## CNC (Full Auto-3 Axis) Tube Bender: PLC-Base Control

We offer fully automatic pipe bender CNC-controlled machining of pipes with a diameter from 4mm to 100mm. These models 1,2,3 axis (hybrid models with electrical control in conjunction with the plumbing) and all-electric models in the 1-3 axis...

## Standard machine design features on CNC benders include:

- Air conditioned electrical enclosure to maintain temperature and prolong system components
- Electrical power filtering to stabilize incoming power supplies for an efficient consistent operation
- Control electrical cabinet isolation to minimize vibration transfer to electronics
- Oil filtering system with condition indicator to protect oil supply
- Radiator type oil cooler standard on most models, available on others to maintain oil temperature
- Vibration control machine mounting pads to reduce machine movement during operation
- Spacious well labeled / layout of electrical system for ease of maintenance and efficient operation
- Remote control console for placement in operational location based on application to reduce operator interface time to increase production
- Foot pedal cycle start operation for quick safe loading increasing production
- Safety mat and safety plates with multiple emergency stop placement for operational safety
- Integrated gearbox reducer with multi layer drive chain assembly for smooth controlled operational start / stop movement of bend arm extending the chain life many years beyond traditional hydraulic benders.
- Low profile bend head design uniquely offset from center of machine frame providing clearance for complicated parts that can not be obtained on other brands of equipment.
- Full capacity feed through collect for working with long material that requires additional length beyond the front collect stop system reducing the need for extended models in most applications.
- Low decibel level production noise to reduce operator fatigue and general improvement of shop conditions
- Low working heights for ease of operation increasing production and improved safety of material handling
- Multiple axis operation reducing cycle time and interference for optimum production

## **All Electric Tube Bender**

The line of CNC electric benders combines the energy savings and quite operation of electric servo control with advanced design features and software to provide the package customers are looking for. The software features the teaching mode programming operation with precise positioning of all movements. The range of the product line from 2" to 6" stainless steel makes these machines a favorite for the truck and automotive exhaust bending industry.

## **Specification**

Model No.		CNC101-	CNC90-	CNC80-	CNC70-	CNC50-	CNC38-
		3A	3A	3A	3A	3A	3A
		MS-AE	MS-AE	MS-AE	MS-AE	MS-AE	MS-AE
Axis		3 A	3 A	3 A	3 A	3 A	3 A
Max. Tube O.D. Bending Capacity (mm)		Ø100	Ø90	Ø80	Ø70	Ø50	Ø38
Max. Tube WaLL Thickness (mm)		4	3	3	3	2.5	2
Max.CLR (mm)		250	250	250	180	180	180
Max. Bending Angle (°)		180	180	180	180	180	180
Max. Mandrel Working Distance (mm) (Extra mandrel length as per customer requirement)		2000	2000	2000	2000	2000	2000
Processing Speed	Tube Feeding Speed (mm/sec)	653	1143	754	1143	839	1693
	Tube Rotation Speed (°/sec)	348	759	180	1371	390	780
	Tube Bending Speed (°/sec)	32.1	80	62.5	156.8	120	283
Repeatability	Tube Feeding Precision (mm)	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1
	Tube Rotation Precision (°)	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1
	Tube Bending Precision (°)	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1
Total Power (kw)		114.45	65	48.05	68.5	63.49	51.06
Operation Height (mm)		1289	1275	1170	1170	1145	1200
Machine Length (mm)		8094	6114	6807	5570	5269	4432
Machine Width (mm)		2132	1977	1804	1637	1676	1324
Machine Height (mm)		2071	1925	1900	1914	1914	1630