Hydraulic Swaging Units



Multihead (MHSU)

- Swages Swagelok® tube fitting ferrules onto tubing prior to assembly
- Is available in two unit sizes, with a choice of interchangeable fractional or metric tooling for:
 1/2 to 1 in. and 12 to 25 mm tubing and tube adapters
 - 1 to 2 in. and 25 to 50 mm tubing and tube adapters
- Reduces makeup torque and installation time



Features

- Preswages Swagelok ferrules onto tubing
- Provides Swagelok tube fitting connections that are 100 % gaugeable upon initial installation. Use MHSU gap inspection gauges supplied with the unit.
- Is available in two unit sizes, with a choice of interchangeable fractional or metric tooling for:
 - 1/2 to 1 in. and 12 to 25 mm tubing and tube adapters 1 to 2 in. and 25 to 50 mm tubing and tube adapters
- Places no initial strain on nut or fitting body threads or on body seal surfaces
- Must be used to install 1 1/4, 1 1/2, and 2 in. and 28, 30, 32, 38, and 50 mm Swagelok tube fittings
- Is standard with a tube marking feature to indicate when tube is properly bottomed in the unit
- Is available with a support base
- Fits neatly in a rugged plastic carrying case
- Reduces assembly and installation time and operator error.

Technical Data

- Dimensions—MHSU case
 - Height—22 in. (55.9 cm)
 - Width—24 in. (61.0 cm)
 - Depth—8.75 in. (22.2 cm)

Weight

- Up to 1 in. (25 mm) MHSU in case with tooling kit and support base—40 lb (18.1 kg)
- 1 in. (25 mm) and over MHSU in case with tooling kit and support base—55 lb (24.9 kg)

Construction

High-strength stainless steel tooling for durability and corrosion resistance

Components

MHSU

- Multihead hydraulic swaging unit
- Hydraulic hose—2 ft (0.6 m) with all units except 1 in. (25 mm) and over unit without support base, which contains 6 ft (1.8 m) hose
- Retaining ring pliers
- Safety glasses
- Gap inspection gauges
- Chamfer block (Up to 1 in. [25 mm] sizes only)
- Operating instructions
- Carrying case

Tooling Kits

- Die head sets and MHSU gap inspection gauges for Swagelok tube fitting sizes:
 - Fractional, up to 1 in.—1/2, 5/8, 3/4, 7/8, and 1 in.
 - Fractional, 1 in. and over—1, 1 1/4, 1 1/2, and 2 in.
 - Metric, up to 25 mm —12, 14, 15, 16, 18, 20, 22, and 25 mm
 - Metric, 25 mm and over—25, 28, 30, 32, and 38 mm
 - 50 mm tooling available separately

Option

Support base



Ordering Information

Select an MHSU ordering number.

MHSU	Ordering Number	
MHSU Only (Tooling Required, Ordering Numbers Below)		
Up to 1 in. (25 mm) unit ¹	MS-MHSU-U-E	
1 in. (25 mm) and over unit	MS-MHSU-O-E	
MHSU with Tooling Kit		
Fractional, up to 1 in. ^①	MS-MHSU-U-E-FKIT-M	
Fractional, 1 in. and over	MS-MHSU-O-E-FKIT-M	
Metric, up to 25 mm	MS-MHSU-U-E-MKIT-M	
Metric, 25 to 38 mm ²	MS-MHSU-O-E-MKIT-M	

^{① For 5/8 and 3/4 in. SAF 2507[™] tubing, order the 1 in./25 mm} and over unit and SAF 2507 tooling. The MHSU cannot be used for SAF 2507 tubing 1/2 in. and under.

Tooling and MHSU Gap Inspection Gauges Up to 1 in. / 25 mm

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Size	Tooling Ordering Number	Gap Inspection Gauge Ordering Number		
Fractional				
1/2 in. ^①	MS-MHSUT-U-810-M	MS-MHSU-IG-810		
5/8 in. ^②	MS-MHSUT-U-1010-M	MS-MHSU-IG-1010		
3/4 in. ^②	MS-MHSUT-U-1210-M	MS-MHSU-IG-1210		
7/8 in.	MS-MHSUT-U-1410-M	MS-MHSU-IG-1410		
1 in.	MS-MHSUT-U-1610-M	MS-MHSU-IG-1610-1		
Fractional, SAF 2507				
5/8 in.	MS-MHSUT-O-2507-1010-M	MS-MHSU-IG-2507-1010		
3/4 in.	MS-MHSUT-O-2507-1210-M	MS-MHSU-IG-2507-1210		
Metric				
12 mm	MS-MHSUT-U-12M0-M	MS-MHSU-IG-810		
14 mm	MS-MHSUT-U-14M0-M	MS-MHSU-IG-1010		
15 mm	MS-MHSUT-U-15M0-M	MS-MHSU-IG-1010		
16 mm	MS-MHSUT-U-16M0-M	MS-MHSU-IG-1010		
18 mm	MS-MHSUT-U-18M0-M	MS-MHSU-IG-1210		
20 mm	MS-MHSUT-U-20M0-M	MS-MHSU-IG-1410		
22 mm	MS-MHSUT-U-22M0-M	MS-MHSU-IG-1410		
25 mm	MS-MHSUT-U-25M0-M	MS-MHSU-IG-1610-1		

① The MHSU cannot be used for SAF 2507 tubing 1/2 in. and under.

Accessories

Retaining Rings and Pliers

Unit Size	Ordering Number	
Retaining Ring		
Up to 1 in./25 mm	MS-MHSU-N5000-200-H	
1 in./25 mm and over	MS-MHSU-N5000-315-H	
Retaining Ring Pliers		
Up to 1 in./25 mm	MS-MHSU-0504	
1 in./25 mm and over	MS-MHSU-0700	

Operating Instructions

MHSU ordering numbers include English instructions. For other languages, replace E with a language designator.

Examples: MS-MHSU-U-C

MS-MHSU-U-**C**-FKIT-M

Support Base

Add -B to the ordering number. Examples: MS-MHSU-U-E-B

MS-MHSU-U-FKIT-M-B

Language	Designator
Chinese	С
French	F
German	G
Japanese	J
Spanish	S

1 in. / 25 mm and Over

Size	Tooling Ordering Number	Gap Inspection Gauge Ordering Number		
	Fractional			
1 in.	MS-MHSUT-O-1610-M	MS-MHSU-IG-1610-1		
1 1/4 in.	MS-MHSUT-O-2000-M	MS-MHSU-IG-2000-1		
1 1/2 in.	MS-MHSUT-O-2400-M	MS-MHSU-IG-2400-1		
2 in.	MS-MHSUT-O-3200-M	MS-MHSU-IG-3200-1		
	Metric			
25 mm	MS-MHSUT-O-25M0-M	MS-MHSU-IG-1610-1		
28 mm	MS-MHSUT-O-28M0-M	MS-MHSU-IG-28M0-1		
30 mm	MS-MHSUT-O-30M0-M	MS-MHSU-IG-30M0-1		
32 mm	MS-MHSUT-O-32M0-M	MS-MHSU-IG-32M0-1		
38 mm	MS-MHSUT-O-38M0-M	MS-MHSU-IG-38M0-1		
50 mm	MS-MHSUT-O-50M0-M	MS-MHSU-IG-50M0-1		

^{2 50} mm tooling available separately.

 $[\]ensuremath{\text{@}}$ For 5/8 and 3/4 in. SAF 2507 tubing, order the 1 in./25 mm and over unit and SAF 2507 tooling and gauges.

Safe Product Selection

When selecting a product, the total system design must be considered to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.

Caution: Do not mix or interchange parts with those of other manufacturers.