

BENDING & FORMING

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



Type	No. of Sizes	Capacity		Page
		in.	mm	
Lever Benders				
300 Series Plumbing	8	5/8 - 3/4	10 - 18	9.2
400 Series Instrument	9	3/16 - 1/2	6 - 12	9.2
Tri-Bender	1	1/4 - 3/8	—	9.3
600 Series Heavy-Duty	9	3/16 - 1/2	6 - 12	9.3
Ratchet Benders				
Spring-Type Benders	8	1/4 - 7/8	6 - 22	9.4
Tube Expanders				
Swaging Tools	5	1/4 - 5/8	6 - 16	9.6
Flaring Tools				
Non-Ratcheting	2	3/16 - 3/4	4 - 186	9.6
Ratcheting	8	1/8 - 3/4	4 - 18	9.7
Manual	10	1/8 - 1/2	6 - 12	9.7
Heavy Duty	3	3/8 - 1	—	9.8
Hammer-Type	8	3/8 - 2	9 - 50	9.8
Hydraulic Bender & Accessories	2	3/8 - 3	—	9.8 - 9.9

Lever Benders



300 SERIES PLUMBING BENDERS

- Designed to bend K and L soft 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.
- Inch and metric sizes.

Imperial

Catalog No.	Model No.	Description	Tube Size Capacity (actual O.D.)	Bend Radius	Weight	
			in.	in.	lb.	kg
36962	310/316M*	Lever Bender	5/8	2 1/4	6 1/2	2.86
36972	312		3/4	2 7/8	7	3.13

*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
36942	310M	Lever Bender	10	42	4	1.81
36947	312M		12	42		
36952	314M		14	56	6 1/2	2.86
36957	315M		15	56		
36962	310/316M*		16	56		
36967	318M	18	72	7	3.13	

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



400 SERIES INSTRUMENT BENDERS

- Designed for bending annealed copper, steel and stainless with a wall thickness less than or equal to 0.06" (1.5 mm) to a maximum of 180°.
- Offset cushion grip handles for comfort when forming 180° bends. A 90° start angle and unique oil-absorbing shoe minimize bending effort while forming accurate bends.
- Inch and metric sizes.

Imperial

Catalog No.	Model No.	Description	Tube Size Capacity (actual O.D.)	Bend Radius	Weight	
			in.	in.	lb.	kg
36117	403	Lever Bender	3/16	5/8	1 1/2	0.86
36122	404		1/4			
36092	405/408M*		5/16	1 5/16	2 3/4	1.18
36097	406		3/8			
36132	408		1/2			

*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
36112	406M	Lever Bender	6	16	1 1/2	0.68
36092	405/408M*		8	24	2 3/4	1.18
36102	410M		10	24		
36127	412M		12	38		

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

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 for 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.
- Inch and metric sizes.

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		1/4			0.76
38038	605/608M*		5/16	1 5/16	4	1.84
38043	606		3/8			
38048	608		1/2			

*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*		8	24		
38058	610M		10	24	4	1.84
38063	612M		12	38		

*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.
- Inch and metric sizes.

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		

Tube Benders



SPRING-TYPE TUBE BENDERS

- Fast free-form bending of soft copper and aluminum tube.
- Inch and metric sizes.

Catalog No.	Model No.	Description	Length		Tube Size Capacity (actual O.D.)		Weight	
			in.	mm	in.	mm	lb.	kg
35245	D-1375	Pack of 6 Spring-Type Benders	10	250	1/4	6	3/8	0.2
35250	D-1376	Pack of 6 Spring-Type Benders	10	250	5/16	8	1	0.5
35255	D-1377	Pack of 6 Spring-Type Benders	10	250	3/8	9		
35260	D-1378	Pack of 6 Spring-Type Benders	12	300	7/16	11	1 5/8	0.8
35265	D-1379	Pack of 6 Spring-Type Benders	12	300	1/2	12	2 5/8	1.2
35270	D-1380	Pack of 6 Spring-Type Benders	12	300	5/8	16	3 1/4	1.5
35275	D-1381	Pack of 6 Spring-Type Benders	12	300	3/4	19	3 3/4	1.7
35280	D-1382	Pack of 6 Spring-Type Benders	12	300	7/8	22	4 1/8	1.9

Spring-Type Bender Sets

Catalog No.	Model No.	Description	Weight	
			lb.	kg
35285	E-5732	Set of 6, 1/4"-5/8" (6 mm - 16 mm)	1 3/4	0.8
35290	E-5734	Set of 8, 1/4"-7/8" (6 mm - 22 mm)	3	1.4

Tube Expanders



MODEL S TUBE EXPANDER

- These single-stage expanders are 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	Weight	
			lb.	kg
15071	S	Tube Expander Tool	1 ½	0.7
30032	7	Kit with ½", ⅝", ⅞" Heads and Case	6	2.7
34152	8	Kit with ¾", 1", 1 ¼" Heads and Case	6 ½	0
58747	-	Replacement Case	3	1.4

Expander Heads – Imperial

Catalog No.	Model No.	Description	Tube Size Capacity (actual O.D.)	Weight
			in.	lb.
10251		Expander Head	⅜	½
10261		Expander Head	½	
10271		Expander Head	⅝	
10281		Expander Head	¾	
10291		Expander Head	⅞	
10301		Expander Head	1	
10311		Expander Head	1 ⅛	
10321		Expander Head	1 ¼	
51206		Expander Head	1 ⅜	
10341		Expander Head	1 ½	
10351		Expander Head	1 ⅝	
10361		Expander Head	1 ¾	

Expander Heads – Metric

Catalog No.	Model No.	Description	Tube Size Capacity (actual O.D.)	Weight
			mm	kg
10371	-	Expander Head	8	0.20
10051	-	Expander Head	10	0.20
10061	-	Expander Head	12	0.20
10071	-	Expander Head	14	0.20
10081	-	Expander Head	15	0.24
10091	-	Expander Head	16	0.24
10101	-	Expander Head	17	0.24
10111	-	Expander Head	18	0.24
10121	-	Expander Head	20	0.24
10131	-	Expander Head	22	0.26
10141	-	Expander Head	28	0.26
10231	-	Expander Head	32	0.30
10241	-	Expander Head	34	0.30
10151	-	Expander Head	35	0.26
10221	-	Expander Head	36	0.26
10201	-	Expander Head	40	0.26
10161	-	Expander Head	42	0.30
10171	-	Expander Head	45	0.30
10211	-	Expander Head	54	0.26

Note: Kit Head sizes are given by Tube O.D.

Swaging Tools



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 tubing.
- Inch and metric sizes.

Catalog No.	Model No.	Description	Tube Size Capacity (actual O.D.)		Weight	
			in.	mm	lb.	kg
52420	570	Kit-4 Tools	-	-	1	0.45
52425	562	Swaging Tool	¼	6	⅛	0.06
52430	563	Swaging Tool	⅜	10	¼	0.11
52435	564	Swaging Tool	½	12	⅝	0.14
52440	565	Swaging Tool	⅝	16	½	0.23

Flaring Tools



PRECISION NON-RATCHETING FLARE TOOLS

- This precision tool provides smooth, uniform flares with minimum effort.
- Hardened steel flaring cone, eccentrically mounted in needs bearings, produces rolling action for even metal flow. Gives uniform flare walls without galling.
- Handle clutch releases when flare is complete to iron and smooth flare.
- Inch and metric sizes.

Catalog No.	Model No.	Description	Sizes	Weight	
				lb.	kg
41162	377	37° SAE Flares	⅜, ¼, ⅝, ⅜, ½, ⅝, ¾"	4	1.6
50257	458MM	45° SAE Flares	4, 4.75, 6, 8, 10, 12, 15, 16		

All flaring tools listed are recommended for soft materials such as aluminum and soft copper. Model 454W, Model 455 and Model 375 will also flare steel, stainless steel, hard copper and brass. Model 458R, Model 458MM and Model 377 will flare steel, stainless steel, hard copper, and brass thru wall thickness of .035 inches.

Flaring Tools



PRECISION RATCHETING FLARE TOOLS

- Through a wall thickness of 0.035" (0.9 mm).
- Ratcheting handle reduces effort required especially in confined areas
- Improves productivity
- Eccentrically mounting, hardened steel flaring cone
- Handle clutch releases when flare is complete to iron and smooth flare
- Produces 45° flare in sizes from 1/8" - 3/4"

Model 445R

Catalog No.	Model No.	Type	Sizes (in.)	Weight	
				lb.	kg
42153	445R	45° SAE Flares	1/4, 3/8, 1/2, 5/8, 3/4	3 3/10	1.5
83037	458R	45° SAE Flares	1/8, 3/16, 1/4, 5/16, 3/8, 1/2, 5/8, 3/4	3 3/10	1.77
70677	456R	45° R410A Flares	1/4, 5/16, 3/8, 1/2, 5/8, 3/4	3 1/2	1.6



345 MANUAL FLARE TOOLS

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

Catalog No.	Model No.	Description	Sizes (in.)	Weight	
				lb.	kg
23332	345	45° SAE Flares	3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8	2 3/4	1.2
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
24797	345/150	45° SAE-(double flares)	No. 345 w/No. 150 Tubing Cutter and Case Kit	3 1/2	1.6
33927	345/150DL	45° SAE Flares	No. 345/DL w/No. 150 Tubing Cutter and Case Kit		
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		
31502		Case Only	-		

Flaring Tools



HEAVY DUTY FLARE TOOLS

- Also, flares steel, stainless steel, hard copper and brass.
- This precision tool provides smooth, uniform flares with minimum effort
- Hardened steel flaring cone, eccentrically mounted in needle bearings, produces rolling action for even metal flow. Gives uniform flare walls without galling.
- Special ironing features ensures a smooth flare.

Catalog No.	Model No.	Description	Sizes	Weight	
			in.	lb.	kg
41285	375	37° SAE Flares	1/2, 3/8, 3/4, 7/8, 1	6 3/4	3.1
41295	454-W	45° SAE- Nominal Water Tube	3/8, 1/2, 3/4, 1	6 1/4	2.8
41300	455	45° SAE Flares	1/2, 5/8, 3/4, 7/8, 1	6 3/4	3.1



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	Water Tube Size	Weight	
		in.	mm	lb.	kg
41315	E-37	3/8	9	3/16	0.1
41320	E-45	1/2	12	1/4	0.2
41325	E-46	5/8	16	3/8	0.2
41330	E-47	3/4	19	1/2	0.3
41335	E-52	1	25	3/4	0.5
41340	E-61	1 1/4	31	1	0.7
41345	E-63	1 1/2	37	1 1/2	1
41350	E-64	2	50	2 1/2	1

Hydraulic Benders



HYDRAULIC BENDERS - TIP-UP WING

- Manual benders are ideal for precision cold bending standard gas pipes up to 3". Versatile, portable benders are ideal for on-site bending, as well as machine construction, boiler making and industrial applications.
- Durable piston seals prevent premature leaks and maximize uptime.
- Longer cylinder stroke per pump and optimized hand force minimizes operator fatigue.
- Bending angle indicators reduce starts, stops and pipe removal to take measurements.
- Single circuit hydraulic system with return spring for better control of the ram and precise bending.
- Pressure relief valve protects the hydraulic system from over-pressurization.
- Supplied in a wooden case and delivered with a set of bending formers for standard gas pipe applications and corner supports.
- Offers the advantage of extra rigidity during the bending process.
- Ideal for on-site applications.

Manually Operated

Catalog No.	Model No.	Description	Capacity (O.D.)	Weight	
			in.	lb.	kg
36518	HB382	HB382 Tip-Up Wing Bender (Manual)	3/8 - 2	158	72
36523	HB383	HB383 Tip-Up Wing Bender (Manual)	3/8 - 3	344	156

RIDGID Hydraulic Benders - Formers and Accessories



Former for Standard Gas Pipe

Catalog No.	Description	Sizes	Radius to Center of Tube	Weight	
		in.	mm	lb.	kg
37223	Former for Gas Pipe 3/8"	3/8	45	2.7	1.1
37228	Former for Gas Pipe 1/2"	1/2	50	3.1	1.4
37233	Former for Gas Pipe 3/4"	3/4	65	6.6	3.0
37238	Former for Gas Pipe 1"	1	100	5.3	2.4
37243	Former for Gas Pipe 1 1/4"	1 1/4	130	5.5	2.5
37248	Former for Gas Pipe 1 1/2"	1 1/2	150	10.4	4.7
37253	Former for Gas Pipe 2"	2	200	14.4	6.5
37258	Former for Gas Pipe 2 1/2"	2 1/2	320	38.2	17.3
37263	Former for Gas Pipe 3"	3	380	39.5	27.0



Accessories for 2" Cap. Hydraulic Benders

Catalog No.	Model No.	Description	Weight	
			lb.	kg
37273		Corner Support Assembly	6.8	3.1
37293	-	Corner Pin	1.5	0.7
38083		Frame	1.1	0.5



Accessories for 3" Cap. Hydraulic Benders

Catalog No.	Model No.	Description	Weight	
			lb.	kg
37278		Corner Support Assembly	0.8	0.4
37298		Pin Fixing	-	-
38078	-	Frame	80.2	36.5
38568		Extender	-	-



Accessories

Catalog No.	Model No.	Description	Weight	
			lb.	kg
37618		Straightener Former	2.2	1
37813	-	Turnable Tripod (for all models up to 3")	16.5	7.5
37828		Transport Wheel Kit	4.8	2.2

