



SUPER HARD with CBN

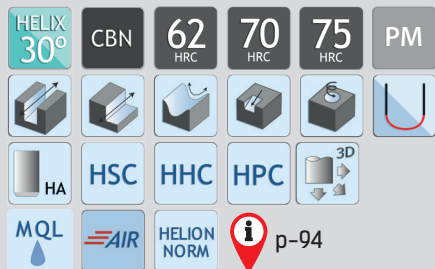
< 75HRc · High speed cutting in HHC
Sharp dimension tolerance
Best surface finishing

Helion

CBN BALL NOSE END MILL Z2 · 30°

93.1824

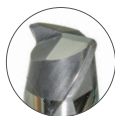
-  Fresa bola CBN Z2 · 30°
 Fraise à bout hémisphérique en carbure avec pointe CBN Z2 · 30°
 Fresa a testa sferica CBN Z2 · 30°
 Фреза концевая сферическая CBN Z2 · 30°
 Cbn küresel uç freze Z2 · 30°
 金刚石球头铣刀 Z2.30°



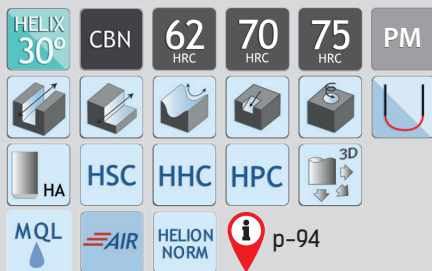
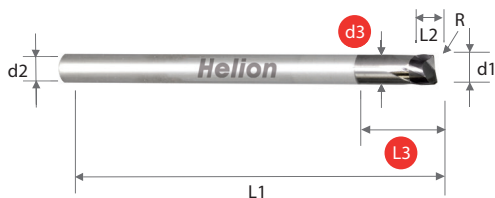
Cod.	d1	d2	d3	L1	L2	L3	Z
9318240108	1	4	0,90	48	0,7	8	2
9318240212	2	4	1,90	50	1,2	12	2
9318241510	3	6	2,90	66	1,8	10	2
9318240220	4	6	3,90	66	2,4	20	2
9318240320	6	6	5,90	83	3,5	20	2

93.1810

CBN CORNER RADIUS END MILL Z2 · 30°



-  Fresa tórica CBN Z2 · 30°
-  Fraise torique en carbure avec pointe CBN Z2 · 30°
-  Fresa a raggio angolare CBN Z2 · 30°
-  Фреза концевая радиусная CBN Z2 · 30°
-  Cbn köşe radius freze Z2 · 30°
-  金刚圆弧角铣刀 Z2.30°

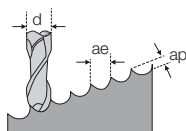


Cod.	d1	R	d2	d3	L1	L2	L3	Z
9318100106	1	0,1	4	0,90	48	0,7	6	2
9318100208	2	0,2	4	1,90	50	0,9	8	2
9318100310	3	0,3	6	2,90	66	1,2	10	2
9318100416	4	0,5	6	3,90	66	1,5	16	2
9318100615	6	0,5	6	5,90	83	3,0	15	2

CUTTING CONDITIONS 93.1824



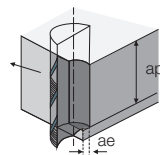
Finishing CBN Insert	45-55 Hrc					55-62 Hrc				60-75 Hrc				
	Hardox 400/ Toolox 44/ Stavax /SDK60					Vancron 40 / Vanadis 10 / Vanadis 4 Hardox 500 / Stavax / SDK61				CPM T15 / CPM 420 / DC53 / M42 / 1.3248				
d1 x L3	ap	ae	feed	speed		ap	ae	feed	speed		ap	ae	feed	speed
mm	mm	mm	mm/min	rpm/min-1		mm	mm	mm/min	rpm/min-1		mm	mm	mm/min	rpm/min-1
1 x 8	0,01	0,03	1200	20000		0,01	0,01	1100	20000		0,01	0,01	840	20000
2 x 12	0,02	0,03	1500	20000		0,01	0,03	1200	20000		0,01	0,02	1100	20000
3 x 10	0,05	0,05	3000	22000		0,04	0,04	2000	22000		0,04	0,04	1500	22000
4 x 20	0,05	0,05	3000	22000		0,04	0,06	1500	22000		0,05	0,05	1200	20000
6 x 20	0,08	0,10	4000	22000		0,04	0,06	1500	20000		0,06	0,06	1200	20000



CUTTING CONDITIONS 93.1810



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	Hardox 400/ Toolox 44/ Stavax /SDK60					Vancron 40 / Vanadis 10 / Vanadis 4 Hardox 500 / Stavax / SDK61					CPM T15 / CPM 420 / DC53 / M42 / 1.3248				
d1 x L3	ap	ae	feed	speed		ap	ae	feed	speed		ap	ae	feed	speed	
mm	mm	mm	mm/min	rpm/min-1		mm	mm	mm/min	rpm/min-1		mm	mm	mm/min	rpm/min-1	
1 x 8	0,02	0,2	700	40000		0,007	0,25	1000	40000		0,006	0,15	800	35000	
2 x 12	0,1	0,4	600	40000		0,01	0,6	1800	30000		0,008	0,3	1200	25000	
3 x 10	0,02	0,8	800	30000		0,01	0,6	1500	30000		0,008	0,3	1200	20000	
4 x 20	0,03	0,8	1500	20000		0,02	0,6	1500	30000		0,01	0,3	1200	25000	
6 x 20	0,05	0,8	2000	20000		0,03	0,6	1500	30000		0,02	0,3	1200	25000	



CONDITIONS OF WORK GUIDELINES. MAY VARY ON EACH CONCRETE CASE.
CONDICIONES DE TRABAJO ORIENTATIVAS. PUEDEN VARIAR EN FUNCION DE CADA CASO CONCRETO.