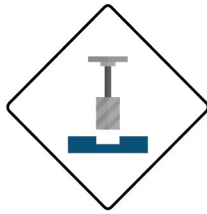


# CNC/NC Heavy Duty Pipe/Tube Bending Machine



(3 AXIS)

## ► Features of Pipe Bending Machine

- Produces wrinkle free, clean, repetitive bends.
- Interchangeable set of tooling for each type of bend.
- Operates at minimum working pressure for trouble free operation.
- Memory Capacity : 50Programes with 11 Bends Program.
- Mitsubishi Control OR SIMILAR with HMI are installed to input data precisely

- Die clamping with Toggle mechanism and Pressure die with direct acting hydraulic cylinder
- All slides guided on linear motion guideways
- Bend axis powered by hydraulic cylinder
- PLC system with touch screen HMI
- Increased push and bend speeds with optimized parallel axis motions for higher productivity
- Spring back compensation facility

MODEL NO.	PL32 (3 Axis)		PPL45 (3 Axis)		PPL65 (3 Axis)		PPL100 (3 Axis)	
Max. Tube Capacity (D X T)	32mm x 2 mm (Ferrous tubes UTS 45 Kg/mm <sup>2</sup> )		45mm x 3 mm (Ferrous tubes UTS 45 Kg/mm <sup>2</sup> )		65 mm x 5 mm (Ferrous tubes UTS 45 kg/mm <sup>2</sup> )		114 mm x 7 mm (Ferrous tubes UTS 45 Kg/mm <sup>2</sup> )	
Min. Tube Capacity (D)	6mm		12mm		20mm		20mm	
Max. Bend Radius (CLR)	120mm		150mm		350mm		350mm	
Min. Bend Radius (CLR)	20mm		25mm		30mm		30mm	
Min. Bend Radius (in terms of D)	1.5D		1.5D		1.5D		1.5D	
Length over mandrel	2 Metres		2 Metres		2 Metres		4 Metres	
Carriage travel	1.5 Metres		1.5 Metres		1.5 Metres		2.5 Metres	
Bend Angle Range	5 to 180 degrees		5 to 180 degrees		5 to 180 degrees		5 to 180 degrees	
Bending Direction	Clockwise		Clockwise		Clockwise		Clockwise	
Max. Bend Speed (accuracy)	30 degrees (± 0.2)		30 degrees (± 0.2)		30 degrees (± 0.2)		30 degrees (± 0.2)	
	Push & Turn - Electric AC Servo Bend - Hydraulically		Push & Turn - Electric AC Servo Bend - Hydraulically		Push & Turn - Electric AC Servo Bend - Hydraulically		Push & Turn - Electric AC Servo Bend - Hydraulically	
Axis (Programmable)	Max. Speed	Max. Speed	Max. Speed	Accuracy	Accuracy	Max. Speed	Accuracy	Accuracy
Push (DBB) - Y Axis	600 mm / sec	± 0.1 mm	600 mm / sec	± 0.1 mm	600 mm / sec	± 0.1 mm	400 mm / sec	± 0.1 mm
Turn (POB) - B Axis	200 deg / sec	± 0.1 deg	200 deg / sec	± 0.1 deg	200 deg / sec	± 0.1 deg	120 deg / sec	± 0.1 deg
Bend (DOB) - C Axis	90 deg / mm	± 0.2 deg	90 deg / mm	± 0.2 deg	90 deg / mm	± 0.2 deg	30 deg / mm	± 0.2 deg
PLC & Servo System	PLC, HMI & Servo Systems of Mitsubishi make		PLC, HMI & Servo Systems of Mitsubishi make		PLC, HMI & Servo Systems of Mitsubishi make		PLC, HMI & Servo Systems of Mitsubishi make	
Memory Capacity	12 bends per program, 50 programs		12 bends per program, 50 programs		12 bends per program, 50 programs		12 bends per program, 50 programs	
Connected Load	5 KW for Hydraulics & 2 KW for Servo Motor		5 KW for Hydraulics & 2 KW for Servo Motor		5 KW for Hydraulics & 2 KW for Servo Motor		5 KW for Hydraulics & 2 KW for Servo Motor	
	3 phase AC, 415 V, 50 Hz		3 phase AC, 415 V, 50 Hz		3 phase AC, 415 V, 50 Hz		3 phase AC, 415 V, 50 Hz	
Oil Tank Capacity	150 Litres (built in)		150 Litres (built in)		200 Litres (built in)		300 Litres (built in)	
Machine Lubrication	Manual Centralized Lubrication System		Manual Centralized Lubrication System		Manual Centralized Lubrication System		Manual Centralized Lubrication System	

D= Tube Outside Diameter | DOB = Degree of Bend | T= Wall Thickness | POB = Plane of Bend | CLR = Centre Line Radius | DBB = Distance between Bends