



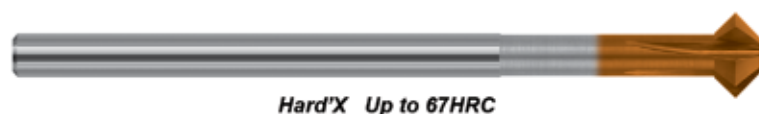
Chamfering Biconical Cutters

K15 Carbide – Front & Back

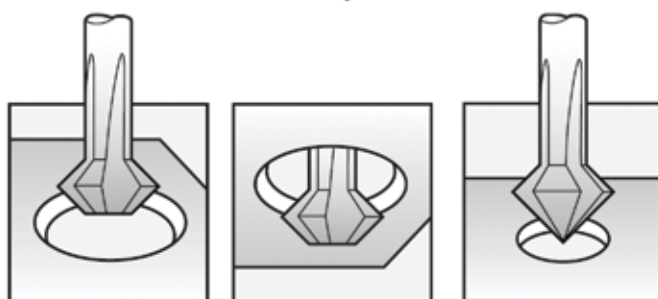
- Special design equals positive cut plus relieving profile
- Unequalled surface finish
- Impressive performance
- Extended tools profile life



Bi-Face: For superior finish operations, Bi-Face has a constant relieved profile. Longitudinal or interpolated work for front and back chamfering of edges and holes.



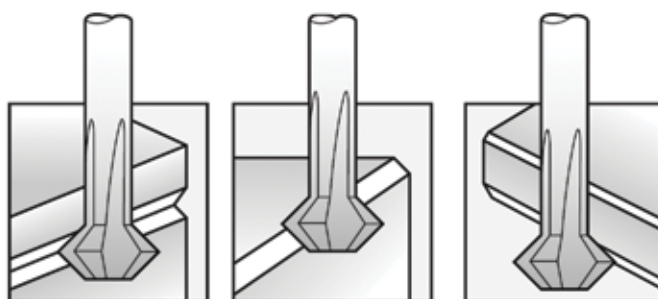
Hard'X: AlTiN carbide tool coating with a high hardness of 3500 HV. This coating shows high thermic stability and excellent protection against heat and wear. Ideal for dry machining - high speed cut - in treated steels and dies up to 67 HRC.



Front

Back

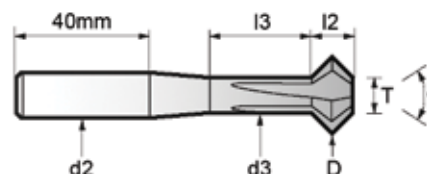
Deburring



V-Grooving

Top & Bottom Chamfering

Tolerances			
D	Tolerance	L	Angle
0.04 - 0.197	0 - 0.002	± 0.04	±1°
0.236 - 0.63	0 - 0.004	± 0.04	±1°



Standard 4 Flute Bi-Face 90° Angle (Series 8490) & Hard'X 90° Angle (Series 8490-H)

Diameter Inch (mm)	d2 (Inch)	d3 Max. (Inch)	T Max. (Inch)	L Min. (Inch)	L2 (Inch)	L3 (Inch)	90° Angle (Series 8490)	90° Angle (Series 8490-H)
							Bi-Face Code	Hard'X Code
0.118 (3)	0.236	0.087	0.047	4	0.051	0.394	314198	314222
0.157 (4)	0.236	0.114	0.063	4	0.069	0.472	314201	314225
0.197 (5)	0.236	0.134	0.079	4	0.091	0.591	314204	314228
0.236 (6)	0.236	0.154	0.094	4	0.114	0.709	314207	314231
0.315 (8)	0.236	0.193	0.193	4	0.118	1.339	314210	314234
0.394 (10)	0.236	0.232	0.232	4	0.157	1.339	314213	314237
0.472 (12)	0.236	0.232	0.232	4	0.236	1.339	314216	314240
0.630 (16)	0.394	0.311	0.311	4	0.315	1.339	314219	314243