

## Bending & Forming

- Wide selection for specific bending and forming needs.
- Quality you can trust.



Type	No. of Sizes	Capacity		Page
		in.	mm	
<b>Lever Benders</b>				
Plumbing	8	5/8 – 3/4	10 – 18	8.2
Instrument	9	3/16 – 1/2	6 – 12	8.2
Tri-Bender	1	1/4 – 3/8	–	8.3
Heavy-Duty	2	3/8 – 1/2	–	8.3
<b>Ratchet Benders</b>				
	3	5/8 – 7/8	16 – 22	8.3
<b>Spring-Type Benders</b>				
	10	1/4 – 7/8	6 – 22	8.4
<b>Conduit Benders</b>				
Heavy-Wall	3	1/2 – 1 1/4	12 – 25.32	8.4
Thin-Wall	3	1/2 – 1	–	8.4
<b>Tube Expanders</b>				
	15	3/8 – 1 3/4	–	8.5
<b>Swaging Tools</b>				
	5	1/4 – 5/8	6 – 16	8.5
<b>Conduit Sizing Tool</b>				
	5	1/8 – 5/8	6 – 16	8.5
<b>Flaring Tools</b>				
Ratchet Type	6	1/8 – 1	4 – 16	8.6
Standard	12	3/16 – 5/8	6 – 16	8.6
Hammer-Type	8	3/8 – 2	9 – 50	8.6
<b>Ratchet Tube Wrenches</b>				
	13	5/16 – 1	–	8.7

## Lever Benders



Catalog No.	Model No.	Description	Capacity		Weight	
			Tube Size (actual O.D.)	Bend Radius	lb.	kg
36962*	310	Lever Bender	5/8"	2 1/4"	6 1/2	2.86
36972	312	Lever Bender	3/4"	2 1/8"	7	3.13
36942	310M	Lever Bender	10 mm	42 mm	4	1.81
36947	312M	Lever Bender	12 mm	42 mm	4	1.81
36952	314M	Lever Bender	14 mm	56 mm	6 1/2	2.86
36957	315M	Lever Bender	15 mm	56 mm	6 1/2	2.86
36962*	316M	Lever Bender	16 mm	56 mm	6 1/2	2.86
36967	318M	Lever Bender	18 mm	72 mm	7	3.13

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

### 300 Series Benders

- Designed to bend copper tubing to a maximum of 180°.
- Offset cushion grip handles and a 90° start angle, together with a specially engineered plastic shoe, combine to ease bending effort.
- 300 series lever benders form smooth bends in types K & L soft (annealed) copper tubing.



Catalog No.	Model No.	Description	Capacity		Weight	
			Tube Size (actual O.D.)	Bend Radius	lb.	kg
36117	403	Lever Bender	3/16"	5/8"	1 1/2	0.68
36122	404	Lever Bender	1/4"	5/8"	1 1/2	0.68
36092*	405	Lever Bender	5/16"	5/16"	2 3/4	1.18
36097	406	Lever Bender	3/8"	5/16"	2 3/4	1.18
36132	408	Lever Bender	1/2"	1 1/2"	5 1/2	2.45
36112	406M	Lever Bender	6 mm	16 mm	1 1/2	0.68
36092*	408M	Lever Bender	8 mm	24 mm	2 3/4	1.18
36102	410M	Lever Bender	10 mm	24 mm	2 3/4	1.18
36127	412M	Lever Bender	12 mm	38 mm	5 1/2	2.45

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

### 400 Series Instrument Benders

- Combine accuracy with easy operation.
- Offset cushion grip handles eliminate knuckle cracking when forming 180° bends. A 90° start angle and unique oil-absorbing shoe minimize bending effort while forming accurate bends in copper, steel and stainless steel tubing.



Catalog No.	Model No.	Capacity	Weight	
			lb.	kg
44852	456	¼", 5⁄16", 3⁄8"	14	0.4

## 456 Tri-Bender

- Designed to easily bend three different sizes of soft tubing: ¼", 5⁄16" and 3⁄8" 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°.

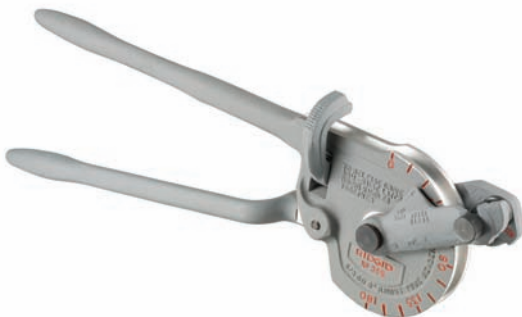


Catalog No.	Model No.	Description	Capacity	Bend Radius	Weight	
					lbs.	kg
51912	506	Lever Bender	3⁄8"	1½"	3½	1.45
51917	508	Lever Bender	½"	1½"	6½	2.95

## 500 Series Heavy-Duty Instrument Benders

- Specially designed for bending stainless steel, titanium and other types of hard tubing.
- A unique two-stage handle design and rollers in the bending handle combine to produce high quality bends with significantly less effort than with conventional benders.

# Ratchet Benders



Catalog No.	Model No.	Radius to Center of Tube		Tube O.D.		Weight		Std. Pack
		in.	mm	in.	mm	lbs.	kg	
35170	358	3	76	5⁄8	16	7½	3.25	1
35175	368	3¾	95	¾	19	13½	6.25	1
35180	378	3¾	95	7⁄8	22	13½	6.25	1

## 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.

## Spring-Type Benders



### Spring-Type Tube Benders

- Fast, free-form bending of soft copper and aluminum tube.

Catalog No.	Model No.	Description	Length		Tube O.D.		Weight/Pk.		Std. Pack
			in.	mm	in.	mm	lbs.	kg	
35245	D-1375	Pack of 6 Spring-Type Benders	10"	250	¼"	6	¾	0.2	1
35250	D-1376	Pack of 6 Spring-Type Benders	10"	250	⅝"	8	1	0.5	1
35255	D-1377	Pack of 6 Spring-Type Benders	10"	250	¾"	9	1	0.5	1
35260	D-1378	Pack of 6 Spring-Type Benders	12"	300	⅞"	11	1½	0.8	1
35265	D-1379	Pack of 6 Spring-Type Benders	12"	300	½"	12	2½	1.2	1
35270	D-1380	Pack of 6 Spring-Type Benders	12"	300	⅝"	16	3¼	1.5	1
35275	D-1381	Pack of 6 Spring-Type Benders	12"	300	¾"	19	3¾	1.7	1
35280	D-1382	Pack of 6 Spring-Type Benders	12"	300	⅞"	22	4½	1.9	1
Spring-Type Bender Sets									
35285	E-5732	Set of 6, ¼"-5/8" (6 mm - 16 mm)					1¾	0.8	1
35290	E5734	Set of 8, ¼"-7/8" (6 mm - 22 mm)					3	1.4	1

## Conduit Benders



### Heavy-Wall Conduit Benders

- Designed for the larger sizes of heavy-wall conduit. This bender has hardened teeth for slip-resistant grip.
- Extra-long supporting socket minimizes handle breakage.
- Notch in radius protects conduit threads.

Catalog No.	Model No.	Capacity		Weight		Std. Pack
		in.	mm	lbs.	kg	
35230	B-1709	½"	12	2½	1.2	1
35235	B-1711	½, ¾"	12, 19	2¾	1.3	1
35240	B-1712	1, 1¼"	25, 32	7¾	3.5	1

*Handles not included.*



### Thin-Wall Conduit Benders

- Made of cast iron, these tools have exceptionally smooth side walls which grip conduit snugly to minimize distortion.
- Bending grooves conform to Standard Code Radii. Marks indicate 30°, 45°, 60° and 90° bends.

Catalog No.	Model No.	Description	Weight		Std. Pack
			lbs.	kg	
35215	B-1677	Bends ½" (12 mm) Thin-Wall Conduit to 4" (100 mm) Inside Radius	2½	1.1	1
35220	B-1678	Bends ¾" (19 mm) Thin-Wall and ½" (12 mm) Heavy-Wall Conduit to 5" (127 mm) Inside Radius	4½	2.0	1
35225	B-1679	Bends 1" (25 mm) Thin-Wall and ¾" (19 mm) Heavy-Wall Conduit to 6½" (165 mm) Inside Radius	8½	3.9	1

*Handles not included.*

## Model S Tube Expander



- This single-stage expander is designed to expand tubing for fast, accurate joints in soft copper, aluminum, and soft steel tube without using fittings. The mechanism is free-floating and self-centering.

Catalog No.	Model No.	Description	Tube Capacity		Weight	
			O.D.	Nominal	lb.	kg
30032	7	Kit with 1/2", 5/8", 3/4" Heads and Case	—	—	6	2.7
34152	8	Kit with 3/8", 1/2", 3/4", 1" Heads and Case	—	—	6 1/2	3.0
15071	S	Expander Handle	—	—	1 1/2	0.7
10251	—	Expander Head	3/8"	1/4"	1/2	0.2
10261	—	Expander Head	1/2"	3/8"	1/2	0.2
10271	—	Expander Head	5/8"	1/2"	1/2	0.2
10281	—	Expander Head	3/4"	5/8"	1/2	0.2
10291	—	Expander Head	7/8"	3/4"	1/2	0.2
10301	—	Expander Head	1"	—	1/2	0.2
10311	—	Expander Head	1 1/8"	1"	1/2	0.2
10321	—	Expander Head	1 1/4"	—	1/2	0.2
10341	—	Expander Head	1 1/2"	—	1/2	0.2
10351	—	Expander Head	1 5/8"	1 1/2"	1/2	0.2
10361	—	Expander Head	1 3/4"	—	1/2	0.2

Note: Kit Head sizes are given by Tube O. D. Replacement Case Catalog No. 58747

## Swaging Tools



- RIDGID Swaging Tools are quality-made and zinc-plated for accuracy and durability.
- Set of four tools is packaged in handy vinyl pouch.
- Designed for copper, aluminum or brass.

Catalog No.	Model No.	Description	O.D. Capacity		Weight		Std. Pack
			in.	mm	oz.	g	
52420	570	Kit-4 Tools	1/4, 3/8, 1/2, 5/8	6, 9, 12, 16	16	454	1
52425	562	Swaging Tool	1/4	6	2	57	1
52430	563	Swaging Tool	3/8	10	4	113	1
52435	564	Swaging Tool	1/2	12	5	142	1
52440	565	Swaging Tool	5/8	16	8	227	1

## Conduit Sizing Tool

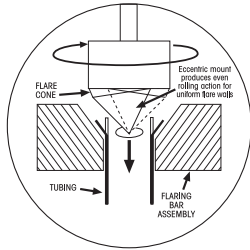


### No. 575 EMT Sizing Tool for Conduit

- Quickly resizes thin-wall conduit ends that have become deformed after installation.
- Tool can also be used for slight bending of 1/2" and 3/4" conduit ends for alignment purposes.
- Hardened alloy steel resists wear.

Catalog No.	Model No.	Capacity	Weight		Standard Pack
			lb.	kg	
36005	575	1/2" (12 mm) and 3/4" (19mm) EMT	1 3/8	0.6	1

## Flaring Tools



### No. 458R Ratchet Flaring Tool

- This precision tool provides smooth, uniform flares with minimum effort.
- The new ratcheting feed screw handle turns easily and requires less motion and effort than a standard handle.
- Hardened steel flaring cone, eccentrically mounted in needle bearings, produces rolling action for even metal flow, giving uniform flare walls without galling.

Catalog No.	Model No.	Description	Sizes (in.)	Weight		Std. Pack
				oz.	g	
83037	458R	45° SAE Flares	1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4	3 1/2	1.6	1
41295	454-W	45° SAE-Nominal Water Tube	3/8, 1/2, 3/4, 1	6 1/4	2.8	1
41300	455	45° SAE Flares	1/2, 5/8, 3/4, 7/8, 1	6 3/4	3.1	1
41162	377	37° SAE Flares	3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4	3 1/2	1.6	1
41285	375	37° SAE Flares	1/2, 5/8, 3/4, 7/8, 1	6 3/4	3.1	1
Metric Model			Sizes (mm)			
50257	458MM	45° SAE Flares	4, 4.75, 6, 8, 10, 12, 15, 16	3 1/2	1.6	1

All flaring tools listed are recommended for soft materials such as aluminum and soft copper. No. 454W, No. 455 and No. 375 will also flare steel, stainless steel, hard copper and brass. No. 458R, No. 458MM and No. 377 will flare steel, stainless steel, hard copper, and brass thru wall thickness of .035 inches.

### No. 345 Flaring Tool

- Model 345 is a precision designed tool for producing 45° flares in soft copper, brass, aluminum and mild steel (JIC and Bundy) tubing.
- A hardened, smooth cone provides fast, 45° flares either single or double lap.
- A single clamp screw provides for easy clamping and removal of tubing.



Catalog No.	Model No.	Description	Sizes (in.)	Weight		Std. Pack
				oz.	g	
23332	345	45° SAE Flares	3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8"	2 3/4	1.6	1
23337	345-DL	45° SAE-(double flares)	Above w/adapters for double lap flares; 3/16", 1/4", 5/16", 3/8", 7/16", 1/2" O.D. Tubing	3	1.3	1
24797	345/150	45° SAE Flares	No. 345 w/No. 150 Tubing Cutter and Case Kit	3 1/2	1.6	1
33927	345/150DL	45° SAE Flares	No. 345/DL w/No. 150 Tubing Cutter and Case Kit	3 1/2	1.6	1
31597	—	—	3/16" Double Lap Adapter	—	—	—
31602	—	—	1/4" Double Lap Adapter	—	—	—
31607	—	—	5/16" Double Lap Adapter	—	—	—
31612	—	—	3/8" Double Lap Adapter	—	—	—
31617	—	—	1/2" Double Lap Adapter	—	—	—
Metric Model			Sizes (mm)			
23342	345M	45° SAE Flares	6, 8, 10, 12, 14, 15, and 16	2 3/4	1.2	1
24087	345M/150	45° SAE Flares	No. 345M w/No. 150 Tubing Cutter and Case Kit	3 1/2	1.6	1
31502	—	—	Case Only	—	—	—

### Hammer-Type Flaring Tools

- Made of high-grade, hardened steel, these tools have a long nose guide that centers tools for smooth, 45° uniform flares.



Catalog No.	Model No.	Water Tube Size		Weight		Std. Pack
		in.	mm	oz.	g	
41315	E-37	3/8	9	3/16	0.1	1
41320	E-45	1/2	12	1/4	0.1	1
41325	E-46	5/8	16	3/8	0.2	1
41330	E-47	3/4	19	1/2	0.2	1
41335	E-52	1	25	3/4	0.3	1
41340	E-61	1 1/4	31	1	0.5	1
41345	E-63	1 1/2	37	1 1/2	0.7	1
41350	E-64	2	50	2 1/2	1.0	1

## Ratchet Tube Wrenches



- Made from high-quality carbon and stainless steel, RIDGID Ratchet Tube Wrenches can be used in a wide variety of applications from plumbing to hydraulics.
- The spring-loaded jaws snap open and close around the fitting, enabling the tool to be used in tight quarters.
- The multi-point contact of the wrench helps prevent distortion of thin-walled fittings.
- These wrenches are available in twelve sizes,  $\frac{5}{16}$ "-1", and a set of five in a plastic pouch,  $\frac{3}{8}$ "- $\frac{5}{8}$ ".

Catalog No.	Model No.	Description	Torque Capacity (in.)	Capacity	Weight		Std. Pack
					oz.	g	
48592	R5	Ratcheting Tube Wrench	$\frac{5}{16}$	280	$\frac{1}{4}$	.1	6
48537	R6	Ratcheting Tube Wrench	$\frac{3}{8}$	293	$\frac{1}{4}$	.1	6
48542	R7	Ratcheting Tube Wrench	$\frac{7}{16}$	325	$\frac{1}{4}$	.1	6
48547	R8	Ratcheting Tube Wrench	$\frac{1}{2}$	390	$\frac{1}{4}$	.1	6
48552	R9	Ratcheting Tube Wrench	$\frac{9}{16}$	520	$\frac{1}{2}$	.15	6
48557	R10	Ratcheting Tube Wrench	$\frac{5}{8}$	780	$\frac{1}{2}$	.15	6
48562	R11	Ratcheting Tube Wrench	$1\frac{1}{16}$	975	$\frac{1}{2}$	.15	6
48567	R12	Ratcheting Tube Wrench	$\frac{3}{4}$	1105	$\frac{1}{2}$	.15	6
48572	R13	Ratcheting Tube Wrench	$1\frac{3}{16}$	1300	$\frac{3}{4}$	.3	6
48577	R14	Ratcheting Tube Wrench	$\frac{7}{8}$	1625	$\frac{3}{4}$	.3	6
48582	R15	Ratcheting Tube Wrench	$1\frac{5}{16}$	1820	$\frac{3}{4}$	.3	6
48587	R16	Ratcheting Tube Wrench	1	1950	$\frac{3}{4}$	.3	6
48597	—	$\frac{3}{8}$ "- $\frac{5}{8}$ " 5 Pc. Kit with Pouch	—	—	$1\frac{1}{4}$	.5	1