

# Swaging Units



## Features

- Compact and rugged table-top unit for mobile and flexible use.
- Manual pressure adjustment with digital display.
- Short assembling times of only few seconds.
- Short set-up times when changing the tube diameter or the working method.
- No initial strain placed on nut or fitting body threads or on body seal surfaces.
- Beeping when pre-swaging is completed.
- Assembly and installation time and operator errors reduced.

## Operating Instructions

### 1. SETUP

- ① Install the die holder into the swaging unit.
- ② Install the appropriate size die head (same size as the fitting).
- ③ Assemble the ferrules (or sleeve) and nut into the die head.

### 2. OPERATION

- ① Turn on the power of the swaging unit.
- ② Set the pressure on the digital indicator (please refer to Pressure Setting table).
- ③ Insert the tube until it rests properly against the piston shoulder.
- ④ While holding the tubing end, press the start button of the swaging unit.
- ⑤ Beeping sound when the pre-swaging is completed.
- ⑥ Disassemble the nut and remove the pre-swaged tubing from the swaging unit.
- ⑦ Insert the pre-swaged tubing into the body of SUPERLOK Tube Fitting (or SUPERLOK DIN Tube Fitting) and tighten the nut until finger-tight.
- ⑧ Hold the fitting body stable and tighten the nut clockwise: one-second to three-fourth turn for SUPERLOK Tube Fitting (Double-ferrule type) and one-second turn for SUPERLOK DIN Tube Fitting (DIN2353 Bite-type)

## Ordering Information

### SWAGING UNIT

Example : **SMHS - AUE**  
**1**

#### 1. Type

□ AMU = Automation Multi-head Hydraulic Swaging Unit □ MU: Multi-head Hydraulic Swaging Unit □ DH: Die Head

#### 2. Size of Die Head

##### 2-1 Fitting Type

□ S = SUPERLOK Tube Fitting (Double Ferrule Compression type)  
□ D = SUPERLOK DIN Tube Fitting (DIN 2353 Bite-type)

##### 2-3 Series

SUPERLOK Tube Fitting (Double Ferrule Compression type)	Tube O.D	Inch	Metric
	Designator	(Blank)	M

## Pressure Setting

### SUPERLOK Tube Fitting

Inch Size				
Die Head Part Number	316 Seamless Tubing & Wall Thickness			Set Pressure (bar)
	TUBE O.D (Inch)	Min. (Inch)	Max. (Inch)	
DH-S8	1/2	0.049	0.083	70
DH-S12	3/4	0.065	0.109	100
DH-S16	1	0.083	0.12	130
DH-S20	1-1/4	0.083	0.156	160
DH-S24	1-1/2	0.095	0.188	190
DH-S32	2	0.109	0.188	230

Metric Size				
Die Head Part Number	316 Seamless Tubing & Wall Thickness			Set Pressure (bar)
	TUBE O.D (mm)	Min. (mm)	Max. (mm)	
DH-S12M	12	1.2	2.0	80
DH-S16M	16	1.5	2.2	90
DH-S20M	20	1.8	2.8	100
DH-S22M	22	1.8	2.8	120
DH-S25M	25	2.2	3.0	130
DH-S28M	28	2.5	3.5	140
DH-S30M	30	2.5	3.5	150
DH-S32M	32	2.8	4.0	160
DH-S38M	38	3.0	4.5	190

### SUPERLOK DIN Tube Fitting (Bite-type)

Light (L) series				
Die Head Part Number	316 Seamless Tubing & Wall Thickness			Set Pressure (bar)
	TUBE O.D (mm)	Min. (mm)	Max. (mm)	
DH-D18L	18	1.5	2.0	90
DH-D22L	22	1.5	2.0	150
DH-D28L	28	1.5	2.0	130
DH-D35L	35	2.0	3.0	200
DH-D42L	42	2.0	3.0	230

Heavy (S) series				
Die Head Part Number	316 Seamless Tubing & Wall Thickness			Set Pressure (bar)
	TUBE O.D (mm)	Min. (mm)	Max. (mm)	
DH-D16S	16	1.5	3.0	100
DH-D20S	20	2.0	3.0	150
DH-D25S	25	2.5	3.0	130
DH-D30S	30	2.5	4.0	220
DH-D38S	38	3.0	4.0	230

### SWAGING UNIT – DIE HEAD

Example : **SMHS - DH - S 12 M**  
**1 2-1 2-2 2-3**

#### 2-2 Tube O.D

Fractional Tube	O.D (Inch)	1/2	3/4	1	1-1/4	1-1/2	2						
	Designator	8	12	16	20	24	32						
Metric Tube	O.D (Inch)	12	16	18	20	22	25	28	30	32	35	38	42
	Designator	12	16	18	20	22	25	28	30	32	35	38	42

SUPERLOK DIN Tube Fitting (DIN2353 Bite-type)	Series	Light	Heavy
	Designator		L

※ For special sizes and configurations, please consult BMT (SUPERLOK) sales representative.