



# "Unparalleled Performance and Safety Under Pressure!"®

TestMaster®

# **Model 333 Series**

# **Hydrostatic Test Tools**

- Pressures up to 30,000 psi (2,068 bar)
- 0.13 in. to 2.00 in. OD (3.3 mm to 50.8 mm OD)
- Collet grip and retractable seal on tube OD
- Air-operated clamp and release
- Pressure-compensated design



#### **DESCRIPTION**

The TestMaster® Model 333 Series Hydrostatic Test Tool offers fast, snap-on coupling and positive sealing for high pressure hydrostatic testing applications or leak testing of tubes and assemblies. The hydraulic sealing mechanisms 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 air, water, oil, or other liquids on request.

The Model 333 Series Tool handles standard and metric tube, pipe, and fitting sizes from 0.13 in. to 2.00 in. OD (3.3 mm to 50.8 mm OD) in diameter. Special tube sizes and tool configurations will be considered upon request.

## **OPERATION**

To connect the tool to the test system, attach the airline to the release port and the fluid line to the pressure port. For manual or automatic testing, apply air pressure from 50 to 90 psi to the release port which retracts the collets. The tube may now be inserted into the tool until it is pressed against the internal tube stop. Release the air supply. This instantaneously provides a positive seal and grip on the tube. Apply test pressure to the desired level, *but do not exceed maximum operating pressure*. When the cycle is complete and pressure is reduced to 0 psi, apply air pressure to the release port to retract the collets and remove the tool from the tube.

#### **APPLICATION**

The TestMaster® Model 333 Series Hydrostatic Test Tool is a snap-on tool, suitable for hydrostatic pressure testing, air underwater leak testing, tube production testing, tube and system assembly testing requiring working pressures up to 30,000 psi (2,068 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: On tube OD

Gripping: Pressure-compensated design
Seal: Retractable seal on tube OD
Actuation: Air-operated clamp and release

Air Requirements: 50 - 90 psi (3.5 - 6.2 bar)

### **OPERATING CONDITIONS**

Maximum Pressure: 30,000 psi (2,068 bar)

Temperature: 32° F to 120° F (0° C to 49° C)

Services: Air, water, oil, or other liquids on request

Tube OD Range: 0.13 in. to 2.00 in.

(3.3 mm to 50.8 mm)

OD Tolerance: Standard tube tolerances

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## **FEATURES**

- Full-flow, high pre fill rate
- Air-actuated collet release
- Patented retractable seal design and segmented collets
- Built-in tube end tolerances require no square cut ends
- Pressure-compensated design
- Predetermined internal tube stops requires no measuring
- Low marking collet design
- Precision-machined from heat-treated stainless steel
- Use with optional NuQuip® Automatic Air-Bleed Valve

#### **BENEFITS**

Decreases cycle time

Fast tool removal increases production throughput

Quick connection to plain end or upset tube or pipe

Efficient operation saves time

Contains all high-pressure loads for safe operation

Ensures proper tube depth engagement

Prevents tube end collapse and eliminates scrap

Provides long, trouble-free service

Eliminates operator attendance during fill cycle

