

# 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.

## 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

## 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



## Ordering Information

Select an MHSU ordering number.

MHSU	Ordering Number
<b>MHSU Only (Tooling Required, Ordering Numbers Below)</b>	
Up to 1 in. (25 mm) unit <sup>①</sup>	MS-MHSU-U-E
1 in. (25 mm) and over unit	MS-MHSU-O-E
<b>MHSU with Tooling Kit</b>	
Fractional, up to 1 in. <sup>①</sup>	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 <sup>②</sup>	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.

② 50 mm tooling available separately.

## Tooling and MHSU Gap Inspection Gauges

### Up to 1 in. / 25 mm

Size	Tooling Ordering Number	Gap Inspection Gauge Ordering Number
<b>Fractional</b>		
1/2 in. <sup>①</sup>	MS-MHSUT-U-810-M	MS-MHSU-IG-810
5/8 in. <sup>②</sup>	MS-MHSUT-U-1010-M	MS-MHSU-IG-1010
3/4 in. <sup>②</sup>	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
<b>Fractional, SAF 2507</b>		
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
<b>Metric</b>		
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.

② 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.

## Accessories

### Retaining Rings and Pliers

Unit Size	Ordering Number
<b>Retaining Ring</b>	
Up to 1 in./25 mm	MS-MHSU-N5000-200-H
1 in./25 mm and over	MS-MHSU-N5000-315-H
<b>Retaining Ring Pliers</b>	
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	C
French	F
German	G
Japanese	J
Spanish	S

### 1 in. / 25 mm and Over

Size	Tooling Ordering Number	Gap Inspection Gauge Ordering Number
<b>Fractional</b>		
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
<b>Metric</b>		
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

**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.**