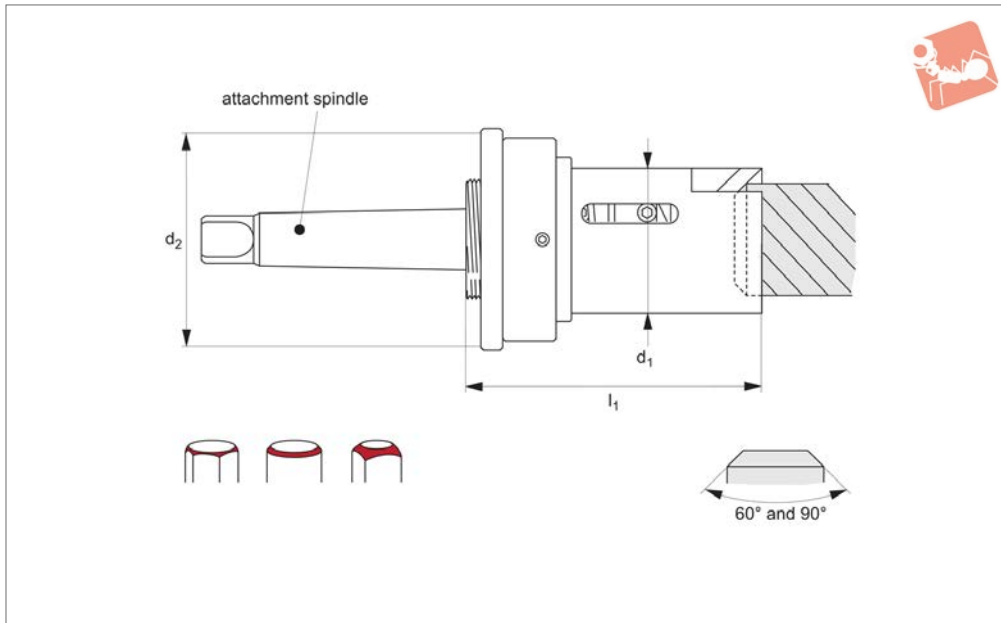




# Outer Chamfering Tools for drill attachment

# Chamfering Tools



**91020**

CHAMFERING TOOLS

### Material

#### Standard pilot cone type:

Supplied with standard HSS blade of 14. cutting angle.

#### CRN pilot cone type:

Supplied with HSS TIN coated blade of 20. cutting angle.

### Technical Notes

Consists of four main elements:

1. Body and drill attachment spindle.
2. Pilot cone - unique to the desired chamfer, provides full support during cutting and ensures concentric chamfer.
3. Blades - 1 x HSS blade at 14. cutting angle supplied.
4. Blades adjusted lock nut.

The CRN pilot cone type gives better results for harder material and larger batches as these have a higher hardness rating and lower friction characteristics.

Used to achieve high quality concentric chamfering quickly and easily, without risk of damage/cutting into the workpiece. The specially designed pilot cone provides full support to the blade throughout cutting and ensures a concentric chamfer.

Available with attachment spindles to suit most pillar drills, CNCs or hand drills. Chamfer angle quoted is inclusive angle.

### Tips

Recommended cutting speed= 10 - 20 m/ min.

To extend the life of the blade and the pilot cone we recommend lubrication with cutting fluid or soluble oil.

On initial set-up, make minor height adjustment of pilot cone via the blade adjustment lock nut, to ensure the best possible positioning.

### Important Notes

For replacement blades see part no. 91022.

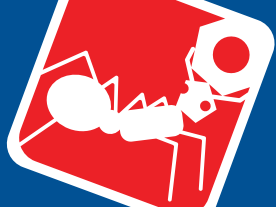
Order No.	Pilot cone type	Chamfer dia. min.   max.	Inc. chamfer angle °	Attachment spindle	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>
91020.W1860-1	Standard	4-17	60°	Ø10	18	26	54
91020.W1890-1	Standard	4-17	90°	Ø10	18	26	54
91020.W3660-1	Standard	4-37	60°	Ø10/Ø16	42	65	105
91020.W3690-1	Standard	4-37	90°	Ø10/Ø16	42	65	85
91020.W3660-2	Standard	4-37	60°	CM2	42	65	105
91020.W3690-2	Standard	4-37	90°	CM2	42	65	85
91020.W4660-2	Standard	10-45	60°	CM2	48	65	109
91020.W4690-2	Standard	10-45	90°	CM2	48	65	85
91020.W6060-2	Standard	21-57	60°	CM2	60	70	109
91020.W6090-2	Standard	21-57	90°	CM2	60	70	85
91020.W8060-2	Standard	41-77	60°	CM2	80	90	118
91020.W8090-2	Standard	41-77	90°	CM2	80	90	95
91020.W8190-3	Standard	60-97	90°	CM3	100	110	107
91020.W8290-3	Standard	80-117	90°	CM3	120	130	110
91020.W1860-19	CRN	4-17	60°	Ø10	18	26	54
91020.W1890-19	CRN	4-17	90°	Ø10	18	26	54
91020.W3660-19	CRN	4-37	60°	Ø10/Ø16	42	65	105
91020.W3690-19	CRN	4-37	90°	Ø10/Ø16	42	65	85
91020.W3660-29	CRN	4-37	60°	CM2	42	65	105



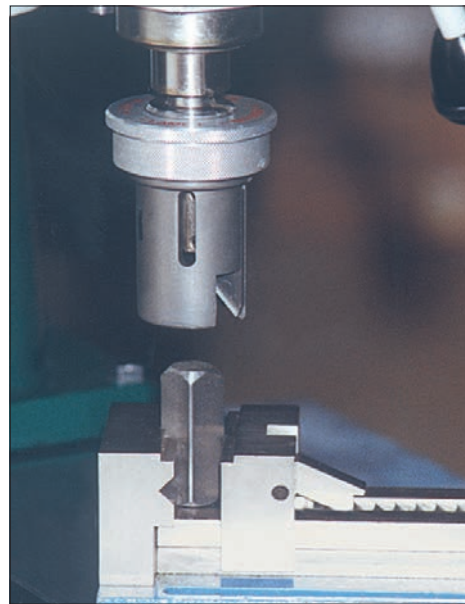
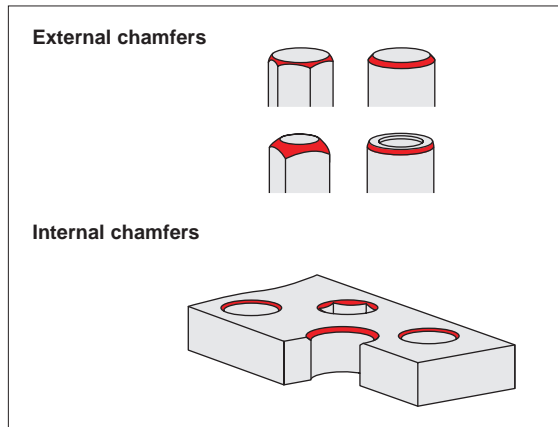
Order No.	Pilot cone type	Chamfer dia. min.   max.	Inc. chamfer angle °	Attachment spindle	d <sub>1</sub>	d <sub>2</sub>	l <sub>1</sub>
91020.W3690-29	CRN	4-37	90°	CM2	42	65	85

CHAMFERING TOOLS





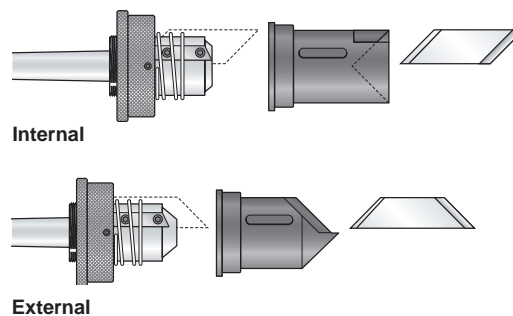
Wixroyd chamfering tools are mainly used as drill extensions to add high quality, consistent inner and outer chamfers. The chamfer angles achievable on a wide range of metals are between 60° to 120° inclusive.



CHAMFERING TOOLS

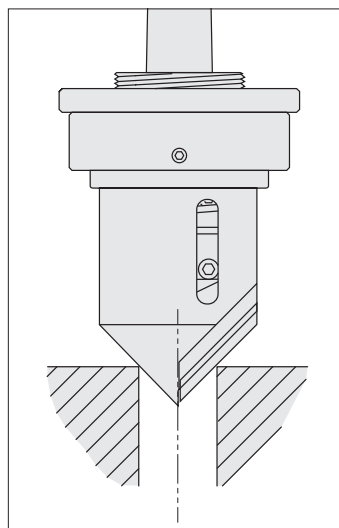
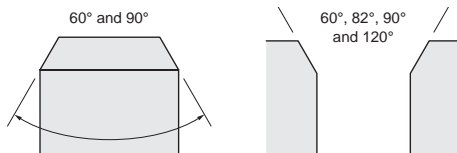
## Construction

- Concentric chamfers.
- Excellent surface finish.
- Reduces risk of cutting into the workpiece.
- Controlled machining torque.

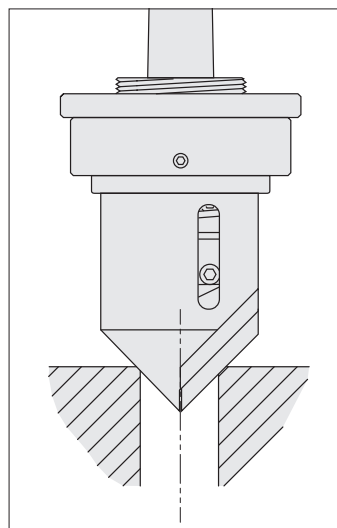


Chamfering tools consist of three main elements: an attachment spindle, pilot cone and cutting blade.

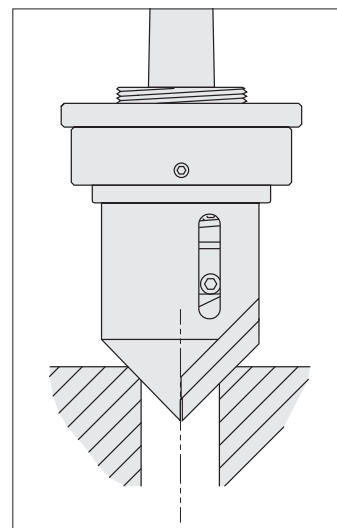
A variety of spindle attachments are available from CM1 to CM3 inclusive.



**1** When the chamfer tools spindle is lowered, it's pilot cone firstly centres the workpiece before retracting to allow the blade to come into contact with the material and start cutting of the chamfer.



**2** Adjusting the output of the blade controls the thickness of the chip count NOT the value or angle of the chamfer e.g. with a blade protrusion of 0,1mm the chamfering tool requires 10 revolutions to cut 1mm of the chamfer.



**3** Concentric chamfer achieved.

Our chamfer tools act by gradually shaving material away from a right angled corner to create a transitional, angled edge between two planes.

Example: with a blade protrusion of 0,1mm the device will make 10 revolutions to cut 1mm.

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