

## Lever Benders



### Model 456 Tri-Bender

- Designed to easily bend three different sizes of soft copper tubing with the same tool. Ideal for plumbing and HVAC applications.
- A 90° start angle minimizes effort required to form a bend. Handy reference marks indicate the angle for quick bends through 90°.

Catalog No.	Model No.	Description	Capacity	Bend Radius	Weight	
			in.	in.	lb.	kg
44852	456	Tri-Bender	1/4, 5/16, 3/8	1.01, 0.98, 0.95	1 1/10	0.48

### 600 Series Heavy-Duty Instrument Benders

- The 'stainless steel' specialist!
- High quality bending performance on stainless steel, and other hard tubing such as steel and titanium.
- Two stage design allows for in-place bending from 90° to 180° without ever crossing handles. Lock/unlock with a half turn rotation of the bending handle.
- Extra long 16" (40 cm) handles increase leverage and roll dies in the bending form reduce force needed.
- Vise clamp built into bending form for extra stability.



#### Imperial

Catalog No.	Model No.	Description	Tube Size Capacity (actual O.D.)	Bend Radius	Weight	
			in.	in.	lb.	kg
38028	603	Heavy-Duty Instrument Bender	3/16	5/8	1 3/4	0.78
38033	604	Heavy-Duty Instrument Bender	1/4	5/8	1 3/4	0.76
38038	605/608M*	Heavy-Duty Instrument Bender	5/16	15/16	4	1.84
38043	606	Heavy-Duty Instrument Bender	3/8	15/16	4	1.84
38048	608	Heavy-Duty Instrument Bender	1/2	1 1/2	6	2.76

\*\*This product is dual-purpose, being both inch and metric.

#### Metric

Catalog No.	Model No.	Description	Tube Size Capacity (actual O.D.)	Bend Radius	Weight	
			mm	mm	lb.	kg
38053	606M	Heavy-Duty Instrument Bender	6	16	1 3/4	0.76
38038	605/608M*	Heavy-Duty Instrument Bender	8	24	4	1.84
38058	610M	Heavy-Duty Instrument Bender	10	24	4	1.84
38063	612M	Heavy-Duty Instrument Bender	12	38	6	2.76

\*\*This product is dual-purpose, being both inch and metric.

## Ratchet Benders



### Geared Ratchet Tube Benders

- High geared mechanical ratios, bend heavy-wall steel tube (up to 1/8" wall thickness), stainless steel tube (up to 3/32" wall thickness) and hard copper water tube (types K and L).
- Benders produce uniform bends up to 180°, with no need to anneal tubing or use special temper grade tubing.
- Reduce bending effort to a minimum.

Catalog No.	Model No.	Radius Bend at Center of Tube		Tube O.D.		Weight	
		in.	mm	in.	mm	lb.	kg
35170	358	3	76	5/8	16	7 1/2	3.25
35175	368	3 3/4	95	3/4	19	13 1/2	6.25
35180	378	3 3/4	95	7/8	22	13 1/2	6.25