TUBING TOOLS

ERGONOMIC TOOLS FOR CUTTING, FORMING and BENDING





BTC200 BLACKMAX® MINI TUBE CUTTER

- Cutting Range: 1/8" 7/8" (3-22 mm) O.D.
- Quick release pin for fast replacement of cutting wheels
- Chromed, hardened cutting wheel
- Patented Set-N-Cut™ spring-loaded center groove rollers for fast, automatic cuts
- Provides a smooth cut, even for slightly deformed tube
- Soft/Hard cutting settings
- Durable aluminum and rubber knob

BTCXC1 Chrome Plated Cutting Wheel **BTCXCT1** Titanium Coated Cutting Wheel BTCXP1 Quick Release Pin



BTC300 BLACKMAX® TUBE CUTTER

- Cutting Range: 3/16" -1-1/4" (5 32 mm) O.D.
- Two quick-change, chromed, hardened cutting wheels
- Enclosed feed screw eliminates clogging, jamming
- Set-N-Cut™ spring-loaded cutting wheel for a perfect cut every time

BTCXC1 Chrome Plated Cutting Wheel **BTCXCT1** Titanium Coated Cutting Wheel

BTCXP1 Quick Release Pin



BTC200R BLACKMAX® MINI RATCHET TUBE CUTTER

- Cutting Range: 1/8" 7/8" (3-22 mm) O.D.
- Excellent for small tube, confined spaces
- Use with or without ratchet handle
- Quick release pin for fast replacement of cutting wheels
- Chromed, hardened cutting wheel
- Patented Set-N-Cut[™] spring-loaded center groove rollers for fast, automatic cuts.
- Provides a smooth cut, even for slightly deformed tube
- Soft/Hard cutting settings
- Durable aluminum and rubber knob

BTCXR Plastic Ratchet **BTCXP1** Quick Release Pin



BTC400 BLACKMAX® HEAVY DUTY TUBE CUTTER

- Cutting Range: 1/4" -1-1/4" (6 32 mm) O.D.
- For brass, copper, aluminum, stainless tube and electrical conduit
- Patented Set-N-Cut[™] technology for the perfect cut every
- Spring-loaded rollers for easy, precision cut
- Heavy duty performance from lightweight aluminum forged body
- Quick change cutting wheel
- · Titanium finish cutting wheel included

BTCXB Cutting Wheel Bearing
BTCXC2 Chrome Plated Cutting Wheel **BTCXCT2** Titanium Coated Cutting Wheel **BTCXP2** Quick Release Pin

BTC500 BLACKMAX® LARGE TUBE CUTTER

- Cutting Range: 3/8" -2-5/8" (10 67 mm) O.D.
- Patented Set-N-Cut[™] Technology for the perfect cut every time
- Two hardened cutting wheels with guick-change pin design
- Enclosed feed screw eliminates clogging and jamming
- Four grooved rollers for precise tube rotation
- Rapid adjustment with quick-slide feed mechanism
- Durable aluminum/rubber knob

BTCXB Optional Cutting Wheel Bearing BTCXC2 Chrome Plated Cutting Wheel BTCXCT2 Titanium Coated Cutting Wheel **BTCXP3** Quick Release Pin





BLACKMAX® TUBE BENDERS (IMPERIAL)					
ltem		Description			
	BTB300		Tube Bender Set includes 7 benders and all parts listed below:		
		RI	PLACEMENT PARTS		
	Mandrels	Item	Tube I.D.	Mandrel Color	
		BTBX14	1/4″ O.D.	Chrome	
		BTBX516	5/16″ O.D.	Copper	
		BTBX38	3/8″ O.D.	Red	
rial		BTBX12	1/2″ O.D.	Yellow-Orange	
Imperial		BTBX58	5/8″ O.D.	Blue	
		BTBX34	3/4″ O.D.	Green	
		BTBX78	7/8″ O.D.	Red-Violet	
		BTBXH	Ratchet Too	I	
	BTBXA1		1/4"-3/8" Shoe Arm		
	BTBXA2		1/2"-7/8" Shoe Arm		
		BTBXR1	Reverse Bei	nder Mandrel Arm	
		BTBXR2	Reverse Bei	nder Shoe Arm	

"0 D " –	Outcide	Diameter	(of tube)
U.D. =	Outside	Diallicter	(O) LUDET

BLACKMAX® TUBE BENDERS (METRIC)					
Item		ltem	Description		
BTB300M		BTB300M	Tube Bender Set includes 7 benders and all parts listed below: (excluding BTBX16M)		
			REPLACEMENT PARTS		
		Item	Tube I.D.	Mandrel Color	
		BTBX6M	6 mm O.D.	Chrome	
		BTBX8M	8 mm O.D.	Copper	
	SIS	BTBX10M	10 mm 0.D.	Red	
	Mandrels	BTBX12M	12 mm 0.D.	Yellow-Orange	
Metric	Ma	BTBX15M	15 mm O.D.	Yellow-Green	
Me		BTBX16M	16 mm O.D. (Optional for BTB300M)	Blue	
		BTBX18M	18 mm O.D.	Titanium	
		BTBX22M	22 mm 0.D.	Red-Violet	
ВТВХНМ		ВТВХНМ	Ratchet Tool, Metric		
	BTBXA1		6-10 mm Shoe Arm		
	BTBXA2		12 - 22 mm Shoe Arm		
	BTBXR1		Reverse Bender Mandrel Arm		
	BTBXR2		Reverse Bender Sho	e Arm	

[&]quot;O.D." = Outside Diameter (of tube)



- Imperial or metric
- For soft copper and aluminum tube
- Nine quick-change tube expanders
- Durable, color-coded, aluminum heads
- Compact, professional, patented design
- Strong carrying case
- Packaging: Color box









BLACKMAX® TUBE EXPANDERS (IMPERIAL)

		Description		ltem
	Tube E	xpander Set inclu	BTLE9	
	Tube Expander (Replacement Tool)			BTLEXH
	0:	Replaceme	nt Heads	Blades (6)
	Size	Color	Item	Item
	1/4″	Chrome	BTLEX14	BTLEX14B
Imperial	5/16″	Copper	BTLEX516	BTLEX516B
lmp	3/8″	Red	BTLEX38	BTLEX38B
	1/2″	Yellow-Orange	BTLEX12	BTLEX12B
	5/8″	Blue	BTLEX58	BTLEX58B
	3/4"	Green	BTLEX34	BTLEX34B
	7/8″	Red-Violet	BTLEX78	BTLEX78B
	1″	Black	BTLEX1	BTLEX1B
	1-1/8″	Pink	BTLEX118	BTLEX118B

BLACKMAX® TUBE EXPANDERS (METRIC)

		Description	Item	
	Tube	Expander Set inclu	BTLE9M	
	Tube	Expander (Replac	BTLEXH	
	Cina	Replacem	Blades (6)	
	Size	Color	Item	Item
	6 mm	Chrome	BTLEX6M	BTLEX6MB
Metric	8 mm	Copper	BTLEX8M	BTLEX8MB
	10 mm	Red	BTLEX10M	BTLEX10MB
	12 mm	Yellow-Orange	BTLEX12M	BTLEX12MB
	15 mm	Yellow-Green	BTLEX15M	BTLEX15MB
	18 mm	Titanium	BTLEX18M	BTLEX18MB
	22 mm	Red-Violet	BTLEX22M	BTLEX22MB
	28 mm	Red-Orange	BTLEX28M	BTLEX28MB
	32 mm	Black - Chrome	BTLEX32M	Not Available



BFT850D BLACKMAX® DRILL POWERED FLARING TOOL

- Dramatically reduces the amount of time to create a precise flare
- Seven quick change positions for flaring soft copper and aluminum tube
- Aluminum body- 50% lighter than steel designs
- Slide gauge sets tube at exact position
- Eccentric cone forms precise 45° flared ends
- For 3/16", 1/4" 5/16", 3/8", 1/2", 5/8", 3/4" O.D. tube
- Built-in clutch prevents over-compression
- Compact, professional, patented design
- Packaging: Color box





Seven quick change positions



Slide gauge for perfect tube alignment before flaring



Eccentric flaring cone for precision flares



Rugged carrying case for all items





- Imperial or metric
- For soft copper, aluminum tube
- Double hinged bending arms for tight quarters
- Two pull points for smooth, easy bends
- Bends from 0° to 180°
- Packaging: Color box



BTB10 Imperial for 5/8" O.D. Tube **BTB15MM** Metric for 15 mm O.D. Tube



BTB06 Imperial for 3/8" O.D. Tube **BTB10MM** Metric for 10 mm O.D. Tube



BTB12 Imperial for 3/4" O.D. Tube **BTB16MM** Metric for 16 mm O.D. Tube



BTB08 Imperial for 1/2" O.D. Tube **BTB12MM** Metric for 12 mm O.D. Tube



BTB14 Imperial for 7/8" O.D. Tube **BTB18MM** Metric for 18 mm O.D. Tube



BTLDB3 BLACKMAX® DEBURRING TOOL

Thick aluminum construction. For soft copper and aluminum tube. Includes (2) spare blades in handle.

TLDB2X Replacement Blade



TLDB2 POCKET DEBURRING TOOL

Remove burrs and surface defects from inner/outer straight and hole edges.

TLDB2X Replacement Blade



FTXSG R410A FLARE SIZE GAUGE

6.4 mm, 1/4" 9.5 mm, 3/8" 12.7 mm, 1/2" 15.9 mm, 5/8" 19.1 mm, 3/4"

TLRM REAMING AND DEBURRING TOOL

- Constructed of rugged die cast metal for long life
- Removes burrs from both inside and outside edges of tube
- Ergonomically shaped to fit comfortably in your hand

TLDB POCKET DEBURRING TOOL (WITH BLADE STORAGE)

- For soft copper and aluminum tubing
- Remove burrs and surface defects from inner/outer straight and hole edges

TLDBX Replacement blade

PRO-SET® HEAVY DUTY TITANIUM TUBE CUTTERS

- All cutter wheels are precision machined from high grade chromium steel and plated with titanium nitride to extend life—up to 5 times longer!
- Precision machined rollers feature cut-off groove to reduce tube loss in damaged flare removal
- Durable metal handle with industrial grade rubber boot provides comfortable grip
- Enclosed hardened steel, thrust bearing feed mechanism for smooth cutting action and trouble free operation
- · Packaging: Clamshell



TCT174 PRO-SET® MINI TITANIUM TUBE CUTTER

Cutting Range: 1/8" to 1-1/8", (3 to 30 mm)

TCXT174C (1) Titanium Nitride Cutting Wheel & (1) Screw



TCT127 PRO-SET® MINI TITANIUM TUBE CUTTER

Cutting Range: 1/8" to 5/8", (3 to 16 mm)

TCXT127C (1) Titanium Nitride Cutting Wheel & (1) Screw



TCT206 PRO-SET® HEAVY DUTY TITANIUM SLIDING TUBE CUTTER

Cutting Range: 1/4" to 2-5/8" (6 to 68 mm)

TCXT206C (1) Titanium Nitride Cutting Wheel & (1) Screw TCXT206R (1) Reamer blade



TCT274 PRO-SET® TITANIUM TUBE CUTTER

Cutting Range: 1/8" to 1-3/8" (3 to 35 mm)

TCX4CTS Titanium Cutting Wheel and Screw

TCXT274C (1) Titanium Nitride Cutting Wheel & (1) Screw Assembly

TCXT274RB (1) Reamer blade



TCT312 PRO-SET® HEAVY DUTY TITANIUM TUBE CUTTER

Cutting Range: 1/8" to 1-3/4", (3 to 45 mm)

TCX4CTS Titanium Cutting Wheel and Screw

TCXT312C (1) Titanium Nitride Cutting Wheel & (1) Screw Assembly



TCPVC PRO-SET® HEAVY DUTY TITANIUM PVC TUBE CUTTER

Cutting Range: 1/4" to 2-5/8" (6 to 68 mm)

PRO-SET® TUBE CUTTERS

- Easy grip knobs with rubber boot over solid metal core
- Advanced tracking system will not walk while cutting
- Rollers feature flare cut-off groove to reduce tube loss
- Integrated retractable rotary deburring tool
- Durable metal handle with industrial grade rubber boot provides sure comfortable grip
- Produces clean right angle cuts every time
- Precision machined rollers feature cut-off groove to reduce tube loss in damaged flare removal



TC174 PRO-SET® MINI TUBE CUTTER

Cutting Range: 3/8"- 1-1/8" (10 - 29 mm)



TC100 PRO-SET® TIGHT SPACES RATCHETING TUBE CUTTER

Cutting Range: 1/4"-7/8" (6 - 22 mm)

TCX100CS Cutting Wheel (1) & Screw

PRO-SET® LEVER TUBE BENDERS

- Constructed of high strength steel for durability and long life
- Create smooth, tight radius bends up to 180° with minimal effort
- Bends without scoring or flattening of tubing
- Calibrated to show angle of bend
- Wide hook grips tubing securely



TB04 1/4" O.D.



TB05 5/16" O.D.



TB06 3/8" O.D.



TB08 1/2" O.D.



TB10 3/4" O.D. TB10XH Replacement Hook



TB12 5/8" O.D. TB12XH Replacement Hook with Screw



TB14 7/8" O.D.



TB6MM 6 mm O.D.



TB10MM 10 mm O.D.



TB12MM 12 mm O.D.



TB15MM 15 mm O.D.



TB16MM 16 mm O.D.

TB250 PRO-SET® UNIVERSAL RATCHET TUBE BENDER SET Universal kit bends tube from 1/4" to 7/8" and 6mm to

- 22mm
- Metal ratcheting system built for long life Seven durable molded plastic mandrels
- Includes TC274 Tube Cutter
- Includes TLRM Reaming and Deburring Tool



REPLACEMENT PARTS

TBXM6	Molded Plastic Mandrel 1/4" (6 mm)
TBXM8	Molded Plastic Mandrel 5/16" (8 mm)
TBXM10	Molded Plastic Mandrel 3/8" (10 mm)
TBXM14	Molded Plastic Mandrel 1/2" (14 mm)
TBXM16	Molded Plastic Mandrel 5/8" (16 mm)
TBXM19	Molded Plastic Mandrel 3/4" (19 mm)
TBXM22	Molded Plastic Mandrel 7/8" (22 mm)
TBXR	Ratchet Mechanism
TBXB1	Small bending bar replacement
TBXB2	Large bending bar replacement







FT800FN PRO-SET® R-410A **IMPERIAL CONCENTRIC FLARING FLARING TOOL & RATCHET TOOL & RATCHET**

- · Imperial clutch driven flaring tool with ratchet and case for 3/16",1/4", 5/16", 3/8", 1/2", 5/8", 3/4" O.D. tubing
- Unique clutch driven feed screw and eccentrically mounted cone produces uniform, clean flare walls without galling
- Engineered specifically to create stronger flare joints for higher pressure R-410A systems
- Innovative 3/8" square drive incorporated directly in voke handle for use of ratchet
- Rugged polyethylene storage case included

FTX800B410 R-410A flaring bar FTX800R Ratchet FTX800Y Yoke assembly

FT806M PRO-SET® METRIC

- Metric clutch driven flaring tool with ratchet and case for 6, 8, 10, 12, 15, 16 & 18mm O.D. tubing
- Unique clutch driven feed screw and faceted cone produce uniform, clean flare walls without thin spots or galling
- Innovative 3/8" square drive incorporated directly in yoke handle for use of ratchet
- Rugged polyethylene storage case included.

FTX800BM Metric flaring bar FTX800R Ratchet FTX800Y Yoke assembly

FT806A PRO-SET® IMPERIAL **ECCENTRIC FLARING TOOL &** RATCHET

- Standard imperial clutch driven flaring tool with ratchet and case for 3/16", 1/4", 5/16", 3/8", 1/2", 5/8" & 3/4" O.D. tubing
- Unique clutch driven feed screw and faceted cone produce uniform, clean flare walls without thin spots or galling
- · Provides an exact amount of flaring torque with break away clutch system
- Innovative 3/8" square drive incorporated directly in voke handle for use of ratchet
- Rugged polyethylene storage case included.

FTX800BA Imperial flaring bar FTX800R Ratchet FTX800Y Yoke assembly



TECH-SET® 45° FLARING & SWAGING KIT

FS275 Imperial kit for 1/8" to 3/4"

FS275M Metric kit for 4 mm to 22 mm

Rugged forged steel slip-on yoke and hardened flaring bar

Chrome finished flaring cone forms better flares with less effort

Positive grip flaring bar eliminates tube movement

Easy operation with professional results

REPLACEMENT PARTS			
FS275 Imperial	FS275	45° Flaring & Swaging Kit 1/8" - 3/4"	
	FSX501	FS275 Long Bar (7/16", 1/4", 1/8", 3/16", 5/16", 3/8")	
	FSX502	FS275 Short Bar (3/4", 1/2", 5/8")	
	FSX503	FS275 5/16" Swaging Adapter	
	FSX504	FS275 3/16" Swaging Adapter	
	FSX505	FS275 1/2" Swaging Adapter	
	FSX506	FS275 5/8" Swaging Adapter	
	FSX508	FS275 3/4" Swaging Adapter	
	FSX509	FS275 Yoke Assembly	
	FSX513	FS275 Compressor Cone	
75 rric	FS275M	45° Flaring & Swaging Kit, Metric	
FS2 Met	FSX507	FS275M 8, 12, 14, 16, 22 mm Swaging Adapter	



TC127 TECH-SET™ MINI TUBE CUTTER

Cutting Range: 1/8" to 5/8" (3 to 16 mm)

- Ideal for cutting pipe in limited access areas
- Precision machined chromium steel cutting wheels

TCX7C (10) Cutting wheels
TCX7S (10) Cutting Wheel Screws
TCX7CTS (1) Titanium Cutting Wheel & (1) Screw
TCX7CS (1) Cutting Wheel and (1) Screw



TC274 TECH-SET™ TUBE CUTTER

Cutting Range: 1/8" to 1-1/8" (3 to 29 mm)

- Hardened steel thrust bearing feed mechanisms for smooth operation
- Precision machined chromium steel cutting wheels
- Foldaway hardened steel reamers for deburring

TCX4R (1) Reamer Blade
TCX4RS (1) Reamer Blade Screw
TCX4C (10) Cutting Wheels
TCX4CS (1) Cutting Wheel and Screw
TCX4S (10) Cutting Wheels and Screws



TC312 TECH-SET™ HEAVY DUTY TUBE CUTTER

Cutting Range: 1/4" to 1-5/8" (6 to 41 mm)

 Spare cutting wheel located under retractable locking reamer

TCX4R (1) Reamer Blade
TCX4RS (1) Reamer Blade Screw
TCX4C (10) Cutting Wheels
TCX4CS (1) Cutting Wheel and
Screw

TCX4S (10) Cutting Wheels and Screws



TC206 TECH-SET™ SLIDING TUBE CUTTER

Cutting Range: 3/8" to 2-5/8" (10 to 67 mm)

 Ratchet feed mechanism speeds up cutting operation
 TCX6CTS (1) Titanium Cutting Wheel & (1)

Screw



TCSET TECH-SET™ TUBE CUTTER COMBO PACK

Cutting Range: 1/8" to 1-1/8" (3 to 29 mm)

Includes TC127 & TC274





TCAP
TECH-SET™
CAPILLARY
TUBE CUTTER



TECH-SET™ SPRING TYPE TUBE BENDERS

- For soft copper and aluminum tubing
- Special spring steel with zinc finish
- Hand bend tubing to any shape without collapsing walls
- End bell design for quick removal of tubing

TBS04 1/4" Spring Tube Bender

TBS05 5/16" Spring Tube Bender

TBS06 3/8" Spring Tube Bender

TBS08 1/2" Spring Tube Bender

TBS10 5/8" Spring Tube Bender

TBS12 3/4" Spring Tube Bender



TB368 TECH-SET™ UNIVERSAL TUBE BENDER

- Triple head lever type tube bender 1/4", 5/16", 3/8" (6, 8, 10 mm)
- For soft copper, aluminum and thin wall steel tubing



FT525 TECH-SET™ 45° **UNIVERSAL ADJUSTABLE FLARING TOOL**

- Flares from 3/16" to 5/8" (5 to 16 mm)
- Unique faceted flaring cone automatically burnishes flare face during operation
- Produces perfect 45° flares while maintaining thickness at base of flare
- Rugged forged steel slip-on yoke
- Compact design ideal for use in tight quarters

FTX516 Yoke assembly FTX517 Tube holding assembly FTX518 Flaring cone

FT195 TECH-SET™ 45° **IMPERIAL FLARING TOOL**

- Flares 7 of the most common sizes of tubing from 3/16" to 5/8" (5 to 16 mm)
- Rugged forged steel slipon voke and hardened flaring bar
- Chrome finished flaring cone forms better flares with less effort
- Positive grip flaring bar eliminates tube movement

FTX500 Yoke assembly FTX501 Flaring bar

FTX509 Compressor cone FTX510 Wing nut

FT203 TECH-SET™

45° IMPERIAL **FLARING TOOL**

- · Flares 4 sizes of tubing - 5/8", 3/4", 7/8" & 1-1/8"
- Rugged forged steel slip-on yoke and hardened flaring bar
- Chrome finished flaring cone forms better flares with less effort
- Positive grip flaring bar eliminates tube movement
- Easy operation with professional results



FT500/FT500M TECH-SET™ 45° **FLARING/BURNISHING TOOL**

- FT500 Imperial tool for 3/16", 1/4", 5/16", 3/8", 1/2" & 5/8"
- **FT500M** Metric tool for (6 16
- Heat treated sliding dies with lever clamping action hold tubing firmly in place
- Rugged forged steel slip-on yoke with large handle for ease of use

FTX500 Yoke assembly

FTX501 Imperial Flaring bar

FTX509 Compressor cone

FTX510 Wing nut

FTX514 FT500 Die Holder Assembly

FTX515 FT500M Die Holder Assembly





PRO-SET® TUBE EXPANDER/SWAGING SET

- Create professional grade one seam pipe unions in the field.
- Multi-faceted interchangeable heads ensure equal linear expansion of tubing and uniformed wall thickness.
- Extended handle length provides added leverage for ease of operation.
- · Re-round deformed tubing and fabricate couplinas.
- · Components are heat treated for durability.
- Ideal for copper, aluminum and soft steel tubina.
- Includes storage case for long-term protection.

TLE6 IMPERIAL WRENCH SET TLE6M METRIC WRENCH SET

Includes:

TLE601 Expander Tool

TLRM Reaming and Deburring Tool

TLH06 3/8" Expander Head

TLH08 1/2" Expander Head

TLH10 5/8" Expander Head

TLH12 3/4" Expander Head

TLH14 7/8" Expander Head

TLH18 1-1/8" Expander Head

Optional:

TLH16 1" Expander Head

TLH22 1-3/8" Expander Head

TLH26 1-5/8" Expander Head

Includes:

TLE601 Expander Tool

TLRM Reaming and Deburring Tool

TLHM10 10 mm Expander Head

TLHM12 12 mm Expander Head

TLHM15 15 mm Expander Head

TLHM18 18 mm Expander Head TLHM22 22 mm Expander Head

TLHM28 28 mm Expander Head

Optional:

TLHM16 16 mm Expander Head

TLHM20 20 mm Expander Head

TLHM35 35 mm Expander Head

TLHM42 42 mm Expander Head