

Product Name:	Automatic Tube Bending Fixture Bender	
Features/Benefits:	400 Tube Capacity Automatic Load / Automatic Unload	
Product Description:	Machine automatically loads cut-to-length tubing. Individual tubes are loaded into the bend station. The part is bent in 2 locations. A robot is then used to grip the part, rotate it 180° and bend the opposite end in 2 locations. After the part is bent, the robot automatically unloads the finish work piece.	
Overall Part Dimensions:	5/8 diameter tube with 4 bends	
Operational Cycle Times:	Part to Part: 8 Seconds	
Bending Tolerances:	± 1.5mm	
Machine Controls:	Operator interface: Push button control - 9 devices PLC: Allen Bradley Pneumatic Valves: SMC MotoMan robot controller	
Engineering & Fabrication Processes Applied:	Primary: Engineering Fabrication CNC Milling Welding Grinding	Secondary: Priming Painting Assembly Hardening
Equipment Used to Manufacture Bending Fixture:	CNC Mill Manual Mills Manual Drills Manual Grinders Automatic Grinders Manual Lathe	Hand Tools Gage Pins Gage Blocks Height Gages Micrometers Dial Caliper
Material Used:	Machine Base Square Tubing 3" x 3" x 1/4 wall Hot Rolled Steel Base Plate Thickness: 5/8' Guarding Sheet Metal: 16 GA Outside Panels: 16 GA Expanded Metal framed with C-Channel	Sub-Assemblies 1018 Low Carbon Steel A2 steel D2 Tool steel S7 Tool steel
Material Finish:	Machine Base: Primed and Painted Guarding: Painted Black & Bright Safety Yellow	
Inspections / In Process testing:	Dimensional Inspection, Functionality Tests	
Standards Met:	Customer Specifications, CAD Drawing	
Industries for Use:	Automotive Industry Appliance Industry Agricultural Industry	Aerospace Industry Medical Industry
Delivery Location:	Ft. Recovery, OH	