves	Crompton Greaves	Crompton Greaves
17	Pipe Clamping & Dis-clamping system	Hydraulic	Hydraulic	Hydraulic
18	Pressure Die Booster	Operated Hydraulically	Operated Hydraulically	Operated Hydraulically
19	Oil Cooling System	By Water Cooler	By Water Cooler	By Water Cooler
20	Automatic Oil Lubrication System	Yes	Yes	Yes
21	Electronic Parts	Schneider	Schneider	Schneider
22	Control Panel with PLC	Schneider	Schneider	Schneider
23	Linear Guide ways	HIWIN / PMI	HIWIN / PMI	HIWIN / PMI
24	Can Add 10 angle in Single Program			
25	Ball Screw For Pipe Reciprocating System			
26	Operating Manual			
27	Reciprocating Servo (Make: Schneider, Panasonic, Delta)	1 KW	1.5 KW	2 KW
28	Rotating Servo (Make: Scheider, Panasonic, Delta)	0.75 KW	1 KW	1.5 KW
29	HMI Screen Size	7"	10"	10"
30	One Die Set Provided with Machine	BendTech	BendTech	BendTech

MACHINE QUALITY

- 1) Heavy Fabricated Structure Body of Heavy Square or rectangular M.S Pipes.
- 2) All the Supports and joints are welded properly with our Experts.
- 3) All the Shafts, Gears, Rack are made from EN8 Material which improves your Machine Life.
- 4) The housings are fabricated from M.S. plates, following the Standard welding practice and machined accurately to house the bearings, which are the main journals for the rolls.
- 5) All the Other M.S Parts are undergone Blackening Process so that it will be prevent from rusting.
- 6) All the Equipment are perfectly fitted with the Allen key Bolts.

ELECTRIC CONTROLPANEL & MOVABLE REMOTE TO OPERATE THE MACHINE With Safety Systems:

The machined is supplied with sophisticated electric control panel, having control of all the motors forwards as well as reverse direction. A control panel consists of following features:

Emergency Stop Switch is fitted on Remote Box to avoid any Accident.

- MCB are provided to protect machine against short-circuit and over-loading.
- Proper colour coding for wires.
- Cooling Fan to reduce temperature in control panel
- Phase Preventer protection
- · Phase loss Indication
- Motor Overload Protection
- Servo Axis Safety Sensor
- Power MCB Protection
- Control MCB Protection
- Transformer for Higher Ratting Servo

HYDRAULIC POWER PACK

- · Complete hydraulic system with cylinders & power pack unit except hydraulic oil.
- Hydraulic oil tank with oil level indicator and filter
- The valves will be mounted on a well-designed and pressure tested manifold block.

 Alternately they may be threaded and sealed with suitable sill.
- Any conduit or hydraulic line in front of the press will be avoided.
- The oil level indicator on the power pack will be on the front side. The material that goes into the construction will be of good tested quality i.e. M.S prime material and of sufficient thickness.

HYDRAULIC CYLINDER

- Total 6 Hydraulic Cylinder are there in Machine.
- Cylinder Bodies are made from forged Steel Material Duly Bored and Fine Honed or Long Sealing Life. The Piston Rod will be Made From E.N.8 material with hard chrome plated & ground finished.

LINEAR MOTION GUIDEWAY

- We are Providing LM Guideway of Standard Companies Like HIWIN, PMI...etc.
 These LM Guideways are made from German/Taiwan Steels with undergone specialize
 Heating Procedure to ensure more depth of case hardness.
- So, this linear guideway can achieve a long life with high speed, high accuracy and smooth linear motion.



- +91 82000 11242
- info@bendtechengineers.com
- 23, RadheShyam Estate, Near Odhav Ring Road Circle, Odhav, Ahmedabad, Gujarat.