



TestMaster®

Model 300 Series

Hydrostatic Test Tools

- Pressures up to 5,000 psi (345 bar)
- 0.31 in. to 3.00 in. ID (7.9 mm to 76.2 mm ID)
- Collet grip and seal on tube ID
- Air-actuated collet pre-grip and release
- Pressure-compensated design

DESCRIPTION

The patented TestMaster® Model 300 Series Hydrostatic Test Tool offers inside gripping and sealing specially designed for high-pressure hydrostatic and leak testing of tubes swaged into sheets. The hydraulic sealing mechanism along with the safety spring pre-grip, assures a constant, positive grip during any work or operation cycle. The tool can be used with a variety of services including water, oil, or other liquids on request.

The Model 300 Series Tool is suitable for hydrostatic pressure testing up to 5,000 psi (345 bar). The compact, balanced design is particularly suited to restricted work areas with limited space.

The Model 300 Series Tool handles standard and metric tube, pipe, and fitting sizes from 0.31 in. to 3.00 in. (7.9 mm to 76.2 mm) in diameter. Special tube sizes and tool configurations will be considered upon request.

OPERATION

Connect the Model 300 Tool to the test system by attaching one air line to the release port, the other air line to the clamp port, and the hydraulic line to the pressure port. Using suitable valving for manual or automatic testing, apply air pressure of 50 to 90 psi (3.4 to 6.2 bar) to the release port which retracts the collet. Insert tool into tube until pressed against tube stop. Apply air to clamp side. Tool now has positive seal and a grip on the tube. Next apply pressure flow to run test, **but do not exceed maximum working pressure**. After test is completed the pressure will drop to 0, then apply air pressure to release port and remove the tool from the tube.

APPLICATION

The TestMaster® Model 300 Series Hydrostatic Test Tool is a used in a variety of HVAC production applications including, boiler tube assemblies, shell and tube heat exchangers, box-type heat exchangers, and other tube assemblies. The Model 300 tool is suitable for applications with working pressures up to 5,000 psi (345 bar). This tool conforms to military, nuclear, automotive, and aerospace testing specifications such as API, ASTM, ASME, ISO, DIN, and BS.

MATERIALS

Wetted Parts: Heat-treated, stainless steel

TOOL CONFIGURATION

| | |
|-----------------------|-------------------------------|
| Collet Grip and Seal: | On tube OD |
| Gripping: | Pressure-compensated |
| Air-Operated: | Air-pilot clamp and release |
| Air Requirements: | 50 to 90 psi (3.4 to 6.2 bar) |

OPERATING CONDITIONS

| | |
|-------------------|---|
| Maximum Pressure: | 5,000 psi (345 bar) |
| Temperature: | 32° F to 120° F (0° C to 49° C) |
| Services: | Water, oil, or other liquids on request |
| Tube ID Range: | 0.31 in. to 3.00 in. (7.9 mm to 76.2 mm) |
| ID Tolerance: | Standard tube tolerances |

MAXIMUM PRESSURE
5,000 psi
345 bar

TestMaster®
Model 300 Series
Hydrostatic Test Tools

FEATURES

- Full-flow, high pre fill rate
- Predetermined internal tube stops requires no measuring
- Low marking collet design
- Special collet design locking principle
- Lever collet release for fast tool removal
- Pressure-compensated design
- Built-in tube end tolerances require no square cut ends
- Compact, balance design
- Precision-machined from heat-treated stainless steel
- Designed for test applications
- Use with optional NuQuip® Automatic Air-Bleed Valve

BENEFITS

Decreases cycle time
Ensures proper tube depth engagement
Prevents tube end collapse and eliminates scrap
Accommodates shorter length tube or pipe
Increases production throughput
Contains all high-pressure loads for safe operation
Efficient operation saves time
Ease of use in limited space applications
Provides long, trouble-free service
Tools can be used with different test media
Eliminates operator attendance during fill cycle



AIRMO, INC. 9445 Evergreen Blvd. NW, Minneapolis, MN 55433-5840 USA

PHONE: 1(763) 786-0000 or 1(800) 394-0016 | **FAX:** 1(763) 786-4622 | **EMAIL:** airmo@airmo.com | **WEBSITE:** www.airmo.com