

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



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.



Product Profile

FEATURES

- 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:

- soft and half-hard copper dia. 5/16" – 1-3/4" (8 – 42 mm)
max. wall thickness 0.06", (1.6 mm)
- soft aluminum dia. 5/16" – 1-1/8" (8 – 28 mm)
max. wall thickness 0.06", (1.6 mm)

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
3/8", 1/2", 3/4", 1"				12323
1/2", 5/8", 7/8", 1-1/8"			6.8	12324
1/2", 5/8", 7/8"				12325
Internal/External Deburring Tool for tubes dia. 1/8" - 1-1/2"			0.7	11006

Standard Riveted Expander Heads

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

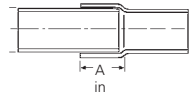
O.D.	Wall thickness max in.				A		No.
	Cu	Al	Fe	Stainless	in.	lb	
5/16"	0.04	0.04	0.04	0.04	0.24	0.5	11008
3/8"	0.04	0.04	0.04	0.04	0.29	0.5	11052
1/2"	0.05	0.05	0.05	0.04	0.43	0.5	11053
5/8"	0.05	0.05	0.05	0.04	0.55	0.5	11054
3/4"	0.05	0.05	0.05	0.04	0.71	0.5	11055
7/8"	0.05	0.05	0.05	0.04	0.71	0.5	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

- Hardened segments: **Tough and long-lasting**
- Bevel at segment ends: **Allows recalibration of unround tubes and fittings**
- Extra long segments: **Ensures proper coupling dimensions**
- 6 rivets and guide channels: **Guarantees perfect centering and uniform capillary gap**
- Smooth-running screw thread: **Change heads quickly**

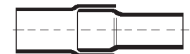


Fitting of tube ends

Diameter



Also suitable for uneven tubes



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)

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

- 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)

- Long lever arms: **Reduces the effort required**

11078

Tee Extractor

1

Tee Extractor Set

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



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

Description	L	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
UNIDRILL® 42, 3/8" - 1-5/8"		11mm	1.0	21575
Extractor Cam Pincer, 1/2" - 1-1/2"	5.9"		0.4	22080

Tee Extractor Parts

Forged hooks, specially polished, tempered and burnished. Nickel-plated bells.

Key features

- Uniform and proper material extraction without scratches or burrs
- Professional tee-extraction with optimum capillary gap
- Special hook design: Easy insertion into drilled hole
- Double vee block: Accurate and firm positioning
- Special trapezoid thread: Optimum force transmission



Hook & Bell

Hooks Only



Usage note for soft copper tubes, the use of an extractor support is recommended

.100 max wall thickness

O.D.	in.	Drill dia. mm	Ratchet size	lb	Tee Extractor No.	O.D.	lb	Extractor Hook No.
3/8"	0.04	6	11 mm	0.3	22060	3/8"	0.25	22260
1/2"	0.04	7	11 mm	0.4	22061	1/2"	0.25	22261
5/8"	0.04	8	11 mm	0.5	22016	5/8"	0.50	22216
3/4"	0.08	10	11 mm	0.5	22062	3/4"	0.50	22263
7/8"	0.08	12	11 mm	0.8	22063	7/8"	0.50	22264
1"	0.10	14	11 mm	1.1	22064	1"	0.50	22265
1-1/8"	0.10	15	11 mm	1.1	22065	1-1/8"	0.50	22266
1-1/4"	0.10	19	11 mm	1.6	22066	1-1/4"	0.60	22267
1-3/8"	0.10	22	11 mm	1.6	22035	1-3/8"	0.75	22235
1-1/2"	0.10	22	11 mm	1.6	22038	1-1/2"	0.70	22268
1-5/8"	0.10	26	11 mm	2.0	22068	1-5/8"	0.70	22270
1-3/4"	0.10	26	11 mm	2.0	22069	1-3/4"	0.25	22244
2"	0.10	30	3/4"	3.0	22050	2"	1.10	22246
2-1/8"	0.10	30	3/4"	3.5	22054	2-1/8"	1.20	22254

ROFLARE®

Compact Flaring Tool, foldable

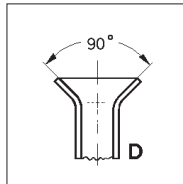
For producing precision 45° single flares on copper, brass, aluminum and precision steel tubes up to 0.04" (1 mm) in wall thickness. Ideal for mobile applications and for pipes in refrigeration and automotive (brakes) industries.

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

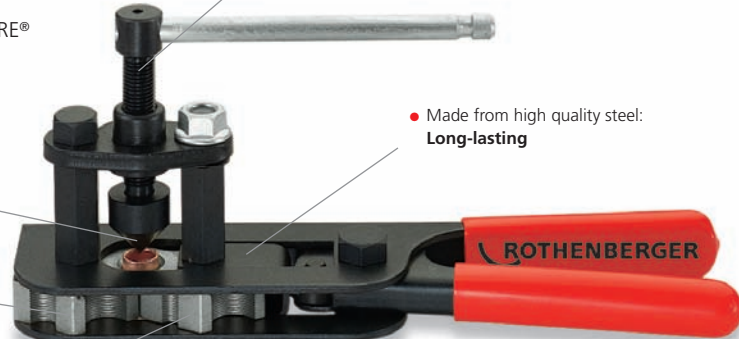
- Hardened and polished flare cone:
High quality flare sealing surface
- "Multiblock" multi-clamping calipers:
Firm, quick, off-center clamping of the tube and automatic self-centering; tubes don't slip



- Mold available in metric and English measurements:



- Special screw thread:
Allows smooth, efficient deformation of material
- Made from high quality steel:
Long-lasting



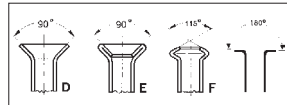
26036

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	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.



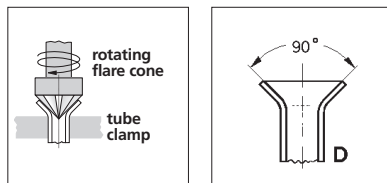
Description	O.D.	lb	No.
ROFORM® Set	6 - 8 - 10 - 12 - 14 - 16 mm	5.0	26711
ROFORM® Set	6 - 8 - 10 - 12 - 15 - 16 mm	5.0	26710
ROFORM® Set	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	5.0	26715
Carry Case			26089P

Flaring Tools

Universal 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



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

Professional Flaring Tool

For producing precision 45° single flares on copper tubes

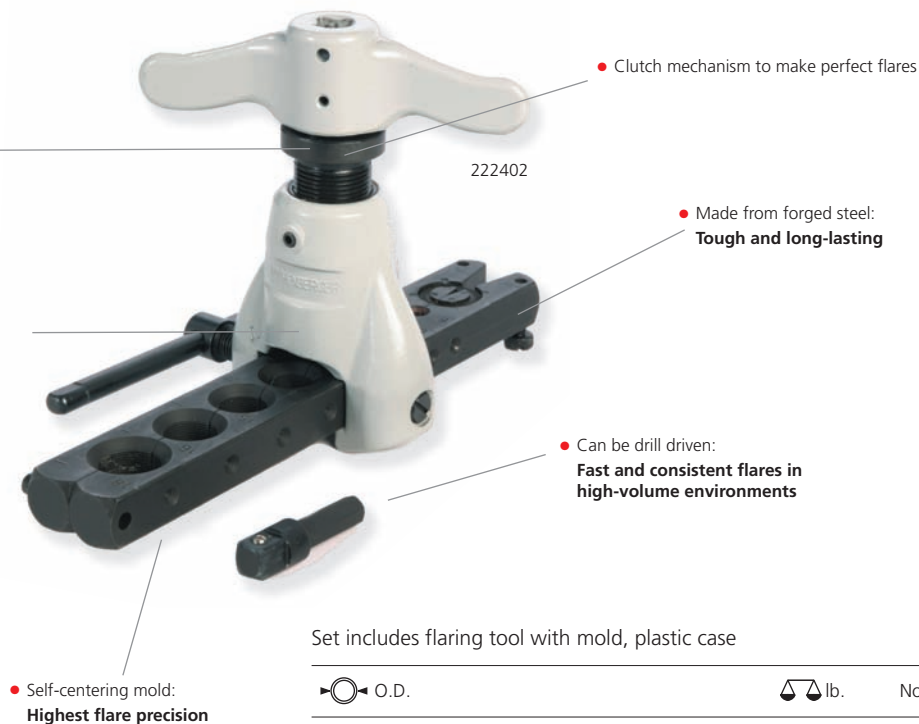
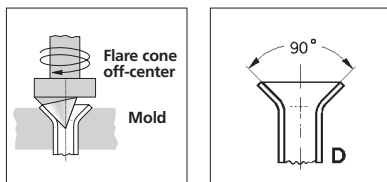
- Certified for R410A

- 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



Set includes flaring tool with mold, plastic case

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

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)

new



- Pliers with bayonet catch:
Faster change of bending formers

- Ergonomic design:
One handed operation

- Mechanical ratchet feed:
Rapid and exact bending

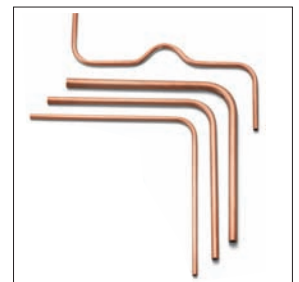
- Open bending frame:
Production of repeated alternate angled bends possible

- Compact design:
Exact bending even in restricted spaces



24134

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	24134
Ratcheting Handle Only		1.0	24130
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

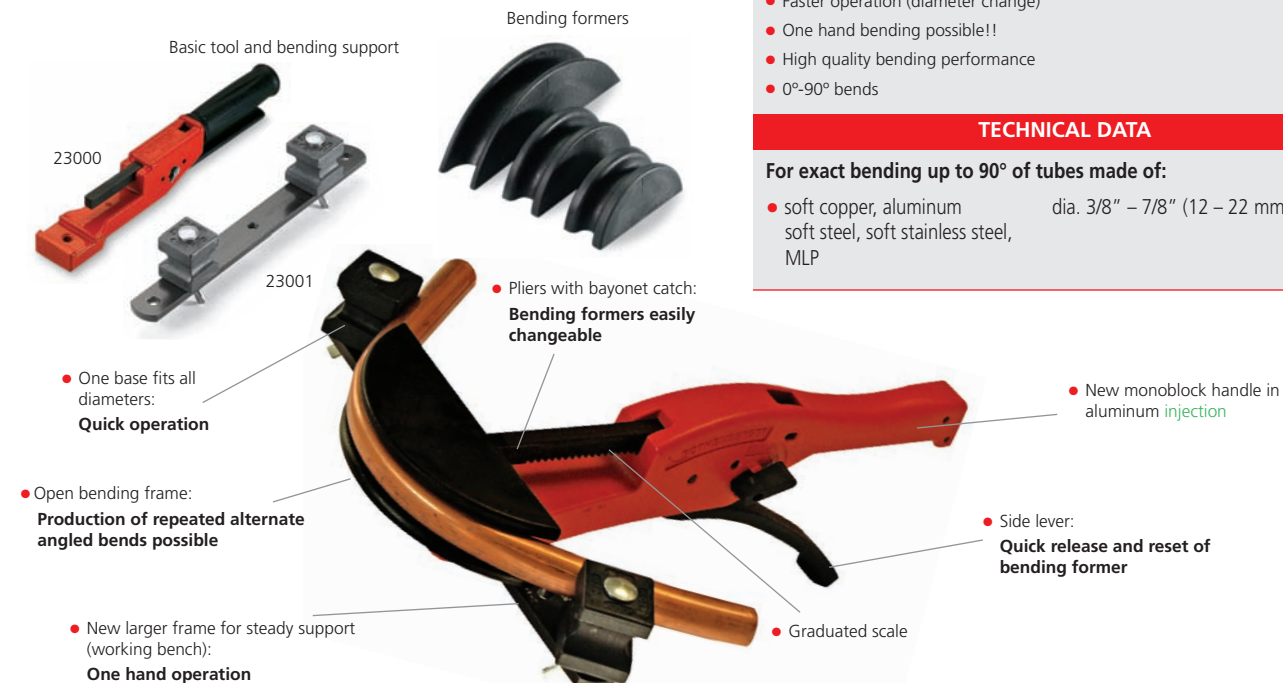


Benders

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TUBE BENDER MAXI

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



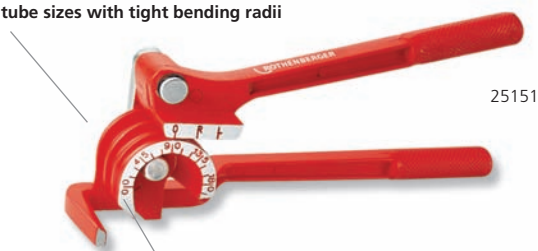
Set includes: basic tool (23000), bending support (23001), bending formers, and steel case



23022X

Description	O.D.	Radius	Max. in.	lb	No.
MAXI BENDER Set 3/8", 1/2", 5/8", 3/4", 7/8"				8.5	23022X
MAXI BENDER MSR Set 1/2", 3/4", 1", Viega 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"	1.38"	0.04	0.2	23010	
1/2"	1.38"	0.04	0.2	23011	
5/8"	1.93"	0.04	0.3	23012	
3/4"	2.91"	0.04	0.3	23013	
7/8"	3.43"	0.04	0.4	23014	

- Compact design:
Three tube sizes with tight bending radii



25151

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.	Bend Radius In.	lb	No.
MINIBEND	1/4", 5/16", 3/8"	(.98", .95", .91")	1.0	25151

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**



Standard Tube Benders

O.D.	R Radius in.	L	lb	No.
5/16"	0.95 (24mm)	12.0"	1.5	25131
5/8"	2.28 (58mm)	17.7"	4.0	25136



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

TUBE BENDER PRO

For bending 1/2" and 3/4" semi-hard and hard copper pipes

- Cast iron body for extended life
- Aluminum former for proper bends
- Glass reinforced polyamide shoe
- S.A.S. (self adjusting shoe). The adjustable former end ensures high pressure at the pipe-former contact area and correct guidance at tube entry section, contributing to perfect bends
- Rubber grip for easy operation
- Displayed in strap for hanging

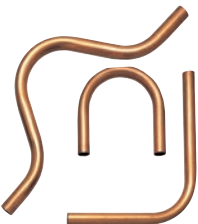


Description	O.D.	lb	No.
Tube Bender PRO	1/2"	6.0	25913
Tube Bender PRO	3/4"	6.0	25914

ROBEND® H+W PLUS

For bending semi hard & hard copper piping

Various bends possible



Vice bending



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 (32mm)	2.6	24551
ROBEND® H+W PLUS, 1/2"	0.04	1.50 (38mm)	2.5	24552
ROBEND® H+W PLUS, 5/8"	0.04	2.52 (64mm)	5.8	24516
ROBEND® H+W PLUS, 3/4"	0.04	3.19 (81mm)	8.5	24519
ROBEND® H+W PLUS, 7/8"	0.04	3.19 (81mm)	8.4	24522
Bending Spray, 5.3 oz. (150 ml)			0.5	25120

- 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
- Fork and former made of high quality forged aluminum:
Retains shape and is stable
- Bending former with base plate:
To be clamped on the vice for easy bending
- 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)

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

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)

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

- 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



Easy presetting of bending angle without use of tool



Description	Wall thickness in.	Bending radius in.	lb	No.	Guide Shoe	No.
ROBEND® 3000 Set 1/2", 5/8", 3/4", 7/8", 1", 1-1/8"			30.0			25001
Bending Formers set for copper tube (includes former and shoe):						
O.D. 1/2"	0.05	1.77 (45mm)	5.0	25652	ROLUB guide shoe	7620515
O.D. 5/8"	0.05	2.20 (56mm)	5.0	25616	ROLUB guide shoe	7620517
O.D. 3/4"	0.05	3.15 (80mm)	5.0	25619	ROLUB guide shoe	7620520
O.D. 7/8"	0.05	3.46 (88mm)	6.0	25622	ROLUB guide shoe	7620521
O.D. 1"	0.06	4.41 (112mm)	5.0	25625	ROLUB guide shoe	7620522
O.D. 1-1/8"	0.06	4.41 (112mm)	6.0	25626	ROLUB guide shoe	7620523
Bending spray 5.3 oz. (150ml)			0.5	25120		
Tripod			16.5	58182		

