

# 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.

Description	Max. O.D.	Max.	lb	No.
ROCAM® Expander tool only	1-3/4"	0.06"	3.8	<b>12000</b>
ROCAM® Expander Set				
3/8", 1/2", 5/8", 3/4", 7/8", 1-1/8"			8.0	<b>12318</b>
3/8", 1/2", 3/4", 1"				<b>12323</b>
1/2", 5/8", 7/8", 1-1/8"			6.8	<b>12324</b>
1/2", 5/8", 7/8"				<b>12325</b>
Internal/External Deburring Tool for tubes dia. 1/8" - 1-1/2"			0.7	<b>11006</b>

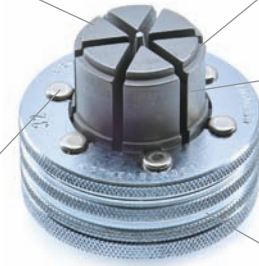


## Standard Riveted Expander Heads

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

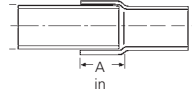
O.D.	Wall thickness max in.				A in.	lb	No.
	Cu	Al	Fe	Stainless			
5/16"	0.04	0.04	0.04	0.04	0.24	0.5	<b>11008</b>
3/8"	0.04	0.04	0.04	0.04	0.29	0.5	<b>11052</b>
1/2"	0.05	0.05	0.05	0.04	0.43	0.5	<b>11053</b>
5/8"	0.05	0.05	0.05	0.04	0.55	0.5	<b>11054</b>
3/4"	0.05	0.05	0.05	0.04	0.71	0.5	<b>11055</b>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

- 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**

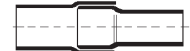


Fitting of tube ends

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)

- 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	<b>11078</b>
Ratchet Handle	3.0	<b>27181</b>

# Tee Extractor

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**

• UNIDRILL Automatic 42:  
**Exact drilling**

• Professional Tee-extraction:  
**Optimum capillary gaps**

• Dimple limits insertion depth:  
**Optimum positioning**

• Extractor Cam Pincer:  
**Limits insertion depth**



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

Product Profile	
FEATURES	
• Extractions on installed tubes: <b>Reduces installation time and materials</b>	
• Producing branches on tubes: <b>Reduces the use of T-pieces</b>	
• Compact design: <b>Suitable for making tees even in tight spaces</b>	
TECHNICAL DATA	
<b>For producing tees on tubes made of:</b>	
• soft copper, hard copper and aluminum	dia. 3/8 – 2-1/8" (10 – 54 mm) max. wall thickness .1" (2.5 mm)

Description	L	ratchet size	lb	No.
Tee Extractor Set 1/2", 5/8", 7/8", 1-1/8"			8.3	<b>22124</b>
Extractor Ratchet, 3/8" - 1-3/4"		11mm	1.0	<b>22081</b>
Extractor Ratchet, 2" - 4-1/4"		3/4"	2.5	<b>27181</b>
UNIDRILL® 42, 3/8" - 1-5/8"		11mm	1.0	<b>21575</b>
Extractor Cam Pincer, 1/2" - 1-1/2"	5.9"		0.4	<b>22080</b>

## 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	<b>22060</b>	3/8"	0.25	<b>22260</b>
1/2"	0.04	7	11 mm	0.4	<b>22061</b>	1/2"	0.25	<b>22261</b>
5/8"	0.04	8	11 mm	0.5	<b>22016</b>	5/8"	0.50	<b>22216</b>
3/4"	0.08	10	11 mm	0.5	<b>22062</b>	3/4"	0.50	<b>22263</b>
7/8"	0.08	12	11 mm	0.8	<b>22063</b>	7/8"	0.50	<b>22264</b>
1"	0.10	14	11 mm	1.1	<b>22064</b>	1"	0.50	<b>22265</b>
1-1/8"	0.10	15	11 mm	1.1	<b>22065</b>	1-1/8"	0.50	<b>22266</b>
1-1/4"	0.10	19	11 mm	1.6	<b>22066</b>	1-1/4"	0.60	<b>22267</b>
1-3/8"	0.10	22	11 mm	1.6	<b>22035</b>	1-3/8"	0.75	<b>22235</b>
1-1/2"	0.10	22	11 mm	1.6	<b>22038</b>	1-1/2"	0.70	<b>22268</b>
1-5/8"	0.10	26	11 mm	2.0	<b>22068</b>	1-5/8"	0.70	<b>22270</b>
1-3/4"	0.10	26	11 mm	2.0	<b>22069</b>	1-3/4"	0.25	<b>22244</b>
2"	0.10	30	3/4"	3.0	<b>22050</b>	2"	1.10	<b>22246</b>
2-1/8"	0.10	30	3/4"	3.5	<b>22054</b>	2-1/8"	1.20	<b>22254</b>

## ROFLARE®

### Compact Flaring Tool, foldable

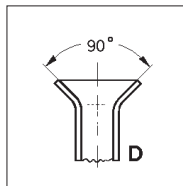
For producing precision 45° single flares on copper, brass, aluminum and precision steel tubes up to 0.04" (1 mm) in wall thickness. Ideal for mobile applications and for pipes in refrigeration and automotive (brakes) industries.

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**

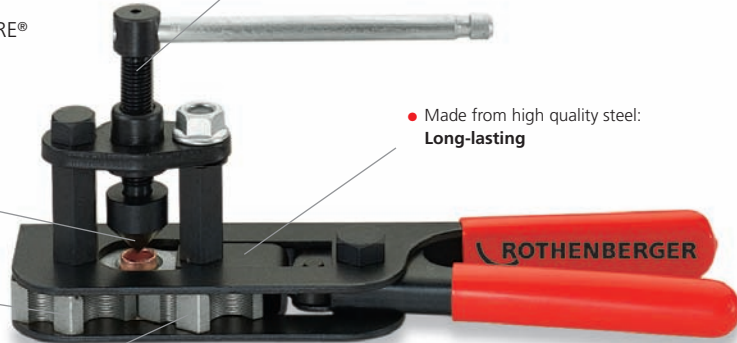


- Mold available in metric and English measurements:



- Special screw thread:  
**Allows smooth, efficient deformation of material**

- Made from high quality steel:  
**Long-lasting**



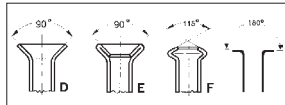
26036

### ROFLARE®

Includes: ROFLARE® basic tool with multiblock

Description	O.D.	lb	No.
Single	6 - 8 - 10 - 12 - 14 - 16 mm	3.0	<b>26038</b>
Double	6 - 8 - 10 - 12 - 15 - 16 mm	3.0	<b>26022</b>
<i>requires 26023 to create double flares</i>			
Single	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	3.0	<b>26036</b>
37° Single	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	3.0	<b>26032</b>
Single/Double	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	3.0	<b>26033</b>
<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	<b>26034</b>
Adapter for 180° flares		5.0	<b>26039</b>



### 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	<b>26711</b>
ROFORM® Set	6 - 8 - 10 - 12 - 15 - 16 mm	5.0	<b>26710</b>
ROFORM® Set	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	5.0	<b>26715</b>
Carry Case			<b>26089P</b>

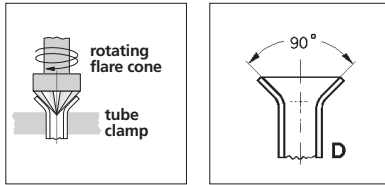
# Flaring Tools

1

## 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**



- Ergonomic handle:  
**Comfortable use**

222601

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

## Professional Flaring Tool

For producing precision 45° single flares on copper tubes

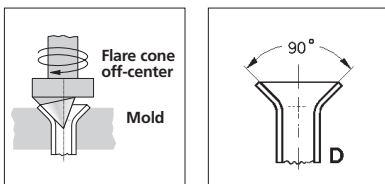
- Certified for R410A

- 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



- Self-centering mold:  
**Highest flare precision**



- Clutch mechanism to make perfect 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

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

## TUBE BENDER

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

Product Profile
<b>FEATURES</b>
<ul style="list-style-type: none"> <li>Special adjustment for small pipe diameters: <b>Use in refrigeration, air-conditioning, oil supply and automotive, as well as pneumatic or hydraulic systems</b></li> <li>Mechanical ratchet feed: <b>Rapid and precise bending</b></li> <li>Toothed rack with bayonet catch: <b>Bending formers are quick and easy to change</b></li> </ul>

TECHNICAL DATA
<b>One handed bender for exact bending up to 90° of tubes made of:</b> <ul style="list-style-type: none"> <li>soft copper and aluminum      dia. 3/16" – 1/2" (4.75 – 12 mm)</li> </ul>

**new**

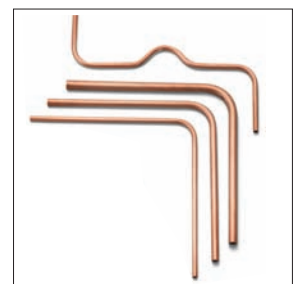
- Ergonomic design: **One handed operation**
- Mechanical ratchet feed: **Rapid and exact bending**
- Compact design: **Exact bending even in restricted spaces**
- Pliers with bayonet catch: **Faster change of bending formers**
- Open bending frame: **Production of repeated alternate angled bends possible**



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	<b>24134</b>
Ratcheting Handle Only		1.0	<b>24130</b>
Bending Former	3/16"	1.0	<b>24001</b>
Bending Former	1/4"	1.0	<b>24002</b>
Bending Former	5/16"	1.0	<b>24003</b>
Bending Former	3/8"	1.0	<b>24006</b>
Bending Former	1/2"	1.0	<b>24008</b>

Various bends possible



Bending formers

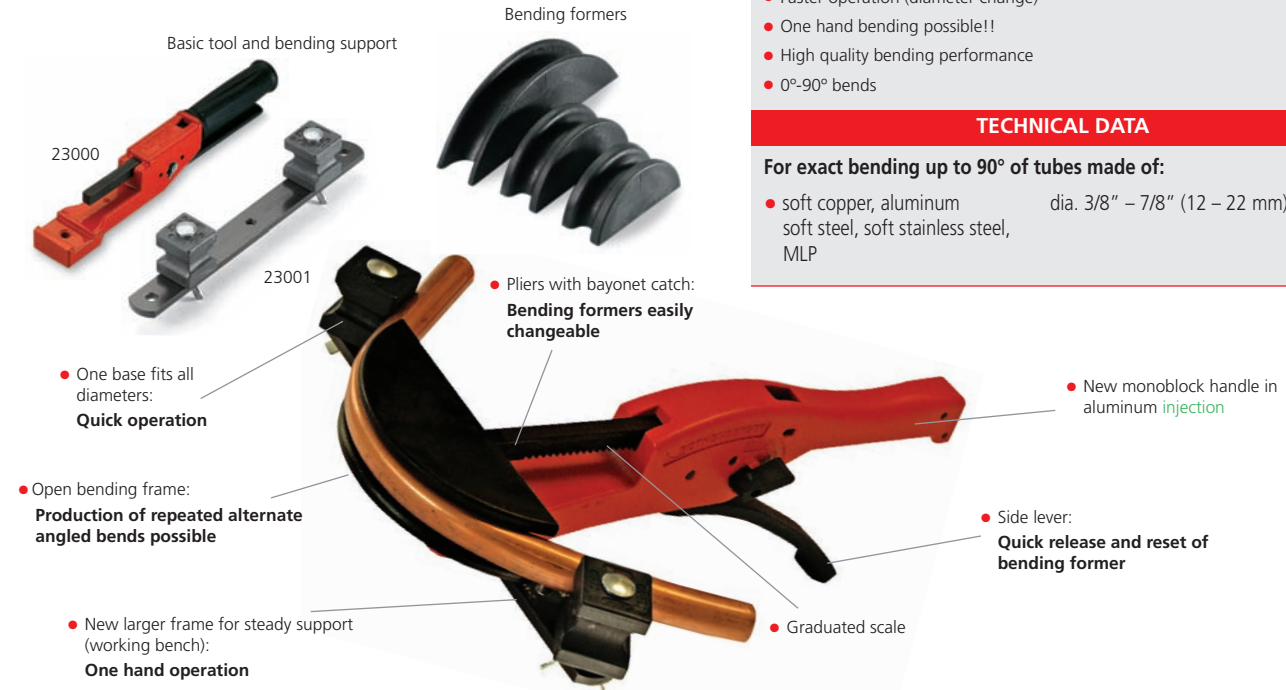


# Benders

1

## TUBE BENDER MAXI

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



Product Profile	
<b>FEATURES</b>	
<ul style="list-style-type: none"> <li>• New improved ergonomic design</li> <li>• Faster operation (diameter change)</li> <li>• One hand bending possible!!</li> <li>• High quality bending performance</li> <li>• 0°-90° bends</li> </ul>	
<b>TECHNICAL DATA</b>	
<b>For exact bending up to 90° of tubes made of:</b>	
<ul style="list-style-type: none"> <li>• soft copper, aluminum</li> <li>• soft steel, soft stainless steel, MLP</li> </ul>	dia. 3/8" – 7/8" (12 – 22 mm)

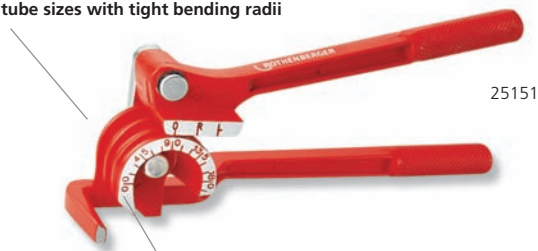
Set includes: basic tool (23000), bending support (23001), bending formers, and steel case



23022X

Description	O.D.	Radius	Max. in.	lb	No.
MAXI BENDER Set 3/8", 1/2", 5/8", 3/4", 7/8"				8.5	<b>23022X</b>
MAXI BENDER MSR Set 1/2", 3/4", 1", Viega FostaPex				8.5	<b>23064</b>
MAXI BENDER Tool Only				2.1	<b>23000</b>
MAXI BENDER Support with R/L Formers				1.2	<b>23001</b>
Formers for copper/aluminum:	3/8"	1.38"	0.04	0.2	<b>23010</b>
	1/2"	1.38"	0.04	0.2	<b>23011</b>
	5/8"	1.93"	0.04	0.3	<b>23012</b>
	3/4"	2.91"	0.04	0.3	<b>23013</b>
	7/8"	3.43"	0.04	0.4	<b>23014</b>

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

## 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.
5/16"	0.95 (24mm)	12.0"	1.5	<b>25131</b>
5/8"	2.28 (58mm)	17.7"	4.0	<b>25136</b>



## 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	<b>90614</b>

## 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

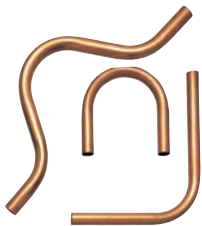


Description	O.D.	lb	No.
Tube Bender PRO	1/2"	6.0	<b>25913</b>
Tube Bender PRO	3/4"	6.0	<b>25914</b>

## 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	<b>24504</b>
ROBEND® H+W PLUS, 3/8"	0.04	1.26 (32mm)	2.6	<b>24551</b>
ROBEND® H+W PLUS, 1/2"	0.04	1.50 (38mm)	2.5	<b>24552</b>
ROBEND® H+W PLUS, 5/8"	0.04	2.52 (64mm)	5.8	<b>24516</b>
ROBEND® H+W PLUS, 3/4"	0.04	3.19 (81mm)	8.5	<b>24519</b>
ROBEND® H+W PLUS, 7/8"	0.04	3.19 (81mm)	8.4	<b>24522</b>
Bending Spray, 5.3 oz. (150 ml)			0.5	<b>25120</b>

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

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,<br>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,<br>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<br>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,<br>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			<b>25001</b>
Bending Formers set for copper tube (includes former and shoe):						
O.D. 1/2"	0.05	1.77 (45mm)	5.0	<b>25652</b>	ROLUB guide shoe	<b>7620515</b>
O.D. 5/8"	0.05	2.20 (56mm)	5.0	<b>25616</b>	ROLUB guide shoe	<b>7620517</b>
O.D. 3/4"	0.05	3.15 (80mm)	5.0	<b>25619</b>	ROLUB guide shoe	<b>7620520</b>
O.D. 7/8"	0.05	3.46 (88mm)	6.0	<b>25622</b>	ROLUB guide shoe	<b>7620521</b>
O.D. 1"	0.06	4.41 (112mm)	5.0	<b>25625</b>	ROLUB guide shoe	<b>7620522</b>
O.D. 1-1/8"	0.06	4.41 (112mm)	6.0	<b>25626</b>	ROLUB guide shoe	<b>7620523</b>
Bending spray 5.3 oz. (150ml)			0.5	<b>25120</b>		
Tripod			16.5	<b>58182</b>		

