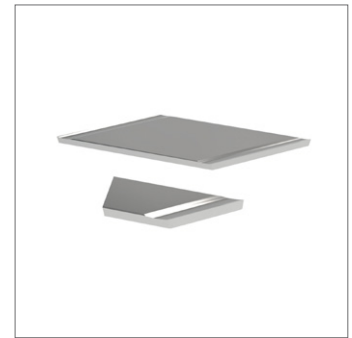
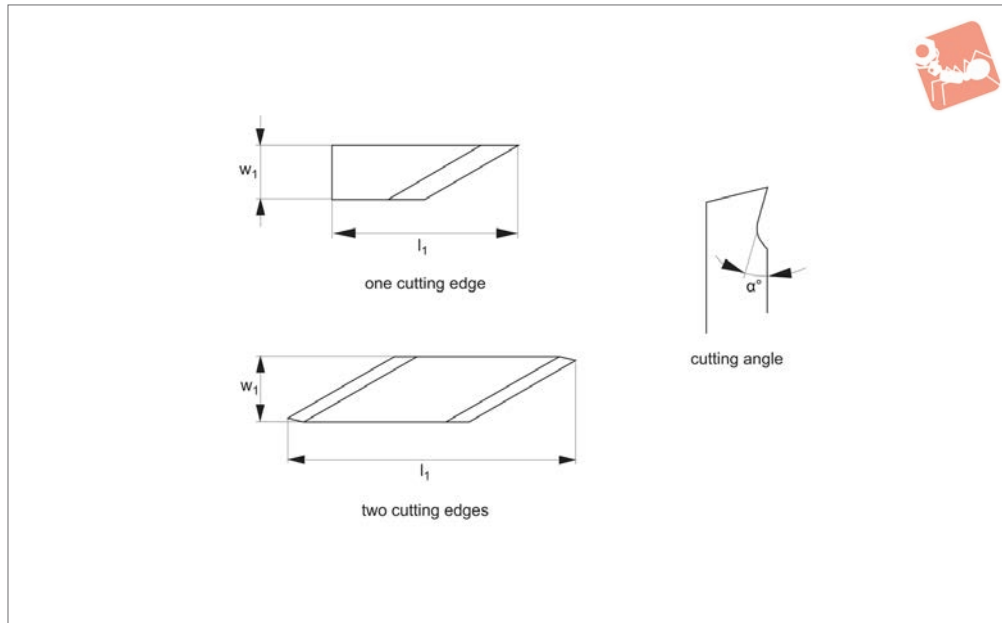




# Blades for Outer Chamfering Tools

for use with 91020



**91022**

CHAMFERING TOOLS

### Material

**HSS:** high speed steel, for most standard materials.

**HSS TIN:** high speed steel with TIN coating for difficult to machine materials such as stainless steel, titanium and Inconel.

### Technical Notes

A blade with a 14 cutting angle is most

commonly used as it covers the widest range of standard materials, please see material suitability table for further advice.

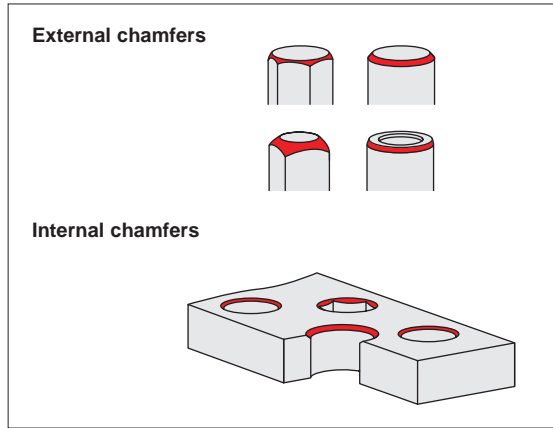
### Tips

Recommended cutting speed= 10 - 20 m/min. To extend the life of the blade and pilot cone we recommend lubrication with cutting fluid or soluble oil.

Order No.	Blade material	For chamfer dia. min.   max.	Inc. chamfer angle	Cutting angle $\alpha$	No. of cutting edges	$w_1$	$l_1$
91022.W1860-00	HSS	4-17	60°	0°	1	8.7	30
91022.W1860-14	HSS	4-17	60°	14°	1	8.7	30
91022.W1860-20	HSS	4-17	60°	20°	1	8.7	30
91022.W1860-25	HSS	4-17	60°	25°	1	8.7	30
91022.W1890-00	HSS	4-17	90°	0°	1	8.7	30
91022.W1890-14	HSS	4-17	90°	14°	1	8.7	30
91022.W1890-20	HSS	4-17	90°	20°	1	8.7	30
91022.W1890-25	HSS	4-17	90°	25°	1	8.7	30
91022.W3660-00	HSS	5-41 to 77/117	60°	0°	2	20.0	88
91022.W3660-14	HSS	5-41 to 77/117	60°	14°	2	20.0	88
91022.W3660-20	HSS	5-41 to 77/117	60°	20°	2	20.0	88
91022.W3660-25	HSS	5-41 to 77/117	60°	25°	2	20.0	88
91022.W3690-00	HSS	5-41 to 77/117	90°	0°	2	20.0	69
91022.W3690-14	HSS	5-41 to 77/117	90°	14°	2	20.0	69
91022.W3690-20	HSS	5-41 to 77/117	90°	20°	2	20.0	69
91022.W3690-25	HSS	5-41 to 77/117	90°	25°	2	20.0	69
91022.W1760-20	HSS TIN	4-17	60°	20°	1	8.7	30
91022.W1790-20	HSS TIN	4-17	90°	20°	1	8.7	30
91022.W4160-20	HSS TIN	5-41 to 77/117	60°	20°	2	20.0	88
91022.W4190-20	HSS TIN	5-41 to 77/117	90°	20°	2	20.0	69



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.

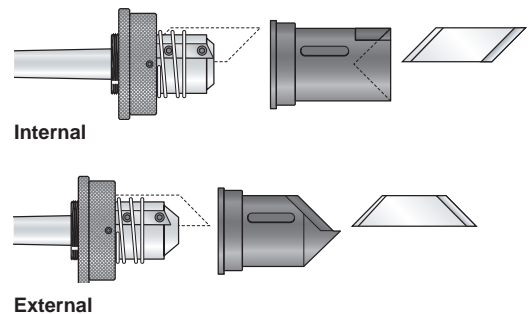
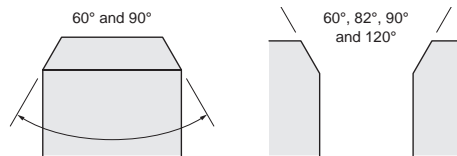


## Construction

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

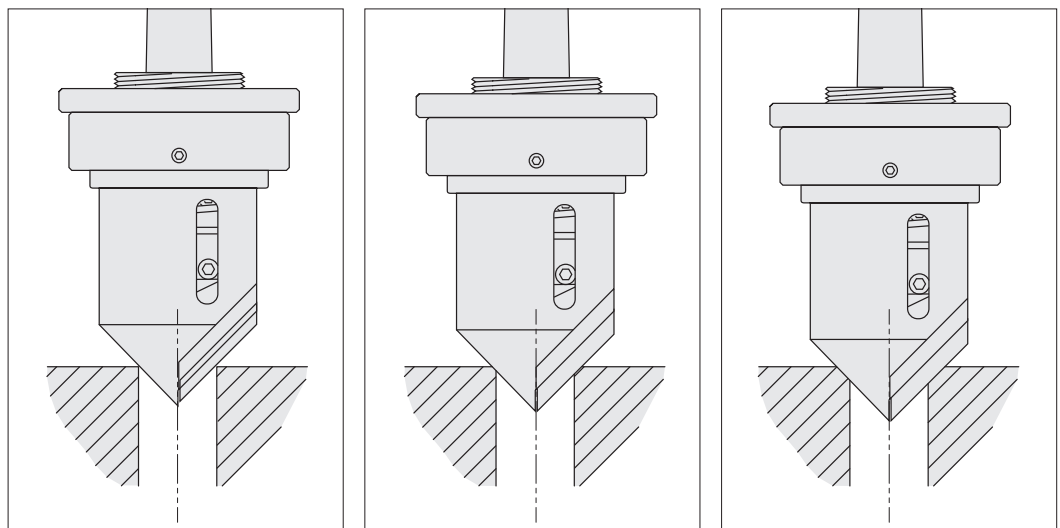
A variety of spindle attachments are available from CM1 to CM3 inclusive.

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



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.



- 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.