

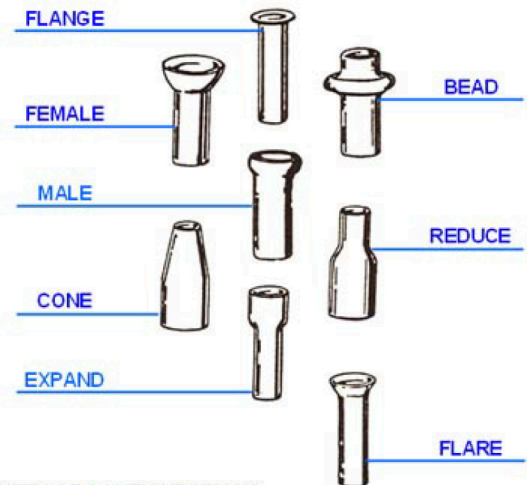
HIGH AND MEDIUM PRODUCTION TUBE/PIPE END FORMING

Two palm button semi-automatic form cycle, this economically priced unit is ideal for quality production of tubing that requires end finishing. This unit will reduce, expand, bead, flare or flange. Simply utilizing the proper tooling, many shapes take form. This rugged and powerful unit generates up to 30 tons of clamping and forming forces. It is completely self contained with quality hydraulics and electronics. An air supply is used to operate the tube stop assembly. This assembly in conjunction with the micro switches will insure precise form depth or height. The powerful hydraulic clamp assembly will insure that the tube being held for forming will not slip and the surface will be mar free. Two 24 volt palm buttons control all hydraulic movement. A programmable logic control system allows for manual or semi-automatic form cycle. A typical production run would be as follows: Tube stop assembly and micro switches are preset

1. Place tube into clamps and up against the tube stop.
2. Simultaneously depress the 2 palm buttons and hold until cycle is complete. (5-15 seconds, depending on shape, form and customer requirements)

Cycle:

1. Depress two palm buttons.
2. Clamp closes.
3. Tube stop retracts.
4. Cylinder advances and forms and makes micro switch and stops.
5. Cylinder retracts and makes micro switch.
6. Clamp opens.
7. Remove part. Tube stop arm will automatically re-position for another cycle.



VARIETY OF CONFIGURATIONS



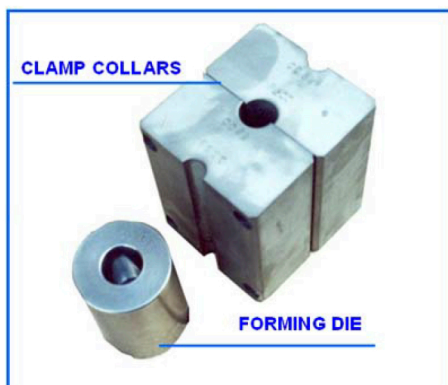
HIGH PRODUCTION HIGH QUALITY AT LOW COST

The model 3212-SA-2P is a completely self-contained end forming machine. It requires a supply of shop air to operate the tube stop system. The machine is normally shipped without hydraulic fluid. First add fluid, plug it in, hook up the air supply and you're ready to start production. The model 3212-SA-2P has the capacity to expand, reduce, flare, flange, dome and bead as well as other special applications with development.

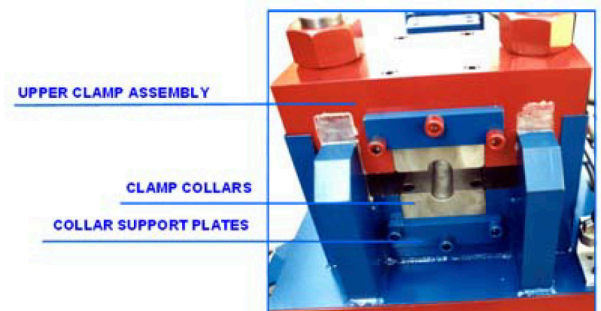
Note the ideal positioning of the critical components such as the adjustable tube stop assembly, the clamp collars, the forming tool and the adjustable 12 volt micro switches. All of these important features are conveniently located and can be moved, changed or adjusted with ease.

SPECIFICATIONS

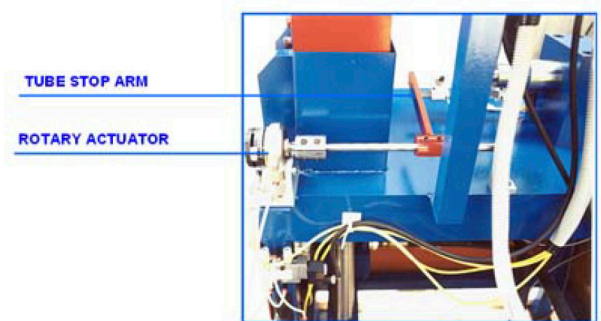
- 220-440 Volt, 3 Phase, 60 Cycle
- 10 H.P. Electric Motor
- 5 GPM Hydraulic Pump
- 3000 PSI Maximum Hydraulic Power
- Approximately 30 Tons of Work Force at PSI
- 100 PSI Shop Air
- 12 Volt Adjustable Micro Switches
- Approx. 30" Long x 40" Wide X 39" High
- Approx. Weight Without Oil - 2100 lbs.
- 2-5 Seconds Per Form Cycle (Depending on Stroke)
- 3-1/8" Maximum O.D. Diameter Tube
- 6" Maximum Forming Stroke
- Machines with 5" forming capacity are quoted on request
- Electrical panel may change due to the capabilities of the ordered unit



All tooling is manufactured from tool steel and heat treated to more than Rockwell RC-62. In some applications tooling is also nitrated for longer wear life. In most applications, clamp sets are capable of forming two diameters for greater versatility and economy.



The hydraulic clamp is raised and lowered on 2 shafts 2" in diameter. Larger diameter shafts are used for higher tonnages. Clamp dies are retained with socket head screws and reinforced with backup plates and 2" welded gussets for added strength.



The tube stop assembly is operated by a pneumatic rotary actuator. A proximity switch insures that the arm is retracted before the form cylinder can advance, eliminating potential damage.



TUBE END FORMING MACHINES

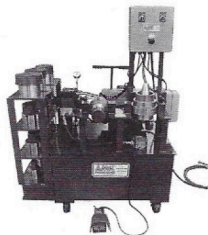
At AMH we produce a variety of tube end forming machines to serve a wide range of markets. Beside our standard products listed here, we design and build special units and tooling to produce products with specific requirements.

Model 8000 Series End Forming Machines

These unique units are ideal for end forming of tubes in a wide range of applications, such as Heat Exchangers, Boiler Tubes, Beading and Slip Connections.

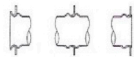
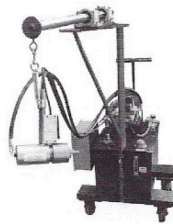
Model RCP-8545

Twin head expander ideal for production expansion



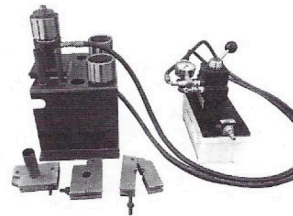
Model RCP-8500

For heat exchangers tube to tube sheet. 1/2 second form cycle



Model RCP-8110

Tube bead or expansion joint. Low Production



Model RCP-8500-HCA

Tube bead forming High production



Model 3000 Series End Forming Machines

These unique units are ideal for low or high production of end finishing joints, such as expanding, reducing, flaring, flanging, or beading. Hydraulic force with mar free clamp collars result in quality cosmetic products. Precise tube positioning and stroke control on the form cylinder result in 100% repeatability. Various models are available, such as multi stage forming by rotary or horizontal die positioning. More economical models are available with manual clamping of the tube and with manual extending and retracting of the form cylinder. Forming of the tube or pipe in diameters of 1/2" to 6" can be accomplished in single or multiform cycles. All units are designed with operator safety as priority.

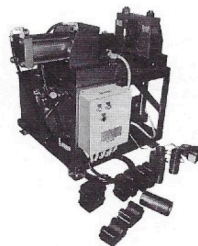
Model 3212 SA-25

Economical low production mar free product. 1"-2-1/2" diameter. Hands free form cycle



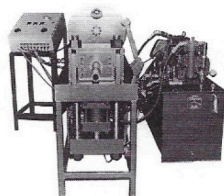
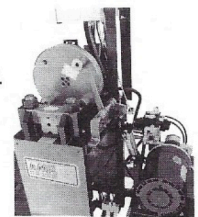
Model 3435-A

High production. Auto form cycle 5" diameter capacity

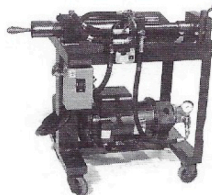


Model 3031-3T

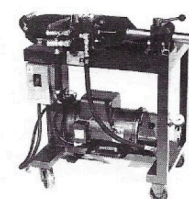
High production. Rotary tool position. Automatic form cycle



Model 3435-A
For reducing of boiler pipe. Medium production



Model 3012 MDE
Mechanical clamp double ended cylinder with segment expansion capacity. Manual operation



Model 3011 MSE
Mechanical clamp swager. Manual operation

