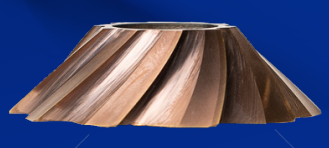
Karnasch®
PROFESSIONAL TOOLS

BEVELLING CUTTERS AND TOOLS

ACCURATE · EFFICIENT · EFFORTLESS



atagroup.com

Ideally suited for welding preparation, chamfering and radii profiling

Welding metal is a skilled, physically demanding and time-consuming job. The quality of the weld preparation is key to ensure a strong weld. Similarly, the rounding of edges on metal has never been so important to ensure compliance with safety regulations.

You can now chamfer and round edges more **accurately** and more **efficiently** with the Karnasch Bevelling Cutters and Tools. Make an **accurate, precise** smooth angle or radius in just one simple **effortless** step.

FEATURES & BENEFITS

- Cutters can be used for bevelling and chamfering edges as well as rounding the edges with a perfect precise radius
- Cutters are applicable on Steel and Stainless-Steel applications
- Consistent results for angle or rounding applications, higher level of workpiece uniformity achievable
- Accurate and effortless process to create welding edges or machined chamfers
- Reduced vibration and noise levels compared to grinding or tools with inserts
- Reduction in air pollution and sparking around the working environment caused by 'fine dust particles'
- Reduced downtime when changing consumables compared to tools with inserts
- Minimal heat transmission into the workpiece
- Creating no discoloration and a clean surface that needs no additional treatment

INDUSTRIES

- Welding
- Offshore
- Pipeline
- Shipbuilding
- Marine
- Steel construction
- Bridge building
- Vessel production
- Tank building

APPLICATIONS

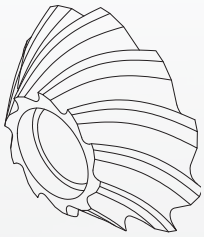
BEVELLING

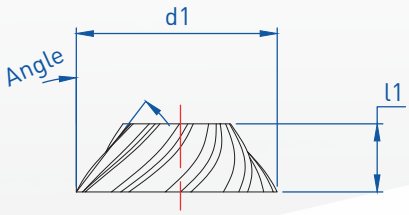
- Weld preparation
- Deburring
- Countersink connections
- Bevel heads are available with angles of 30° | 37,5° | 45°

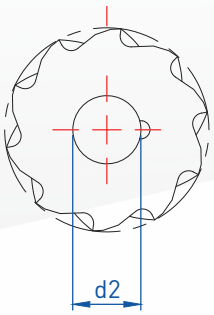
RADIUS

- Paint / coating adhesion
- Smooth finish
- Cable feed
- Radius cutters are available with a radius (R=mm) of R2, R3, R4, R6, R8 cutters

Angled Cutter Range

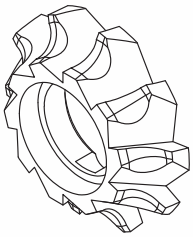


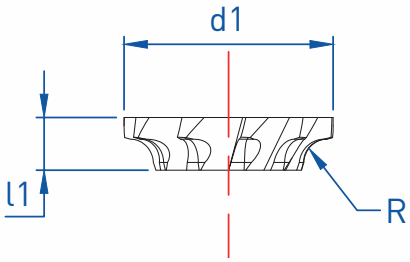


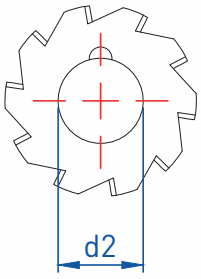


Material Code	Description	Angle	d1 (mm)	l1 (mm)	d2 (mm)
131000-010	BT30-08	30°	27.1	8.0	12.0
131000-020	BT30-12	30°	31.1	12.0	12.0
131000-030	BT37-08	37°	29.1	8.0	12.0
131000-040	BT37-12	37°	35.9	12.0	12.0
131000-050	BT45-06	45°	22.0	6.5	9.0
131000-060	BT45-08	45°	33.0	8.0	12.0
131000-070	BT45-12	45°	41.0	12.0	12.0

Radius Cutter Range







Material Code	Description	Radius (R)	d1 (mm)	l1 (mm)	d2 (mm)
131010-010	BTR2-06	R2	22.0	6.5	9.0
131010-020	BTR2-08	R2	27.0	7.0	12.0
131010-030	BTR3-06	R3	22.0	6.5	9.0
131010-040	BTR3-08	R3	27.0	7.0	12.0
131010-050	BTR4-06	R4	23.0	6.5	9.0
131010-060	BTR4-08	R4	28.0	7.0	12.0
131010-070	BTR6-10	R6	33.0	10.0	12.0
131010-080	BTR8-12	R8	39.0	12.0	12.0

BENEFITS

- Concentricity to improve lifetime of cutters
- Higher level of uniformity and fitting
- New: Tisinos® coating results in an increased cutter life and improved surface finish

APPLICATION MATERIALS

Steel			Stainless Steel	Non-Ferrous
S235	>S355	Plasma / Laser Cut	S304	
Excellent			Good	Not advisable

Bevelling Air Tools

Bevel faster with the range of Karnasch bevelling air tools. The tools have an excellent power to weight ratio, offering consistently high quality cutting with minimal physical effort.

The bevel can be adjusted to various depths easily and can be replaced very quickly.

For lighter bevelling and radius work, up to a depth of 6mm, Karnasch offers the P25-BT (130100) and SM16-BT (130110). Specially designed for quick rounding of small sheets, pipes and holes, with depth adjustments of 0.125mm increments the tools are precise and easy to use.

Designed for heavy-duty bevelling up to a depth of 12mm or radius work up to 8mm, the RA14-BT (130120) offers a powerful 1.5HP motor ensuring that even the most physically demanding and time-consuming work is completed more efficiently.

Flange Head

Adjustable flange can cater for various cut depths

RA14-BT

130120

SM16-BT

130110

Bevelling Tool Specifications

Model	P25-BT	SM16-BT	RA14-BT
Product Code	**130100**	**130110**	**130120**
Motor	Pneumatic	Pneumatic	Pneumatic
Max. Depth (mm)	±3mm at 45°	6	12
Air Pressure (bar)	6.3	6.3	6.3
Air Consumption (m^3/min)	0.63	0.62	1.13
Power (W)	375	820	1100
Max Speed (rpm)	25,000	16,000	9,000
Weight (kg)	1.07	1.33	4.40
For Radius (mm)	R2 | R3 | R4	R2 | R3 | R4	R2 | R3 | R4 | R6 | R8
For Bevels	45°	45°	30° | 37.5° | 45°
Min Opening for Bevelling (mm)	22	22	41
Min Opening for Rounding (mm)	16	16	22

Spindle Lock Button

Allowing for a quicker cutter change

Flange Plate

Nitride hardened, scratch resistant flanges for improved sliding capability

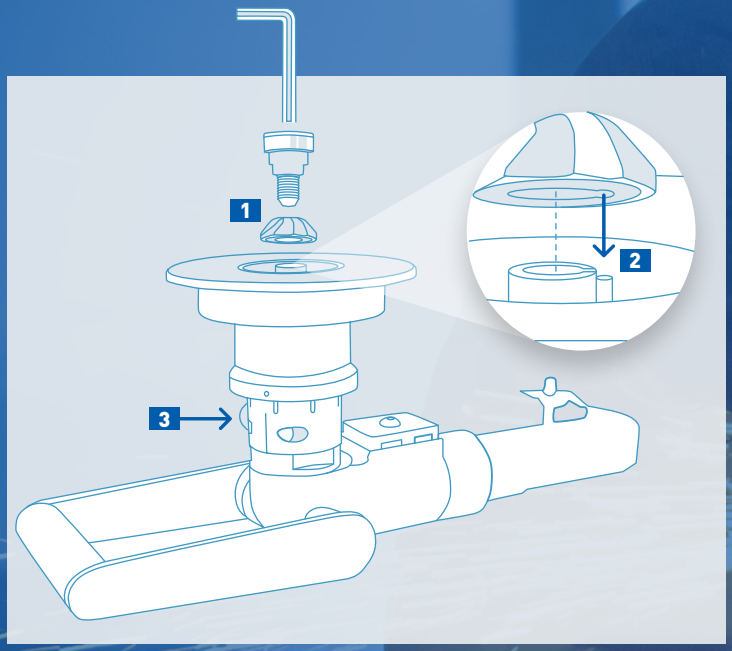
P25-BT

130100

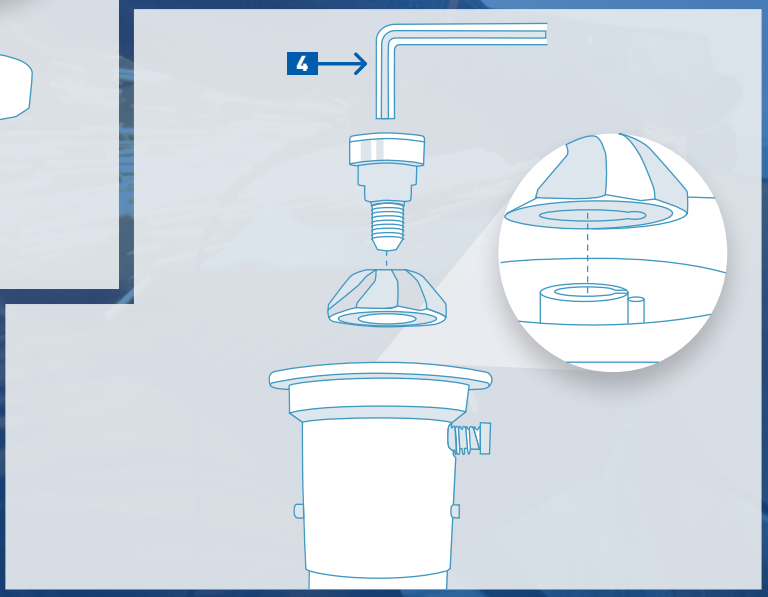
BENEFITS

- Reduced vibration to improve lifetime of the cutters
- Quick and easy cutter replacement on all tools
- Spindle lock button
- Concentricity for a smoother cut
- Nitride hardened (QPQ), scratch resistant flanges for improved sliding capability

How-to Guide

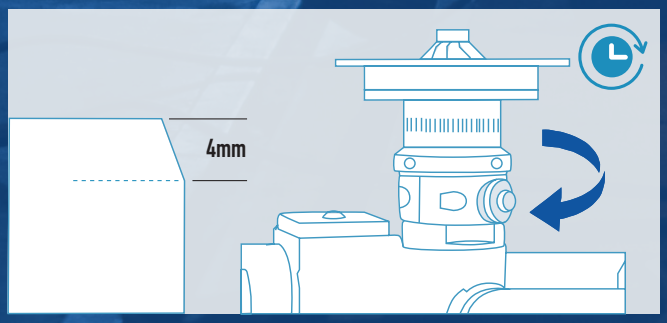


1. Place bevel cutter onto the adaptor
2. The pin on the adaptor should align with the pinhole on the cutter
3. Lock the spindle using the lock button



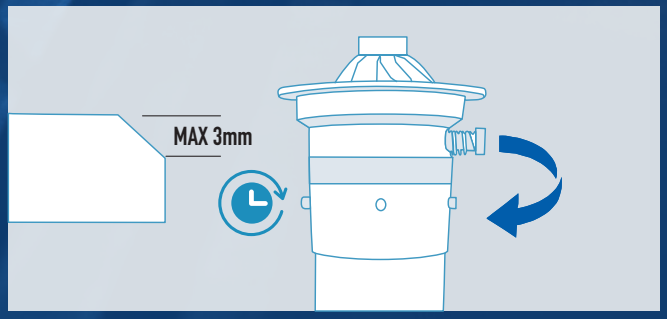
4. Tighten the guide bearing using the hex key provided
5. Complete a free run test of the tool
6. When changing to a new cutter always ensure you use a new bearing (supplied)

Right Angled Tools



- → 1 click is equal to 0.25mm
- → Therefore, 1mm adjustment requires 4 clicks
- → Maximum single pass cut of up to 4mm

Straight Tools

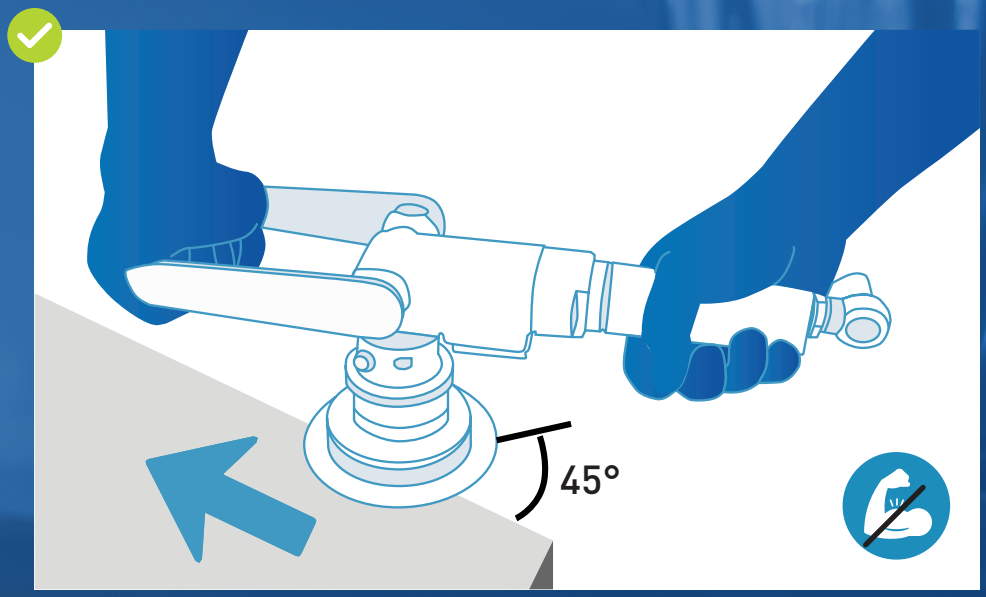


- → 1 click is equal to 0.125mm
- → Therefore, 1mm adjustment requires 8 clicks
- → Maximum single pass cut of up to 3mm

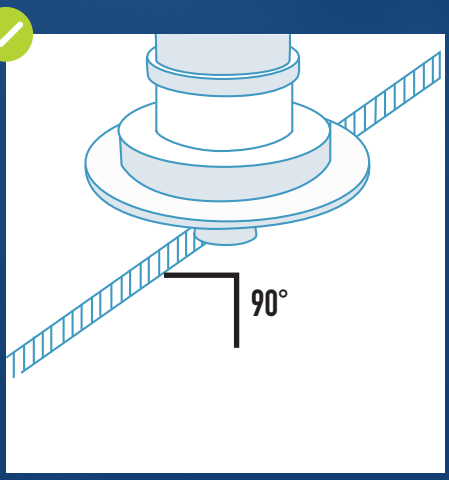
→ When bevelling approach the workpiece at a 45° angle.

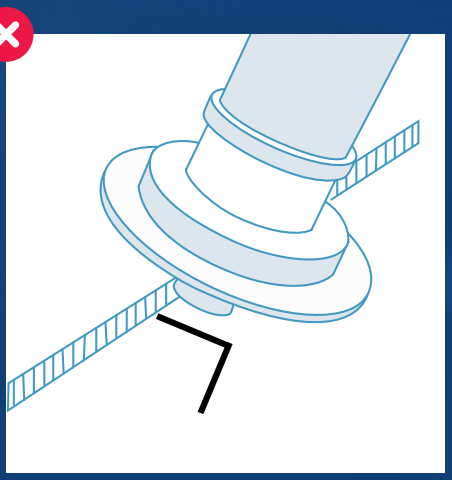
→ Ensure that the flange head is flat on the workpiece.

→ Do not use excessive force.



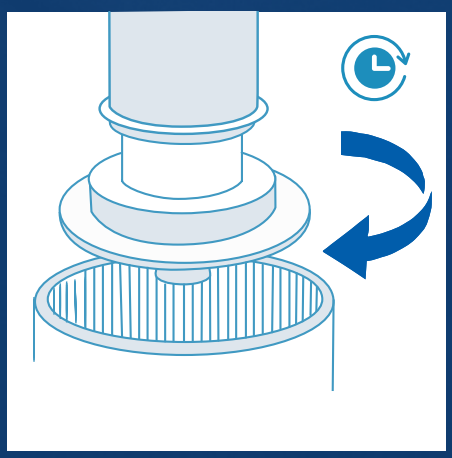
→ To ensure a precise, uniform and consistent cut the flange head must be flat on the workpiece.

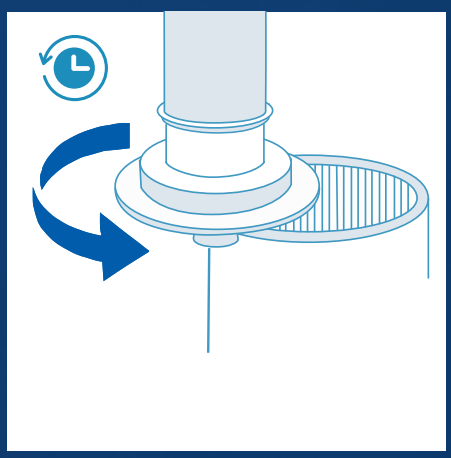




→ For internal grinding use the tool in a clockwise motion.

→ For external grinding use the tool in an anti-clockwise motion.





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Cutter and Tool Matrix

Bevel Head Description	Bevel Head Product Code	For Radius	For Chamfer	Tool Product Code	Replacement guide Bearing code
Karnasch Bevel Head 30-08	131000-010		30°	130120	801-058-00
Karnasch Bevel Head 30-12	131000-020		30°	130120	801-060-00
Karnasch Bevel Head 37-08	131000-030		37.5°	130120	801-058-00
Karnasch Bevel Head 37-12	131000-040		37.5°	130120	801-058-00
Karnasch Bevel Head 45-06	131000-050		45°	130100 and 130110	801-057-00
Karnasch Bevel Head 45-08	131000-060		45°	130120	801-058-00
Karnasch Bevel Head 45-12	131000-070		45°	130120	801-058-00
Karnasch Bevel Head R2-06	131010-010	R2		130100 and 130110	801-057-00
Karnasch Bevel Head R2-08	131010-020	R2		130120	801-059-00
Karnasch Bevel Head R3-06	131010-030	R3		130100 and 130110	801-057-00
Karnasch Bevel Head R3-08	131010-040	R3		130120	801-059-00
Karnasch Bevel Head R4-06	131010-050	R4		130100 and 130110	801-057-00
Karnasch Bevel Head R4-08	131010-060	R4		130120	801-059-00
Karnasch Bevel Head R6-10	131010-070	R6		130120	801-062-00
Karnasch Bevel Head R8-12	131010-080	R8		130120	801-062-00