

Expanding, Extracting, and Bending Tools

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When it comes to installation or repair of soft copper, hard copper, aluminum or PEX tubing, ROTHENBERGER has the solution.

ROTHENBERGER hand and power tools are the perfect choice for the professional for fitting-free installation.



Expanders

1 ROCAM® EXPANDER Power Torque

From the pioneer of tube expansion technology and the leading manufacturer of expanders for more than 35 years, the ROCAM® Expander is ideal for efficient, fitting-free tube installation in plumbing, heating, gas, refrigeration and climate control systems.



The **EPT®-Technology** offers the following advantages:

- Concealed bent lever:
 - Protection against dirt
 - Protection against mechanical damage
- Optimized force transmission:
 - Ergonomic
 - Better force flow in relation to the hand force of the user
 - Less effort required



Product Profile	
FEATURES	
<ul style="list-style-type: none"> • Eliminates purchase and storage of fittings • 50% less labor costs • 50% less soldering saves materials • Converts scrap tubes into fittings, saves material costs • Increases safety by reducing number of soldered joints 	
TECHNICAL DATA	
For expanding, reducing and calibrating tubes made out of:	
<ul style="list-style-type: none"> • soft and half-hard copper • soft aluminum 	dia. 5/16" – 1-3/4" (8 – 42 mm) max. wall thickness 0.06", (1.6 mm) dia. 5/16" – 1-1/8" (8 – 28 mm) max. wall thickness 0.06", (1.6 mm)



The **golden Titanium Nitride coating (TiN)** on the pin guide is superior because of its:

- High degree of hardness of 2300 HV: **Protection against abrasive wear**
- Low friction factor: **Reduces effort required**
- Chemical resistance: **Good corrosion protection**
- Universal wear resistance layer: **Long-lasting**



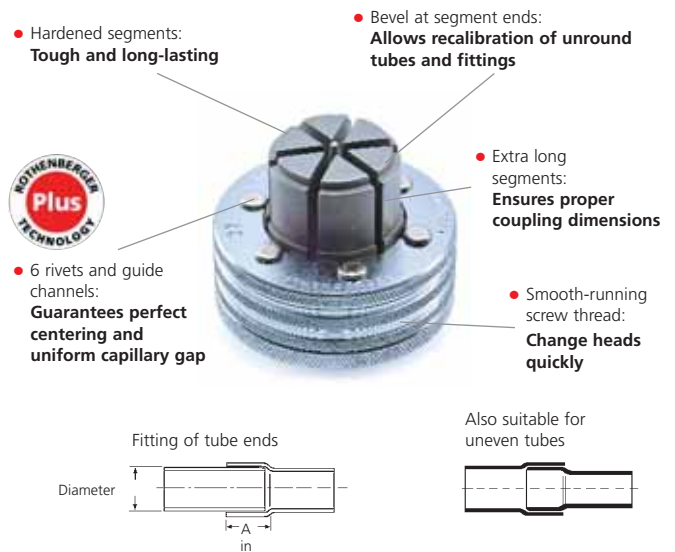
Includes: ROCAM® EXPANDER Power Torque (12000) with riveted expander heads, internal and external deburrer (11006), steel case.

Description	Max. O.D.	Max.	lb	No.
ROCAM® Expander tool only	1-3/4"	0.06"	3.8	12000
ROCAM® Expander Set	3/8", 1/2", 5/8", 3/4", 7/8", 1-1/8"		8.0	12318
	1/2", 5/8", 7/8", 1-1/8"		6.8	12324

Standard Riveted Expander Heads

ROTHENBERGER standard riveted expander heads fit similar expanders from other brands as well.

O.D.	Wall thickness max in.				A in.	lb	No.
	Cu	Al	Fe	Stainless			
5/16"	0.04	0.04	0.04	0.04	0.24	0.5	11008
3/8"	0.04	0.04	0.04	0.04	0.29	0.5	11052
1/2"	0.05	0.05	0.05	0.04	0.43	0.5	11053
5/8"	0.05	0.05	0.05	0.04	0.55	0.5	11054
3/4"	0.05	0.05	0.05	0.04	0.71	0.5	11055
7/8"	0.05	0.05	0.05	0.04	0.71	0.5	11056
1"	0.06	0.06	0.06	-	0.62	0.5	11057
1-1/8"	0.065	0.065	0.065	-	0.70	0.9	11058
1-3/8"	0.065	-	-	-	0.70	1.0	11035
1-5/8"	0.065	-	-	-	0.70	1.1	11062



Internal/External Deburring Tool

Description	lb	No.
Internal/External Deburring Tool for tubes dia. 1/8" - 1-1/2"	0.7	11006



GRADUATED EXPANDER A1

For efficient, fitting-free tube installation in plumbing, heating, gas, refrigeration and climate control systems.

Product Profile

TECHNICAL DATA

For expanding, reducing and calibrating tubes made out of:

- soft copper, aluminum dia. 1-3/8" - 4-1/8" (35 - 108 mm) max. wall thickness 0.1" (2.5 mm)

- Strong pin guide: Bearing the expander head segments completely allowing high loads



- 6 sizes on one tool: Expanding without changing tools

- Positive fine adjustment: Optimum adjustment of tube socket size and capillary gap

- Trapezoid thread with self-lubricating bronze socket: Optimized force transmission

Ratchet Handle (27181)

11078

- Long lever arms: Reduces the effort required

EXPANDER A1

Includes: Graduated expander with handle, without special ratchet handle

O.D.	lb	No.
1-3/8", 1-5/8", 2-1/8", 2-5/8", 3-1/8", 4-1/8"	9.3	11078
Ratchet Handle	3.0	27181

Tee Extractors

1

Tee Extractor Set

ROTHENBERGER's Tee Extractors are simple, fast and economical - create perfect tees in less than a minute!



- Special screw thread:
Reduces effort required



- Dimple limits insertion depth:
Optimum positioning

- Professional Tee-extraction:
Optimum capillary gaps

- UNIDRILL Automatic 42:
Exact drilling



21575



22080

- Extractor Cam Pincer:
Limits insertion depth



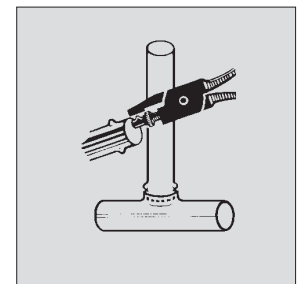
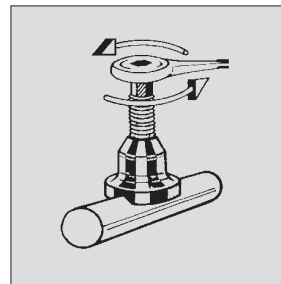
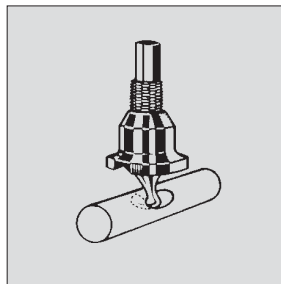
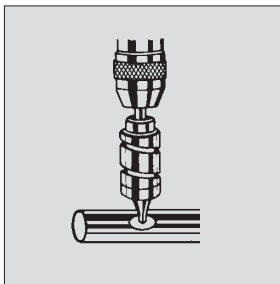
22124

Precise drilling without a center punch - drill stop prevents over sizing or damage to tube wall

Insert the extractor hook into the drilled hole and screw the bell firmly to the tube wall.

Using ratchet, turn extractor to the left.

After extraction, set correct insert depth with the cam pincer.



Set includes: Tee-extractor, special ratchet (22081), cam pincer (22080), UNIDRILL Automatic 42 (21575), and steel carrying case

Description	⬢ ratchet size	⚖ lb	No.
Tee Extractor Set 1/2", 5/8", 7/8", 1-1/8"		8.3	22124
Extractor Ratchet, 3/8" - 1-3/4"	11mm	1.0	22081
Extractor Ratchet, 2" - 4-1/4"	3/4"	2.5	27181



27181

Product Profile

FEATURES

- Extractions on installed tubes:
Reduces installation time and materials
- Producing branches on tubes:
Reduces the use of T-pieces
- Compact design:
Suitable for making tees even in tight spaces

TECHNICAL DATA

For producing tees on tubes made of:

- soft copper, hard copper and aluminum dia. 3/8 - 2-1/8" (10 - 54 mm)
max. wall thickness .1" (2.5 mm)

Tee Extractors

Key features

- Uniform and proper material extraction without scratches or burrs
- Professional tee-extraction with optimum capillary gap

O.D.	in.	Drill dia. mm	Ratchet size	lb	No.
3/8"	0.04	6	11 mm	0.3	22060
1/2"	0.04	7	11 mm	0.4	22061
5/8"	0.04	8	11 mm	0.5	22016
3/4"	0.08	10	11 mm	0.5	22062
7/8"	0.08	12	11 mm	0.8	22063
1"	0.10	14	11 mm	1.1	22064
1-1/8"	0.10	15	11 mm	1.1	22065
1-1/4"	0.10	19	11 mm	1.6	22066
1-3/8"	0.10	22	11 mm	1.6	22035
1-1/2"	0.10	22	11 mm	1.6	22038
1-5/8"	0.10	26	11 mm	2.0	22068
1-3/4"	0.10	26	11 mm	2.0	22069
2"	0.10	30	3/4"	3.0	22050
2-1/8"	0.10	30	3/4"	3.0	22054



UNIDRILL® Automatic 42

- High speed steel drill
Fast, burr-free drilling
- Special drill tip
Precise location without need for center punch
- Drill hole scale
Calibrated drill diameter automatically corresponds to the correct extractor hook and branch size
- Drill stop
Prevents damage to tube wall

Description	O.D.	Ratchet size	lb	No.
UNIDRILL® 42	3/8" - 1-5/8"	11 mm	1.0	21575



Extractor Cam Pincer

- Marker:
Ensures exact insertion depth and prevents over-inserting
- Cam depth adjustment with scale:
Calibrating the corresponding insertion depth

O.D.	L	lb	No.
1/2" - 1-1/2"	5.9"	0.4	22080



Extractor Support

- For soft tube material
Prevents deformation during extraction

O.D. Main Tube	O.D. Branch Tube	lb	No.
1/2"	3/8"	0.3	22170
5/8"	1/2"	0.4	22153
3/4"	5/8"	0.6	22172
7/8"	3/4"	0.6	22157
1-1/8"	1"	0.7	22158



Universal Flaring Tools

1

Professional Flaring Tool

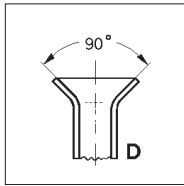
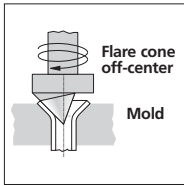
For producing precision 45° single flares on copper tubes

- Spring-loaded slide coupling:
No reduction in wall thickness



- Flare cone rotates off-center in needle bearings:
Controlled expanding and shaping of tube end without tearing

High quality flares



222402

- Made from forged steel:
Tough and long-lasting

- Can be drill driven:
Fast and consistent flares in high-volume environments

Set includes flaring tool with mold, plastic case

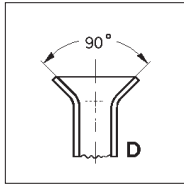
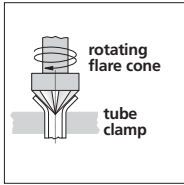
- Self-centering mold:
Highest flare precision

O.D.	lb.	No.
1/8", 1/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4"	4.4	222402

Flaring Tool

For producing precision 45° single flares on copper tubes

- Self-centering tube clamp for all diameters:
Compact design
- Hardened flare cone with special geometry:
Controlled flaring without tearing, forming perfect surfaces



- Quick and easy adjustment:
Clamp adjusts for all diameters



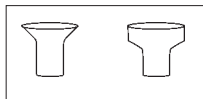
222601

- Ergonomic handle:
Comfortable use

O.D.	lb.	No.
3/16" - 5/8" (4-16mm)	1.9	222601

Flaring and Swaging Set

For producing flares from 1/8" - 3/4"



Description	lb	No.
Flaring and Swaging Set Includes: expander heads 3/16" - 3/4", square ratchet wrench 1/4" - 5/16", tube cutter, flaring tool	5.0	22350

ROFLARE®

Compact Flaring Tool, foldable

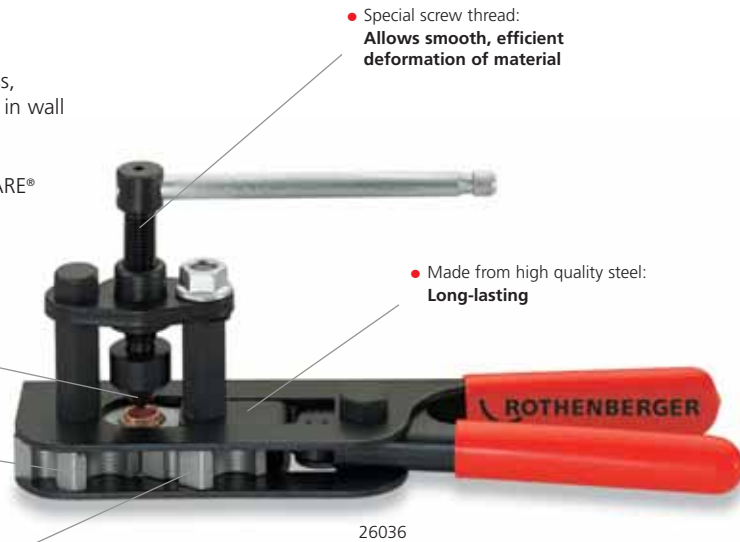
For producing precision 45° single flares on copper, brass, aluminum and precision steel tubes up to 0.04" (1 mm) in wall thickness. Ideal for mobile applications and for pipes in refrigeration and automotive (brakes) industries.

Double and 180° flares are also possible with the ROFLARE® double flare attachment.

- Hardened and polished flare cone:
High quality flare sealing surface
- "Multiblock" multi-clamping calipers:
Firm, quick, off-center clamping of the tube and automatic self-centering; tubes don't slip



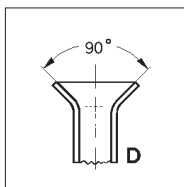
- Mold available in metric and English measurements:



ROFLARE®

Includes: ROFLARE® basic tool with multiblock

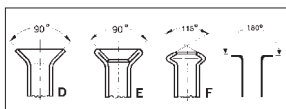
Description	O.D.	lb	No.
Single	6 - 8 - 10 - 12 - 14 - 16 mm	3.0	26038
Double	6 - 8 - 10 - 12 - 15 - 16 mm	3.0	26022
<i>requires 26023 to create double flares</i>			
Single	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	3.0	26036
37° Single	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	3.0	26032
Single/Double	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	3.0	26033
<i>requires 26034 to create double flares</i>			



180° adapter



Double flare attachment with tube depth stop for clamping



ROFLARE® / ROFORM® Accessories

Double flare attachment/180° Adapter fits in ROFLARE flaring tool as well as in ROFORM® socket and flare tools.

Description	O.D.	lb	No.
Double	6 - 8 - 10 - 12 - 15 mm	5.0	26023
Double	1/16", 1/4", 5/16", 3/8", 1/2"	5.0	26034
Adapter for 180° flares		5.0	26039

ROFORM® Set

For producing precision 45° single flares and precision sockets on soft and hard tubes.

Set includes: Basic tool, 45° cone, expander pin, internal and external deburrer dia. 1/8" - 1-1/2" in. (11006), ROTRAC® Tube Cutter 28 dia. 1/8" - 1-1/8" in. (70010), plastic case.



Description	O.D.	lb	No.
ROFORM® Set	6 - 8 - 10 - 12 - 14 - 16 mm	5.0	26711
ROFORM® Set	6 - 8 - 10 - 12 - 15 - 16 mm	5.0	26710
ROFORM® Set	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	5.0	26715
Carry Case			26089P

Benders

1

TUBE BENDER

Compact and easy to use, this small tube bender works with only one hand.

Product Profile

FEATURES

- Special adjustment for small pipe diameters:
Use in refrigeration, air-conditioning, oil supply and automotive, as well as pneumatic or hydraulic systems
- Mechanical ratchet feed:
Rapid and precise bending
- Toothed rack with bayonet catch:
Bending formers are quick and easy to change

TECHNICAL DATA

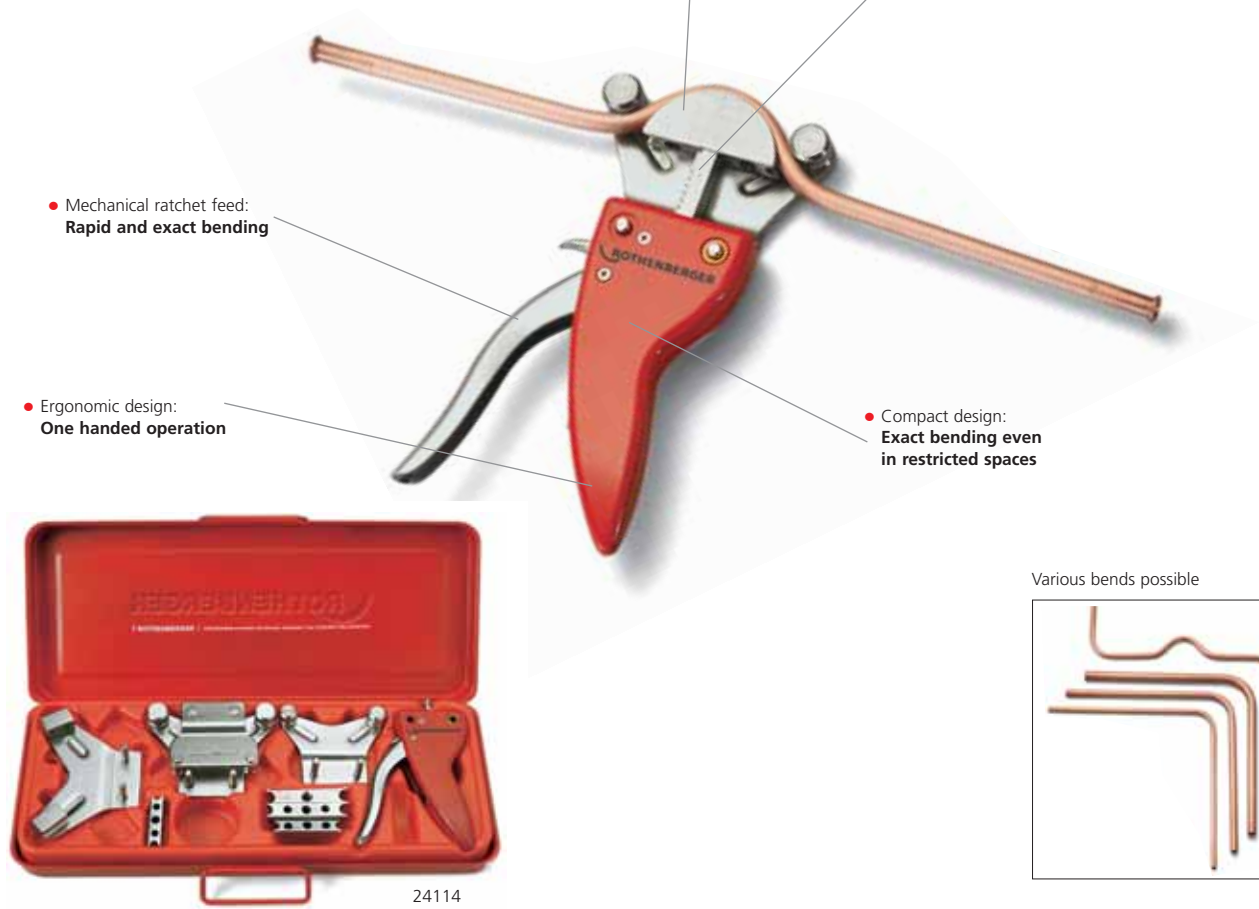
One handed bender for exact bending up to 90° of tubes made of:

- soft copper and aluminum dia. 3/16" – 1/2" (4.75 – 12 mm)

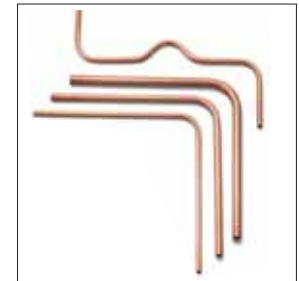
- Open bending frame:
Production of repeated alternate angled bends possible



- Pliers with bayonet catch:
Faster change of bending formers



Various bends possible



Set includes: Basic tool, bending formers, steel case

Description	O.D.	lb	No.
TUBE BENDER Set for 1/4", 5/16", 3/8", 1/2"		7.8	24114
TUBE BENDER Only		1.0	24000
Bending Former	3/16"	1.0	24001
Bending Former	1/4"	1.0	24002
Bending Former	5/16"	1.0	24003
Bending Former	3/8"	1.0	24006
Bending Former	1/2"	1.0	24008

Bending formers



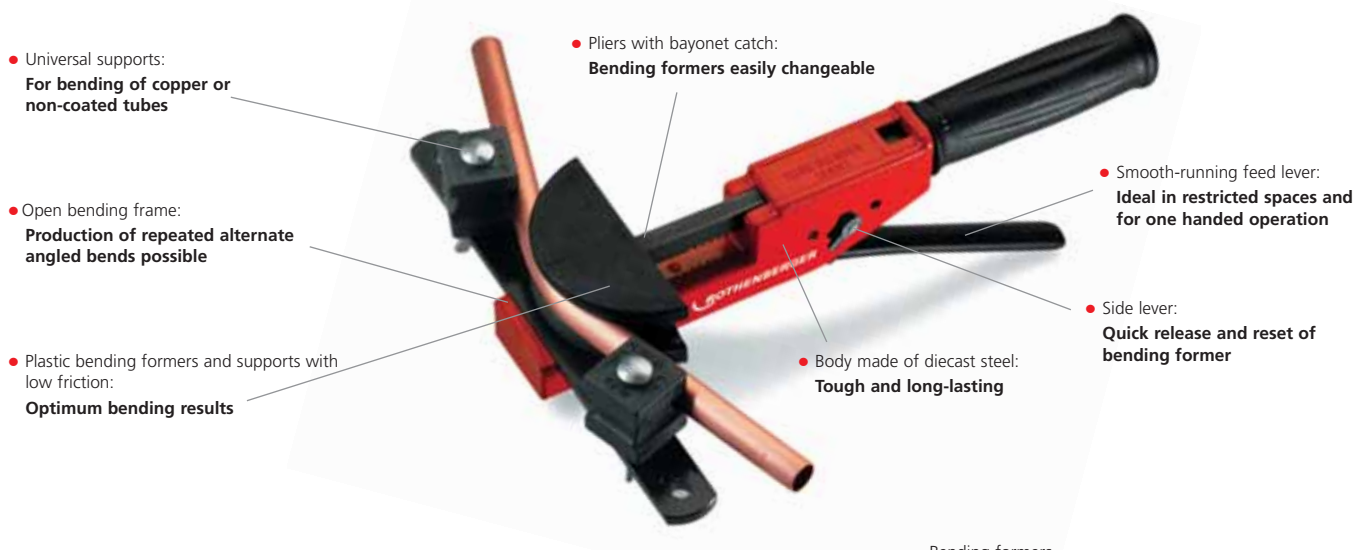
Back plates

TUBE BENDER MAXI

Universal application possibilities in plumbing and heating installations, refrigeration, climate control, floor heating, and hydraulic systems.

new

Product Profile	
FEATURES	
<ul style="list-style-type: none"> • Eliminates costs and storage of fittings • Less soldering saves materials • Increases safety by reducing number of joints • Reduced labor time • Mechanical ratchet feed 	
TECHNICAL DATA	
For exact bending up to 90° of tubes made of:	
• soft copper and aluminum	dia. 3/8" – 7/8" (10 – 22 mm)
• PEX with aluminum and PE outer layers (Viéga FostaPex)	dia. 1/2", 3/4", 1"



Set includes: basic tool (23000), bending support (23001), bending formers, and steel case



Description	O.D.	Max. in.	lb	No.
MAXI BENDER Set 3/8", 1/2", 5/8", 3/4", 7/8"			8.5	23022
MAXI BENDER MSR Set 1/2", 3/4", 1", Viéga FostaPex			8.5	23064
MAXI BENDER Tool Only			2.1	23000
MAXI BENDER Support with R/L Formers			1.2	23001
Formers for copper/aluminum:	3/8"	0.04	0.2	23010
	1/2"	0.04	0.2	23011
	5/8"	0.04	0.3	23012
	3/4"	0.04	0.3	23013
	7/8"	0.04	0.4	23014

Standard Tube Benders

1



25141

Standard Two Handed Bender

For exact bending up to 180° of tubes made of

- Soft copper and aluminum
- Bending radius display of 0 - 180° on former:

Exact bending

- Clamp mechanism for tighter tube hold:

For bending shorter tube pieces

- Light construction:
- **Fatigue-free hand operation**

O.D.	R Radius in.	L "	lb	No.
1/4"	0.71	12.0"	1.3	25140
5/16"	0.95	12.0"	1.5	25131
3/8"	1.18	15.4"	2.0	25141
1/2"	1.65	15.4"	3.8	25142
5/8"	2.28	17.7"	4.0	25136



90614

MULTIBENDER

Universal hand bender provides bending of 1/2", 5/8", 3/4", and 7/8" O.D. with 1 tool. Ideal for soft copper and aluminum.

Description	O.D.	lb	No.
MULTIBENDER	1/2", 5/8", 3/4", 7/8"	8.7	90614

- Compact design:
Three tube sizes with tight bending radii



25151

- Minimum measurement and bending radius display on former:
Exact bending possible

MINIBEND

For exact, two-handed bending up to 180° of tubes made of

- soft copper, brass, aluminum dia. 1/4", 5/16", 3/8"
(6 mm, 8 mm, 10 mm)

- Suitable for use in:
Refrigeration, climate control, oil supply, automobile, hydraulic and air pressure systems.

Description	O.D.	lb	No.
MINIBEND	1/4", 5/16", 3/8"	1.0	25151



Copper Tube Bending Spring

For hand bending of soft copper tubes

- With coiled cone:
Ideal handling even with longer tubes
- Cadmium-plated spring steel:
Tough and long-lasting
- Optimal spring form:
No buckling in bending radius area

O.D.	lb	No.
1/4"	0.5	25187
3/8"	0.5	25188
1/2"	0.5	25190

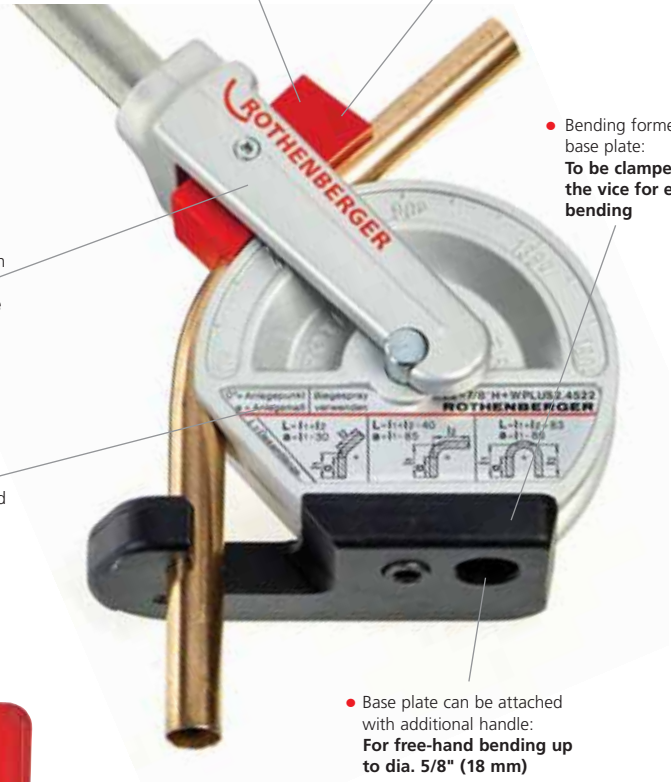
ROBEND® H+W PLUS

Product Profile	
FEATURES	
<ul style="list-style-type: none"> Eliminates purchase and storage of fittings Less soldering saves materials Increases safety by reducing number of joints Patented ROLUB system: Reduces friction for faster, smoother bending 	
TECHNICAL DATA	
For exact bending up to 180°, of tubes made of:	
• soft, semi-hard, hard copper	dia. 5/16" – 7/8" (8 mm – 22 mm)
• thin-walled coated copper	dia. 3/8" – 5/8" (10 mm – 18 mm)
• thin-walled aluminum and brass	dia. 5/16" – 7/8" (8 mm – 22 mm)
• precision steel	dia. 3/8" – 5/8" (10 mm – 18 mm)
• coated, seamless stainless steel	dia. 5/16" – 7/8" (8 mm – 22 mm)



- Patented **ROLUB ANTI-STICK SYSTEM:**
42% less effort due to lower friction and optimum distribution of the bending spray

- Optimum combination of ROLUB guide shoe and bending former:
Reduced effort bending without deformation and wrinkles



- Bending former with base plate:
To be clamped on the vice for easy bending

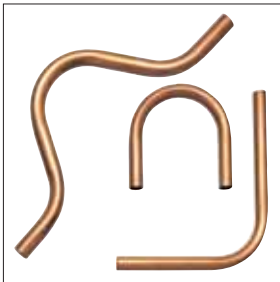
- Fork and former made of high quality forged aluminum:
Retains shape and is stable



- Reserve length table and bend radius scale on every former:
Exact bending

- Base plate can be attached with additional handle:
For free-hand bending up to dia. 5/8" (18 mm)

Various bends possible



Ideal for construction sites



Vice bending



24504



Set includes: benders corresponding to the various tube dimensions, bending spray 150 ml (25120), steel case

Description	Max. in.	R Radius in.	lb	No.
ROBEND® H+W PLUS Set, 1/2", 5/8", 7/8"	0.04		30.3	24504
ROBEND® H+W PLUS, 3/8"	0.04	1.26	2.6	24551
ROBEND® H+W PLUS, 1/2"	0.04	1.50	2.5	24552
ROBEND® H+W PLUS, 5/8"	0.04	2.52	5.8	24516
ROBEND® H+W PLUS, 3/4"	0.04	3.19	8.5	24519
ROBEND® H+W PLUS, 7/8"	0.04	3.19	8.4	24522
Bending Spray, 5.3 oz. (150 ml)			0.5	25120

Power Benders

1

ROBEND® 3000

Tough, portable power bender

Universal applications in plumbing, heating, refrigeration, climate control, and industrial systems.

Product Profile

FEATURES

- Eliminates purchase and storage of fittings:
Easy work preparation
- Less joints:
For increased safety
- Production of repeated alternate angled bends
- Bending former made of high quality forged aluminum
- Patented ROLUB system:
Reduces friction for faster, smoother bending

TECHNICAL DATA

Cold bending up to 180°, manually or automatically, of tubes made of:

- soft, semi-hard, hard copper, DIN EN 1057 dia. 1/2" – 1-1/8" (12 mm – 28 mm)
- coated copper, precision steel dia. 1/2" – 1-1/8" (12 mm – 28 mm)
- soft, half-hard, hard precision steel, DIN 2391/2393/2394 dia. 1/2" – 1-1/8" (12 mm – 28 mm)
- threaded steel, DIN 2440/2441 dia. 1/2" – 1-1/8" (12 mm – 28 mm)
- seamless stainless steel GW 541, wall thickness 0.04" – 0.05"/1.0mm – 1.2mm dia. 1/2" – 1-1/8" (12 mm – 28 mm)
- coated steel tubes MPS-H heating type, DIN EN 2394 dia. 1/2" – 1-1/8" (14 mm – 30 mm)



Easy presetting of bending angle without use of tool



- Forged aluminum former with bending radius scale:
High quality and robust



- Special ROLUB guide shoe:
Bending without deformation and wrinkles due to less friction



- Powerful 1010 W motor:
Ideal for use on construction sites
- Automatically shuts off when preset bending angle is obtained:
Fast batch production possible



25001

Set includes Basic ROBEND® unit, guide shoe axle (25743), bending formers and guide shoes for corresponding tube diameters, adapter for tri-pod base, plastic case

Description	Wall thickness in.	Bending radius in.	lb	No.
ROBEND® 3000 Set			30.0	25001
1/2", 5/8", 3/4", 7/8", 1-1/8"				
Bending Formers for copper tube:				
O.D. 1/2"	0.05	1.77	5.0	25652
O.D. 5/8"	0.05	2.20	5.0	25616
O.D. 3/4"	0.05	3.15	5.0	25619
O.D. 7/8"	0.05	3.46	6.0	25622
O.D. 1"	0.06	4.41	5.0	25625
O.D. 1-1/8"	0.06	4.41	6.0	25626
Bending spray 5.3 oz. (150ml)			0.5	25120
Tripod			16.5	58182