



"UNPARALLELED PERFORMANCE AND SAFETY UNDER PRESSURE!"®

ExpanTek®

Model 37 Series

Tube Expansion Tools



- 0.31 in. to 1.13 in. OD (7.9 mm to 28.6 mm OD)
- Seals plain end tubing
- Collet grip and seal on tube OD
- Spring-actuated grip release



DESCRIPTION

The ExpanTek® Model 37 Series Expansion Tool offers fast, snap-on coupling and positive sealing for high-pressure expansion of tubes. When used with a high-pressure power source, this tool will quickly expand tubing for HVAC applications and tubular assemblies. The tool can be used with a variety of services, such as water, oil, and other liquids.

This precision-machined tool is made from heat-treated stainless steel to provide long, trouble-free service for high-pressure expansion applications. Its compact, balanced design is beneficial for applications with limited space area.

The Model 37 Series Tool expands standard and metric tube, and fitting sizes from 0.31 in. to 1.13 in. (7.9 mm to 28.6 mm) in diameter. Special tube sizes and tool configurations will be considered upon request.

OPERATION

Connect the Model 37 Tool to the pressure line using the optional NuQuip® Automatic Air-Bleed Valve attached on the cap side of the tool. Push the tube into the tool until pressed against the internal stop. The collets are activated for positive grip when the service line is pressurized to approximately 50 psi (3.4 bar). Continue to pressurize the tube until desired expansion is reached, *but do not exceed maximum operating pressure*. After the tube expands and the service line pressure drops to 0 psi/bar, the collets will automatically release for quick removal of the tool from the tube.

APPLICATION

The ExpanTek® Model 37 Series Tube Expansion Tool is a snapon tool suitable for high-pressure expansion of tubing with standard OD tolerances and maximum working pressure up to 20,000 psi (1,379 bar). This unique tool when used with a high-pressure system will rapidly expand tubing for refrigeration coils, boilers, tubular assemblies, and many other applications.

MATERIALS

Body and Collets: Heat-treated, stainless steel

TOOL CONFIGURATION

Collet Grip and Seal: On tube OD
Gripping: Normally-open

Spring-actuated grip release

OPERATING CONDITIONS

Maximum Pressure: 20,000 psi (1,379 bar)

Temperature: 32° F to 120° F (0° C to 49° C) Services: Water, oil, and other liquids

Tube OD Range: 0.31 in. to 1.13 in.

(7.9 mm to 28.6 mm)

OD Tolerance: Standard tube tolerances

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Model 37 Series Tool Specifications

| Tube OD Range* | | | | Overall | | Body | | Minimum | | Minimum | | Ctdd |
|----------------|------|------|------|---------|-------|----------|------|---------|------|---------|------|------------------|
| Inches | | MM | | Length | | Diameter | | Orifice | | Swallow | | Standard Port |
| Min. | Max. | Min. | Max. | Inches | MM | Inches | MM | Inches | MM | Inches | MM | |
| 0.31 | 0.38 | 7.9 | 9.5 | 3.89 | 98.8 | 1.00 | 25.4 | 0.20 | 5.2 | 0.82 | 20.7 | 3/8" MP |
| 0.38 | 0.41 | 9.6 | 10.4 | 3.89 | 98.8 | 1.13 | 28.6 | 0.20 | 5.2 | 0.72 | 18.2 | 3/8" MP |
| 0.41 | 0.50 | 10.4 | 12.7 | 5.17 | 131.4 | 1.25 | 31.8 | 0.31 | 7.9 | 0.75 | 19.1 | 9/16" MP |
| 0.50 | 0.63 | 12.7 | 16.0 | 5.05 | 128.2 | 1.44 | 36.6 | 0.31 | 7.9 | 0.81 | 20.5 | 9/16" MP |
| 0.63 | 0.75 | 16.0 | 19.1 | 5.60 | 142.2 | 1.75 | 44.5 | 0.31 | 7.9 | 0.81 | 20.5 | 9/16" MP |
| 0.75 | 0.88 | 19.1 | 22.2 | 5.96 | 151.5 | 2.00 | 50.8 | 0.44 | 11.1 | 0.90 | 22.9 | 3/4" MP |
| 0.88 | 1.00 | 22.3 | 25.4 | 5.44 | 138.1 | 2.13 | 54.0 | 0.44 | 11.1 | 0.90 | 22.9 | 3/4" MP |
| 1.00 | 1.13 | 25.4 | 28.6 | 5.76 | 146.2 | 2.38 | 60.3 | 0.44 | 11.1 | 0.90 | 22.9 | 3/4" MP |

^{*} Note: Tools are designed for a dedicated tube diameter and do not cover the entire diameter range noted at each size.

A single tube OD must be specified for the collet set.

Special Configurations Available Upon Request Automatic Air-Bleed Valve Recommended for Optimal Performance

FEATURES

- Seals plain end tubing
- Full-flow, high pre fill rate
- Predetermined internal tube stops requires no measuring
- Special collet design locking principle
- Automatic collet release
- 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 tube expansion applications
- Use with optional NuQuip® Automatic Air-Bleed Valve

BENEFITS

Positive sealing for high-pressure expansion

Decreases cycle time

Ensures proper tube depth engagement

Accommodates shorter length of tube

Fast tool removal after each operation

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 service media

Eliminates operator attendance during fill cycle

