Product Name: Tube Bending Fixture Machine

Product Description: Dedicated Pneumatic Bending Machine used to bend part complete without

additional operations.

Part Description: IHX Tubing assembly

IHX tube: 4 bends

5/8 diameter tube: 1 bend 8mm diameter tube: 2 bends

Overall machine Size: 56 x 99

Cycle Times: Tooling Operation (1st Stage): 14 Seconds

Tooling Operation (2nd Stage): 13 Seconds 1st and 2nd stage cycle concurrently

Operator Duties: 10 Seconds Part to Part: Every 24 Seconds

Bending Tolerances: ± 1.5mm

Machine Controls: Operator interface: Allen Bradley Programmable Interface

PLC: Allen Bradley

Pneumatic Valves: Parker Hannifin

Engineering & Fabrication

Process Applied: Primary: Secondary:

Engineering/Design Priming
Product Development Painting
Fabrication Assembly
CNC Milling Hardening

Welding Grinding

Equipment Used toCNC MillGage PinsManufacture Machine:Manual MillsGage Blocks

Manual Drills Height Gages
Manual Grinders Micrometers
Automatic Grinders Dial Caliper

Manual Lathe Hand Tools Inspection Tools

Material Used: Machine Base

Square Tubing Hot Rolled Steel Base Plate

3" x 3" x 1/4 wall Thickness: 5/8"

Tooling: made from a combination of material

Hot rolled steel A2 Tool steel
1018 steel S7 Tool steel

All tooling subject to wear is heat treated for longevity

Guarding

Sheet Metal: 16 GA

Outside Panels: 16 GA Expanded Metal framed with C-Channel

Material Finish: Machine Base: Primed and Painted

Guarding: Painted Black & Blue

linspections / In Process testing: Dimensional Inspection, Functionality Tests

Standards Met: Customer Specifications, CAD Drawing

Industry for Use: Automotive Industry Aerospace Industry

Appliance Industry Medical Industry
Agricultural Industry HVAC Industry

Delivery Location: Monterrey, Mexico