# FLANGE FACING

4 Models to Resurface Flanges and Bolt Patterns from 3/4" to 24" O.D.

### **Model BF**

Working range: 3/4" to 8" (19.1 mm to 203.2 mm) O.D.

#### **Model MSF**

Working range: 11/4" to 12" (31.8 mm to 304.8 mm) O.D.

#### **Model MTF**

Working range: 31/4" to 16" (82.6 to 406 mm) O.D.

#### **Model MFTF**

Working range: 41/4" to 24" (108.0 to 609.6 mm) O.D.

Single Person Setup And Operation

Field Conversion
Between Beveling
Machine And Flange
Facer Is Quick And Easy
Adjust Between A Wide
Range Of Face Surfaces
Internal Locking With
Standard Wedge Plates
Or Elbow Mandrel For
Maximum Accuracy

Mandrel Mounts In Short Radius Elbows — MSF In 1/2" (12.7 mm), MTF In 1" (25.4 mm), MFTF In 11/4" (31.8 mm) Minimum Depth

### Simple, Safe, Accurate Flange Facing

H&S Tool offers four models of reliable pipe machine tools with premium flange facing conversion accessories. Each is powered by reliable pneumatic or electric motors to accurately meet your job site or factory requirements.

The tools are portable, making them ideal for use in the field. Setup and operation is easily handled by a single worker.

Kits include everything necessary to convert your Model B, MS, MT or MFT beveling tool with illustrated instructions.

Standard wedge plates can be used for internal locking or precision elbow mandrels are available. Centering and squaring devices make accurate machining of gasket surfaces and/or bolt patterns simple and safe.

Rental or purchase, the rugged design and quality construction makes H&S the tool of choice for all types of tube and pipe machining, cutting and expanding tools plus flange facing.











## **Flange Facing Tools and Accessories**

	Model BF	Model MSF	Model MTF	Model MFTF			
Working Range* 3/4" I.D. to 8" O.D. (19.1 to 203.2 mm)		11/4" I.D. to 12" O.D. (31.8 to 304.8 mm)	31/4" I.D. to 16" O.D. (82.6 to 406.4 mm)	41/4" I.D. to 24" O.D. (108.0 to 609.6 mm)			
Surface Finish Approx. Finish/Pin	63 to 250 RMS 1 = 63 RMS, 2= 125RMS 4 = 250 RMS  63 to 500 RMS 1 = 63 RMS, 3 = 125 RMS, 6 = 500 RMS						
Tool Feed Rate	.005" (0.13 mm) per pin. Pins must be engaged at opposing positions for even resurfacing.						
Max. Tool Travel*	11/2" (38.1 mm)	2" (50.8 mm)	3" (76.2 mm)	3" (76.2 mm)			
Axial Feed Rate Per Full Turn Adjustments 1/4 turn 1/2 turn 3/4 turn	.062" (1.6 mm) .015" (0.38mm) .031" (0.79 mm) .046" (1.2 mm)	.062" (1.6 mm) .015" (0.38 mm) .031" (0.79 mm) .046" (1.2 mm)	.083" (2.1 mm) .021" (0.53 mm) .042" (1.1 mm) .063" (1.6 mm)	.083" (2.1 mm) .021" (0.53 mm) .042" (1.1 mm) .063" (1.6 mm)			
Internal Locking/ Locating	Collet Internal Locking	nal Precision elbow mandrels with "Z" axis adjustment.					
Alignment	Centering/squaring machined aluminum plate, spoked adapter and dial indicator attachment for use with elbow mandrels.						
Minimum Mounting Depth 3/4" (191. mm		1/2" (12.7 mm)	1" (25.4 mm)	11/4" (31.8 mm)			
Tooling	Single point replaceable carbide insert in steel tool holder, two machining points per insert.						
Weight Power Unit Mandrel	19 lbs. (8.6 kgs.) N/A	27 lbs. (12.2 kgs.) 4 lbs. (1.8 kgs.)	55 lbs. (24.9 kgs.) 10 lbs. (4.5 kgs.)	70 lbs. (31.8 kgs.) 13 lbs. (5.9 kgs.)			
Dimensions Mandrel Length Radial Clearance*	121/2" (317.5 mm) 4" (101.6 mm)*	14" (355.6 mm) 6" (152.4 mm)	15" (381.0 mm) 9" (228.6 mm)	18" (457.2 mm) 11" (279.4 mm)			
Motor, Pneumatic Air Volume Pressure Speed, Adjustable	.9 HP (0.66 kW) 38 CFM (1.1 M³/Min.) 90 psi (6.1 bar) 90 RPM, Max.	1-5/8 HP (1.2 kW) 38 CFM (1.1 M³/Min.) 90 psi (6.1 bar) 50 RPM, Max.	3 HP (2.2 kW) 65 CFM (1.9 M³/Min.) 90 psi (6.1 bar) 22 RPM, Max.	3 HP (2.2 kW) 65 CFM (1.9 M³/Min.) 90 psi (6.1 bar) 18 RPM, Max			

<sup>\*</sup>Model BF has a tight clearance option available. This option reduces the maximum working reach to 51/2" (139.7 mm). Tool travel is limited to 1" (25.4 mm). Radial clearance is reduced to 23/4" (69.9 mm).

### **Model MSF Elbow Mandrel**

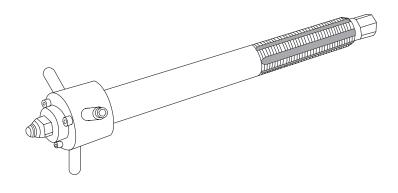
Size	Pin	I.D. Range		Size	Pin	I.D. R	ange
	Length	Inches	MM		Length	Inches	MM
Α	0.594	13/4 – 2	44.5 – 50.8	G	1.344	31/4 – 31/2	82.6 – 88.9
В	0.719	2 – 21/4	50.8 - 57.2	Н	1.469	31/2 – 33/4	88.9 – 95.3
Ċ	0.844	21/4 – 21/2	57.2 – 63.5	1	1.594	33/4 – 4	95.3 – 101.6
Ď	0.969	21/2 – 23/4	63.5 – 69.9	J	1.719	4 – 41/4	101.6 – 108.0
Ē	1.094	23/4 – 3	69.9 – 76.2	K	1.844	41/4 – 41/2	108.0 – 114.3
F	1.219	3 – 31/4	76.2 – 82.6				

## Model MTF Elbow Mandrel

Size Pin	I.D. I	Range	Size	Pin	I.D. I	Range
Leng	th Inches	MM		Length	Inches	MM
MT1 1.25 MT2 1.62	5 4 – 43/4	82.6 – 101.6 101.6 – 120.7	MT5 MT6	2.750 3.125	61/4 – 7 7 – 73/4	158.8 – 177.8 177.8 – 196.9
MT3 2.00		120.7 – 139.7 139 7 – 158 8	MT7	3.500	<b>7</b> 3/4 – <b>8</b> 1/2	196.9 – 215.9

### **Model MFTF Elbow Mandrel**

					Locator Pins For Extended Head			
Size	Pin	I.D. I	Range	Size	Pin	I.D. Range		
	Length	Inches	MM		Length	Inches	MM	
FT1	1.750	41/4 – 5	108.0 – 127.0	FT7	2.375	83/4 - 91/2	222.3 – 241.3	
FT2	2.125	5 - 53/4	127.0 - 146.1	FT8	2.750	91/2 - 101/4	241.3 – 260.4	
FT3	2.500	53/4 - 61/2	146.1 – 165.1	FT9	3.125	$10^{1/4} - 11$	260.4 - 279.4	
FT4	2.875	61/2 - 71/4	165.1 – 184.2	FT10	3.500	11 – 113/4	279.4 - 298.5	
FT5	3.250	71/4 - 8	184.2 – 203.2	FT11	3.875	<b>11</b> 3/4 - <b>12</b> 1/2	298.5 - 317.5	
FT6	3.625	8 - 83/4	203.2 - 222.3	FT12	4.250	121/2 - 131/4	317.5 – 336.6	
				FT13	4.625	131/4 – 14	336.6 - 355.6	
				FT14	5.000	<b>14</b> – <b>14</b> 3/4	355.6 - 374.7	
				FT15	5.375	<b>14</b> 3/4 - <b>15</b> 1/2	374.7 - 393.7	



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