

Expanders

1 ROCAM® EXPANDER Power Torque

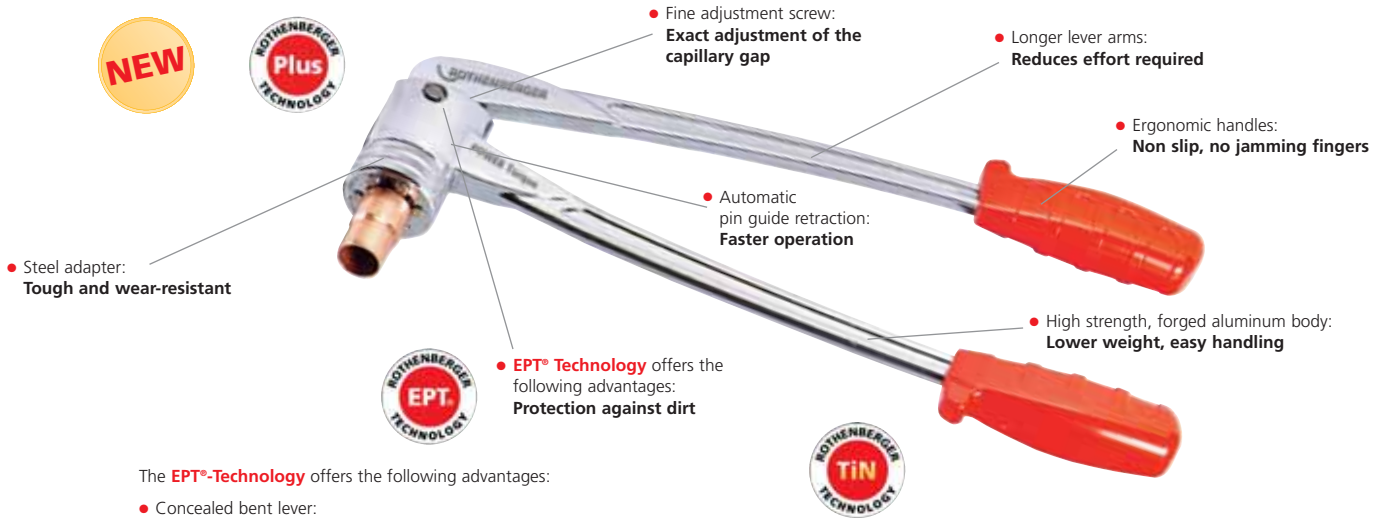
For expanding, reducing and calibrating tubes made out of

- 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)
- soft precision steel dia. 5/16" – 1-1/8" (8 – 28 mm)
max. wall thickness 0.06" (1.6 mm)
- soft stainless steel dia. 5/16" – 7/8" (8 – 22 mm)
max. wall thickness 0.04" (1.0 mm)

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

Key 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
- From the pioneer of tube expansion techniques and the leading manufacturer of expanders for more than 35 years



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

- Concealed bent lever:
 - Protection against dirt
 - Protection against mechanical damage
- Optimized force transmission:
 - Ergonomic, highly optimized force flow in relation to the hand force of the user
 - Optimized operating principle reduces effort

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 with steel: **Saves effort**
- Good chemical resistance: **Good corrosion protection**
- Universal wear resistance layer: **Long-lasting**



ROCAM® EXPANDER Power Torque Set

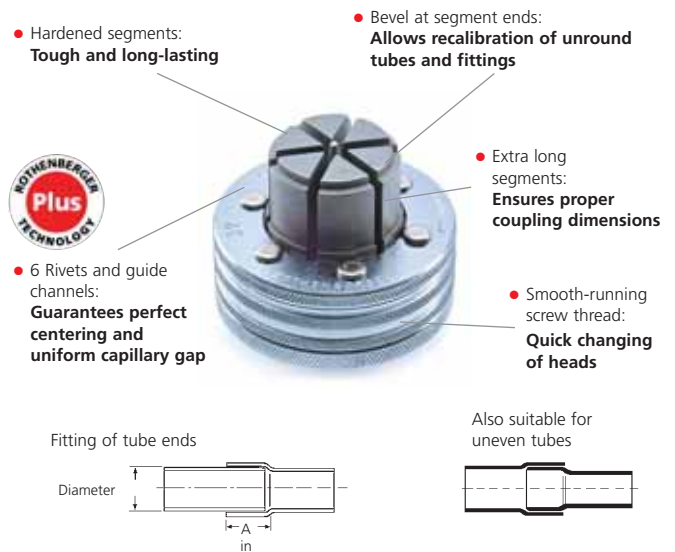
Includes: ROCAM® EXPANDER Power Torque (12000) with riveted expander heads, internal and external deburrer (11006), steel case.

	O.D.	lb	No.	
	1/2", 5/8", 7/8", 1-1/8"	6.8	12324	
Description	Max. O.D.	Max.	lb	
ROCAM Expander tool only	1-3/4"	0.06"	1.9	12000

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	0.3	11008
3/8"	0.04	0.04	0.04	0.04	0.29	0.3	11052
1/2"	0.05	0.05	0.05	0.04	0.43	0.3	11053
5/8"	0.05	0.05	0.05	0.04	0.55	0.3	11054
3/4"	0.05	0.05	0.05	0.04	0.71	0.3	11055
7/8"	0.05	0.05	0.05	0.04	0.71	0.3	11056
1"	0.06	0.06	0.06	-	0.62	0.4	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"	0.70	11006



GRADUATED EXPANDER A1

For expanding, reducing and calibrating tubes made out of

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

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

- 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



Special ratchet (27181)

- Long lever arms: Reduces the effort required

EXPANDER A 1

Includes: Graduated expander with handle, without special ratchet

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		27181

Tee Extractors

1 For producing tees on tubes made of soft, semi-hard and hard copper, aluminum and precision steel
 dia. 3/8 – 2-1/8" (10 – 54 mm)
 max. wall thickness 2.5 mm

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



• Simple, fast and economical operation,
 Example: only 21 seconds for a tee-extraction of dia. 3/4" inches

• UNIDRILL Automatic 42:
Exact drilling

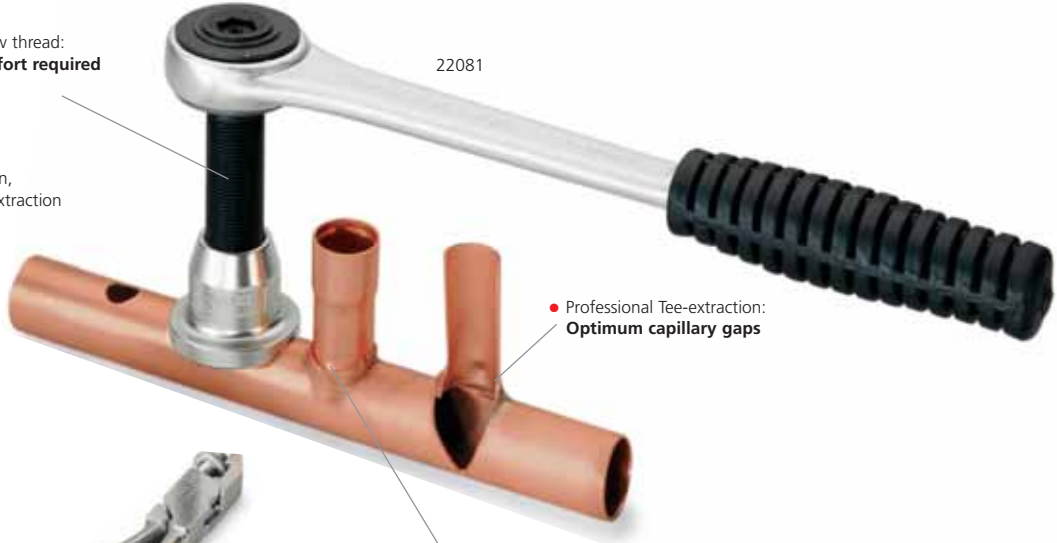


21575



• Extractor cam pincer:
Fixing the insertion depth

22080



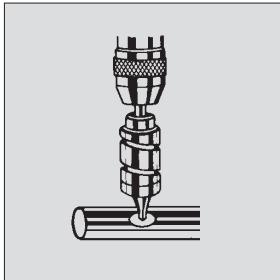
22081

• Special screw thread:
Reduces effort required

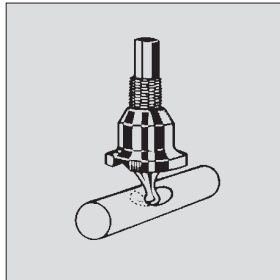
• Professional Tee-extraction:
Optimum capillary gaps

• Cam pincer for fixing insertion depth:
Optimum positioning

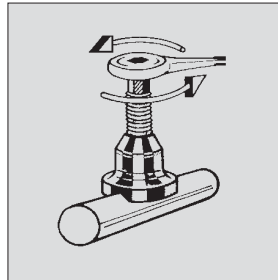
Precise drilling without a center punch - drill stop prevents over sizing or damage to tube wall



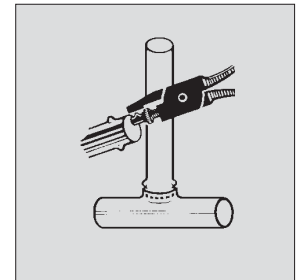
Insert the extractor hook into the drilled hole and screw the bell firmly to the tube wall.



Turn extractor with the ratchet to the left, at the same time make sure it's firmly in place.



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



Simply calibrate the tee diameter on the UNIDRILL Automatic and the drilled hole diameter will automatically correspond to the required extractor hook.

Tee-Extractor Set

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

⌀ O.D.	⚖ lb	No.
1/2", 5/8", 7/8", 1-1/8"	8.3	22124



Extractor Hooks

Key features

- Uniform and proper material manipulation 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"	3.1	22050
2-1/8"	0.10	30	3/4"	3.1	22054

- Special trapezoid thread:
Optimum force transmission



- Double vee block:
Accurate and firm positioning for exact 90° branches

- Special hook design; forged and tempered with special polish:
Easy insertion into drilled hole
Burr-free extraction

UNIDRILL Automatic 42

- High speed steel drill
Rapid and burr-free drilling
- Special drill tip
Precise location without need for center punch
- Drill hole scale
Calibrated drill dia. corresponds to the correct 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 Ratchet

Chrome vanadium steel;
fine-toothed and right/left
reversible



for tee sizes	ratchet size	lb	No.
3/8" - 1-3/4"	11 mm	1.0	22081
2" - 4-1/4"	3/4"	2.6	27181

Extractor Clamp Pincer

- Includes: Clamp pliers
without extractor bell
- With quick release lever



O.D.	L	lb	No.
1-1/8" - 1-5/8"	14.6"	3.1	22086

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

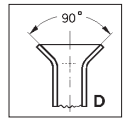


O.D. Main Tube	O.D. Branch Tube	lb	No.
1/2"	3/8"	0.3	22170
5/8"	1/2"	0.4	22153
3/4"	5/8"	0.6	22172
7/8"	3/4"	0.6	22157
1"	7/8"	0.7	22174
1-1/8"	1"	0.7	22158

Flaring Tools

1 Professional Reeling Flaring Tool

For producing precision 45° single flares on copper tubes



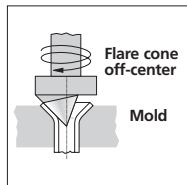
- Spring-loaded slide coupling:
No reduction in wall thickness



- Made from forged steel:
Tough and long-lasting

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

High quality flares



- Self-centering mold:
Highest flare precision

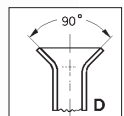
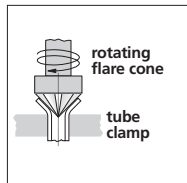
Set includes reeling flaring tool with mold, plastic case

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

Universal Flaring Tool

For producing precision 45° single flares on copper tubes

- Self-centering tube clamp for all diameters:
Universal application and highest flare precision:
- Hardened flare cone with special geometry:
Controlled flaring without tearing, forming perfect surfaces



Set includes universal flaring tool for tube diameters 3/16" – 5/8" (4 – 16 mm), plastic case

O.D.	No.
3/16" - 5/8"	222601

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.

With the ROFLARE double flare attachment, double and 180° flares are also possible.

- Hardened and polished flare cone:
High quality flare sealing surface

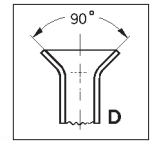
- "Multiblock" multi-clamping callipers:
Firm, quick off-center clamping of the tube and automatic self-centering



- Mold available in metric and English measurements:
Tubes don't slip

- Special screw thread:
Allows proper, efficient handling of material

- Made from high quality steel:
Lightweight and long-lasting



26036

ROFLARE

Includes: ROFLARE basic tool with multiblock

Description	↻ O.D.	⚖ lb	No.
Single	6 - 8 - 10 - 12 - 14 - 16 mm	3	26038
Double	6 - 8 - 10 - 12 - 15 - 16 mm	3	26022
Single	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	3	26036
Single/Double	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	3	26715



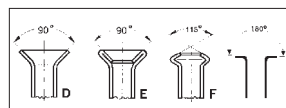
ROFORM Set

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	26711
ROFORM Set	6 - 8 - 10 - 12 - 15 - 16 mm	5	26710
ROFORM Set	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	5	26717

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	26023
Double	1/16", 1/4", 5/16", 3/8", 1/2"	5	26034
Adapter for 180° flares		5	26039

One Handed Benders

1

TUBE BENDER

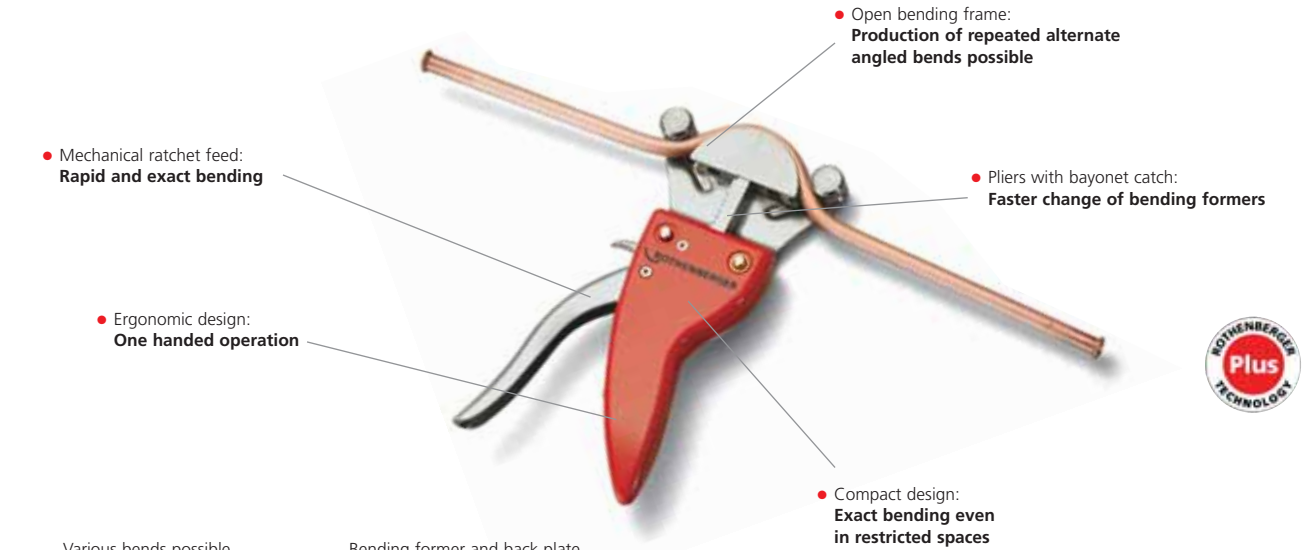
One handed bender for exact bending up to 90° of tubes made of

soft copper and aluminum
soft, non-coated copper tube
soft precision steel tube

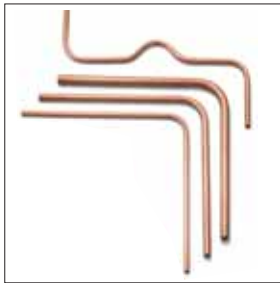
dia. 3/16" – 1/2" (4.75 – 12 mm)
dia. 3/16" – 1/2" (4.75 – 12 mm)
dia. 3/16" – 3/8" (4.75 – 10 mm)

Key features

- Specially designed for small tube diameters:
Suitable for use in refrigeration, climate control, oil supply as well as automobile, hydraulic, and air pressure systems.
- Eliminates purchase and storage of manufactured fittings:
Quick return on investment



Various bends possible



Bending former and back plate



24114

TUBE BENDER Set

Set includes: Basic tool, bending formers, steel case

O.D.	lb	No.
1/4", 5/16", 3/8", 1/2"	7.75	24114
Basic tool without bending formers	1	24000

TUBE BENDER Bending Formers

O.D.	lb	No.
3/16"	1	24001
1/4"	1	24002
5/16"	1	24003
3/8"	1	24006
1/2"	1	24008

Bending formers



Back plates

TUBE BENDER MAXI

For exact bending up to 90° of tubes made of

soft copper and aluminum	dia. 3/8" – 7/8" (10 – 22 mm)
soft, non-coated copper	dia. 3/8" – 5/8" (10 – 18 mm)
soft precision steel	dia. 3/8" – 7/8" (10 – 22 mm)
thin-walled soft stainless steel	dia. 3/8" – 5/8" (10 – 18 mm)

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

Key features

- Eliminates costs and storage of fittings
- 50% less soldering saves materials
- Increases safety by reducing number of joints
- Reduced labor time
- Mechanical ratchet feed

- Universal supports:
For bending of copper or non-coated tubes

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

- Plastic bending formers and supports with low friction:
Optimum bending results

- Pliers with bayonet catch:
Bending formers easily changeable

- Smooth-running feed lever:
Ideal in restricted spaces and for one handed operation

- Side lever:
Quick release and reset of bending former

- Basic body made of hard diecast:
Tough and long-lasting



TUBE BENDER MAXI Set



23022

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

⊘ O.D.	⚖ lb	No.
3/8" - 1/2" - 5/8" - 3/4" - 7/8"	8.5	23022
Basic tool without bending support	2.10	23000
Bending support with R/L formers	1.15	23001

TUBE BENDER MAXI Bending Formers

for copper and precision steel tubes

Basic tool and bending support



Bending formers



⊘ O.D.	⊘ Max. in.	⚖ lb	No.
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	0.25	23013
7/8"	0.04	0.4	23014

Standard Tube Benders

1



Key features

- Bending radius display of 0 - 180° on former: **Exact bending**
- Clamp mechanism for better hold of the tube: **Enables the bending of even short tube pieces**
- Light construction: **Fatigue-free hand operation**

Standard Two Handed Bender 180°

For exact bending up to 180° of tubes made of soft copper, aluminum and precision steel.

O.D.	R Radius in.	L ↔	⚖ lb	No.
1/4"	.71	12	1.25	25140
5/16"	.95	12	1.5	25131
3/8"	1.18	15.4	2	25141
1/2"	1.65	15.4	3.75	25142
5/8"	2.28	17.7	4	25136



MULTIBENDER

Universal hand bender provides bending of 1/2", 5/8", 3/4", and 7/8" O.D. with 1 tool. Ideal for copper and light grade stainless steel tubing.

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

- Compact design:
Three tube sizes with tight bending radii



- 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, precision steel

- 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

Key features

- 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
5/8"	0.75	25186

ROBEND® H+W PLUS

For exact cold 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) |

Key features

- Eliminates purchase and storage of fittings
- 50% less soldering saves materials
- Increases safety by reducing number of joints
- Patented, ANTI-STICK ROLUB system



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

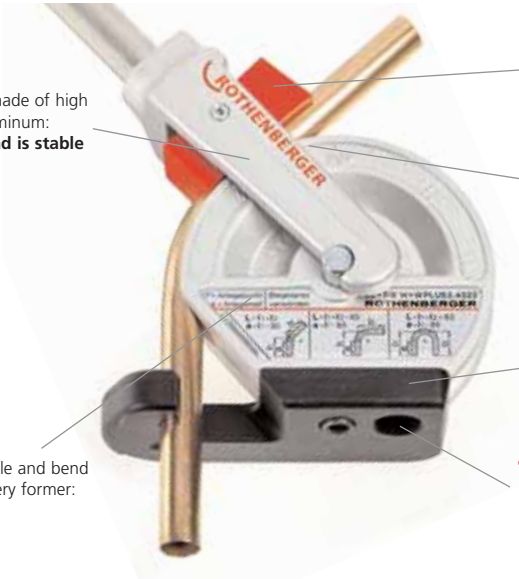
- Optimum combination of ROLUB guide shoe and bending former:
Bending without deformation and wrinkles with reduced effort

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

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

- 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



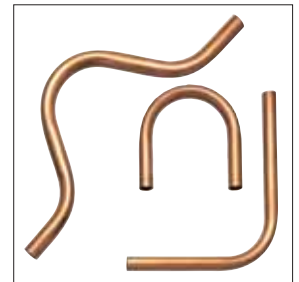
Vice bending



Suitable for construction sites



Various bends possible



ROBEND® H+W PLUS Set

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

O.D.	Max in.	lb	No.
1/2", 5/8", 7/8"	0.04	30.3	24504

ROBEND® H+W PLUS Bender

O.D.	Max. in.	R Radius in.	lb	No.
3/8"	0.04	1.26	9	24551
1/2"	0.04	1.50	3	24552
5/8"	0.04	2.52	15	24516
3/4"	0.04	3.19	13	24519
7/8"	0.04	3.19	11	24522



Power Benders

1

ROBEND® 3000

Tough, portable power bender

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

Key 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 ANTI-STICK SYSTEM

- Tool-free presetting of bending angle:
Exact bending

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:
Well-proven for use on construction sites

- Automatic switch-off when preset bending angle is obtained:
Fast batch production possible



ROBEND® 3000 Bending Set

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	O.D.	lb	No.
ROBEND 3000 Set	1/2", 5/8", 3/4", 7/8", 1-1/8"	30	25001
Bending spray 150ml		0.5	25120
Tripod			58182



Bending former with ROLUB guide shoe

ROBEND® 3000 Bending Formers

O.D.	Wall thickness in.	Bending radius in.	lb	No.
For copper tube				
1/2"	0.05	1.77	5	25652
5/8"	0.05	2.20	5	25616
3/4"	0.05	3.15	5	25619
7/8"	0.05	3.46	6	25622
1"	0.06	4.41	5	25625
1-1/8"	0.06	4.41	6	25626

ROBEND® 3000 RB Rebar Bender

Tough, portable power bender for quick, effortless bending of reinforced concrete steel.

Bending with continuous high accuracy using angle preset and automatic switch-off. For bending reinforced concrete steel up to 5/8" (1.6 mm) diameter.

- Bending of various soft and hard tube materials up to 3/4" (30 mm):
Large application area

- Bending former and support roller made of high quality steel:
Tough and long-lasting

- Tool-free presetting of the bending angle:
Exact bending

- Automatic switch-off when preset bending angle is obtained:
Fast batch production possible

- Powerful 1010 W motor:
Well-proven for use on construction sites



Easy presetting of bending angle without use of tool



- Adapter suitable for bending formers and ROLUB guide shoes from the ROBEND® 3000 Program:
Bending of tubes and reinforced steel with one tool



ROBEND® 3000 RB Bending Set

Set includes basic unit, bending formers, plastic case.

Description	Nominal diameter	lb	No.
ROBEND 3000 RB Set	3/8", 1/2", 5/8"	34.4	7647039

ROBEND® 3000 RB Bending Formers

Set includes: bending former and support roller

Model name	Nominal diameter	lb	No.
ROBEND 3000 RB bending former	3/8"	1.8	25630
ROBEND 3000 RB bending former	1/2"	1.8	25631
ROBEND 3000 RB bending former	5/8"	2.0	25632

