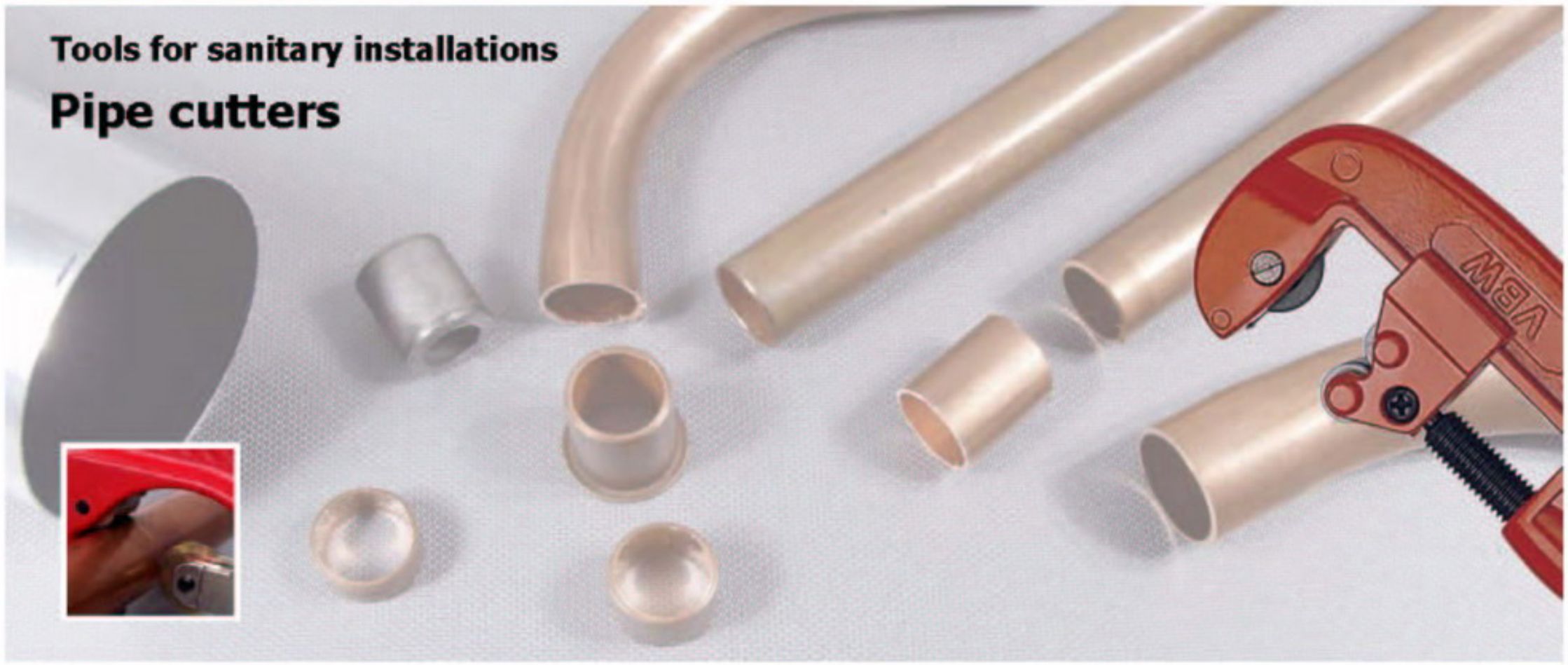
Pipe cutters



140 Pipe cutters

Code		min. (inch)	max. (inch)	min. (mm)	max. (mm)		
Pipe cutters, red lacquered							
140 0 03	260	⅛"	1¼"	3	31	1842	1
140 0 05	400	⅛"	2"	3	50	2193	1
140 0 10	540	1¼"	4"	31	100	5207	1
Spare cutting wheels for copper and steel tubes							
140 1 05			1¼"			4	5
140 1 05			2"			4	5
140 1 10			4"			4	3
Spare cutting wheels for cast pipes							
140 2 05			1¼"			4	5
140 2 05			2"			4	5
140 2 10			4"			4	3
Spare cutting wheels for plastic pipes							
140 1 15			2"			4	5
Spare rollers							
140 3 03			1¼"			4	10
140 3 05			2"			4	10
140 3 10			4"			4	10
Spare pins							
140 4 03			1¼"			4	10
140 4 05			2"			4	10
140 4 05			4"			4	10

- Double roller guides
- For cutting off plastic, steel and cast pipes

141 Copper pipe cutters

Code	min. (inch)	max. (inch)	min. (mm)	max. (mm)		
Copper pipe cutters, red lacquered						
141 0 05 195	1/8"	1 3/8"	3	36	470	
Spare cutting wheels for copper and steel tubes						
141 1 05		1 3/8"			4	10
Spare cutting wheels for plastic pipes						
141 1 10		1 3/8"			4	10
Spare pins						
141 4 05		1 3/8"			4	10

- Automatic feed
- 4 rolls provide accurate guidance
- Deburrer for inside pipe edges in handle
- Cutting wheels made of chrome-alloy stainless steel

142 Copper pipe cutters

Code	min. (inch)	max. (inch)	min. (mm)	max. (mm)		
Copper pipe cutters, red lacquered						
142 0 05 140	1/4"	1 1/8"	6	28	320	1
Spare cutting wheels for copper pipes						
142 1 05		1 1/8"				10
Spare pins						
142 4 05		1 1/8"				10

- Slim-line, sturdy model
- Accurate, smooth-action slide movement
- Deburrer for inside pipe edges in handle

979 Pipe cutters

Code	(inch)	(inch)	(mm)	(mm)		
Pipe cutters, red lacquered						
979 0 05 400	1/8"	2"	3	50	2559	1
Spare cutting wheels for copper and steel tubes						
140 1 05		2"			4	5
Spare cutting wheels for cast pipes						
140 2 05		2"			4	5
Spare cutting wheels for plastic pipes						
140 1 15		2"			4	5

- For cutting off plastic, steel and cast pipes
- Forged steel body
- Handle made of diecast zink
- Double roller guides

978 Copper pipe cutters

Code	min. (inch)	max. (inch)	min. (mm)	max. (mm)		
Copper pipe cutters, red lacquered						
978 0 05 150	1/8"	1 3/8"	3	35	378	1
Spare cutting wheels for copper and steel tubes						
141 1 05		1 3/8"			4	10
Spare cutting wheels for plastic pipes						
141 1 10		1 3/8"			4	10

- Copper pipe cutters for pipes 1/8 - 1 3/8", 3 - 35 mm
- Pipe deburrer in handle
- Heavy-duty model
- 2 support rolls
- With deburring knife in handle

143 Midget tube cutters

Code	min. (inch)	max. (inch)	min. (mm)	max. (mm)		
Midget tube cutters, red lacquered						
143 0 05 50	1/8"	5/8"	3	16	211	1
Spare cutting wheels for copper and steel tubes						
141 1 05		5/8"			4	10

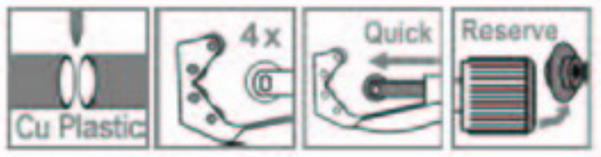
- Body made of lacquered die-cast zink
- Cutting wheels made of chrome-alloy stainless steel

977 Midget tube cutters

Code	(inch)	(inch)	(mm)	(mm)		
Midget tube cutters, red lacquered						
977 0 05 65	1/8"	1"	3	25	195	1
Spare cutting wheels for copper and steel tubes						
141 1 05		1"			4	10

- Pipe cutters for copper pipes
- With 2 support rolls

978/1 Pipe cutters



Code						
Pipe cutters, red lacquered						
978 1 05	240	¼"	2½"	6	66	731
Spare cutting wheels for copper etc.						
978 1 15		¼"	2½"	6	66	7 10
Spare cutting wheels for plastic						
978 1 10		¼"	2½"	6	66	7 10

- For plastic, copper and thin-walled stainless pipes
- With quick-action adjuster
- Four-roller guide
- Aluminium diecast body
- Spare cutter wheels in handle

978/2 Compact pipe cutters

Code		min.	max.	min.	max.		
Compact pipe cutters, red lacquered							
978 1 55	150	⅛"	1⅜"	3	35	543	1
Spare cutting wheels for copper and steel tubes							
141 1 05		⅛"	1⅜"	3	35	4	10

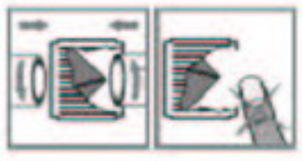
- Complete with extendible deburring blade
- Covered spindle
- Four-roller guide
- Retractable deburrer for inside pipe edges
- For thin-walled steel tubes, copper and brass tubes and piping made of other non-ferrous metals
- Precision telescopic guides
- Spare wheel in handle

978/3 Plastic pipe shears

Code		
Red lacquered		
978 2 05	200	26 172

- For highest demands
- Cutter guided on both sides
- Ratchet feed
- For pipes up to 26 mm

138 Tube deburrers



Code		max.	
Plastic, red			
138 0 05	42	50	38 12

- For inside and outside deburring

Tools for sanitary installations, special tools

128 Strap wrenches

Code	max.	L	
Strap wrench, nickel-plated			
128 0 05	160	230	290
Spare webbing			
128 1 00	160		75

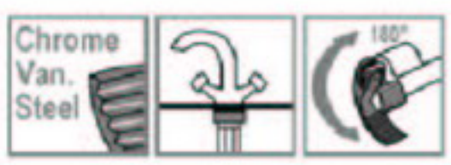
- With non-slip webbing, 22 mm wide
- Handle immersion-insulated

145 Special spanners for sanitary installations

Code				
Chromium plated				
145 0 05	223	17	19 M 10	210

- Chrome vanadium
- 17 x 19 mm
- For M 10 stud screws
- Insert can be adjusted

149 Basin nut wrenches



Code		
Red lacquered		
149 0 05	235	503

- Chrome vanadium
- Adjustable for clockwise and anticlockwise use
- For nuts up to 30 mm

149/1 Basin wrenches

Code			
Red lacquered			
149 1 05	360		326

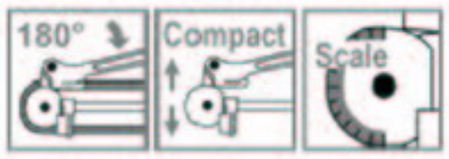
- Chrome vanadium
- For single-handed mixer taps
- 13 mm hex
- With interchangeable inserts 10, 11 and 14 mm
- Inserts zinc plated

132 Copper pipe bending wrenches

Code		WICU	r	max. ∢	
132 0 05	10	6	45	90°	1140
132 0 10	12	8	45	90°	1160
132 0 15	14	10	45	90°	1250
132 0 20	15	-	59	90°	2806
132 0 25	16	12	59	90°	3307
132 0 30	18	-	60	90°	3705
132 0 35	20	15	80	90°	4200
132 0 40	22	18	96	90°	5434

- For bends of up to 90°
- With sliding rail
- Handles with plastic coating
- Sturdy design

134 Copper pipe bending wrenches



Code		r	∢	
134 0 05	6	11	180°	311
134 0 10	8	14	180°	357
134 0 15	10	23	180°	726
134 0 20	12	30	180°	944
134 0 25	14	42	180°	2019
134 0 30	15	42	180°	2089
134 0 35	16	54	180°	2806

- Chromium-plated
- For bends of up to 180°
- Bending segment with scale marked in degrees

171 Screw-punches

V2A V4A

Code		
Screw-punch, gunmetal finish		
171 0 05	28,30	179
171 0 10	31,75	214
171 0 15	35,00	274
Loose spare screws M10x1 for 28.3 and 31.75 mm, gunmetal finish		
171 1 05	M10	47
Loose spare screws M12x1.5 for 35 mm, gunmetal finish		
171 1 10	M12	69

- With 3 cutters and positive cutter geometry
- High tensile strength screws for longer lifetimes
- Recommended sheet thicknesses: iron, steel 2.0 mm, stainless steel, vanadium □1.5 mm, aluminium 2.0 mm, copper 2.0 mm. □These thicknesses can be exceeded, but at the expense of the screws.

199/5L Combined spud wrenches

1/2"

Code	min.	max.				
Chromium plated						
199 1 15	10x	3/8"	1"	105	1/2"	132

- Special steel
- With 10 steps incl. 3/8 1/2" 3/4" 1" and numerous intermediate steps
- For all standard screw fittings
- Tip can be used as a screwdriver

199/5K Combined spud wrenches

1/2"

Code	min.	max.				
Chromium plated						
199 1 16	5x	3/8"	1"	90	1/2	116

- Special steel
- With 5 steps incl. 3/8" 1/2" 3/4" and 1"

199/6 Combined spud wrenches with 1/2" ratchet

1/2"

Code	min.	max.					
In wallet with spud wrench 199/5 L							
199 1 20	10x	3/8"	1"	105	1/2	250	648
In wallet with spud wrench 199/5 K							
199 1 27	5x	3/8"	1"	90	1/2	250	553

- With a ratchet made of chrome vanadium steel

199/4K 1/2" ratchets for spud wrenches

Code			
Chromium plated			
199 0 35	250	½"	428 5

- Chrome vanadium

199/11 Sanitary four-way spanners

Code										
199 5 00	7x	3/8"	½"	¾"	1"	M 8	M 10	M 12	200	523

- Special steel, red lacquered
- For tap extensions, stud and express screws
- For fitting and removing valves and return fittings

158/1 Pipe cleaning tools

Code	m	mm	
158 0 05	3	6	400
158 0 10	5	9	1400
158 0 15	10	9	2700

- Hot-dip galvanised
- For unblocking blocked household pipes
- Beechwood crank

Bolt cutters

Interesting facts about cutters that are actually "breakers"

VBW bolt cutters can be seen as consisting of two distinct sections:

1. Cutterhead
2. Tubular head and handles.

The efficiency of the cutterhead is determined to a large extent by the cutter geometry. In reality the bolt cutter is not a cutter, at all. It does not use sharp knives so it is not really a cutting action. To be more precise, it splits or breaks the material. When the blades penetrate the material, the notches they make can be easily seen. As you continue to apply pressure, these notches go deeper and become wider until the material is parted.

The cutting action depends directly on the angle of the cutters, the radius of the cutters, their width and surface quality, the centring of the cutters and their parallelism. - Simply to achieve the required level of hardening for the cutters, they are passed through 4 heat treatment stages:

Forging: First, the cropped blanks are heated to an extremely high shaping temperature.
Annealing: The blanks are annealed to an accurately controlled temperature and then slowly allowed to cool.
Hardening and tempering: Once finished, the cutters are hardened and tempered at high temperatures to ensure optimum hardness and toughness.
Hardening: The surface layer of the cutting edges of the hardened and tempered cutters are heated beyond the annealing temperature, quenched and then tempered at a lower temperature to achieve the ideal hardness and optimum wear-resistance.

VBW bolt cutters are available in two quality levels:

1. Highest quality standard also suitable for the hardest materials
2. A less expensive series for everyday standard applications

Uncompromising cutting performance is provided by VBW's high-grade alloy CrV special steels.

The less expensive series is also made of a high-grade CrV steel which is ideally suited to all except the most demanding cutting jobs.

All VBW tubular sections use the toggle lever principle to convert hand force into cutting force. The extent to which the force applied by the hand is multiplied depends on the position of the toggle mechanism - in other words, the more it is extended, the greater the force actually applied to the workpiece. Due to the kinematic effects of the toggle lever, large bolt cutters require an adjustment mechanism to enable exactly the right amount of force to be transmitted for the required cutting action.

All VBW bolt cutters are fitted with a permanent endstop for the adjustment mechanism which prevents the cutters overriding, prevents hands becoming jammed between the handles and enables the toggle lever to be finely adjusted. Similarly, there are permanent endstops for the cutter settings so that the top end of the cutting range is physically limited.

The tubes used for the handles are firmly attached to the tubular head section, which prevents the handles slipping or twisting even under the most gruelling working conditions.

Hint: The greatest cutting force is achieved if the first nick is applied with the tip of the cutterhead before pushing the full width of the cutters over the material to be cut. IMPORTANT: To achieve the best cut, hold the bolt cutter straight and at right-angles.

SAFETY FIRST: Hard materials may eject splinters at high speed when they are cut. Always wear goggles when using these tools, warn other people around you what you are doing and cover the material you are cutting.