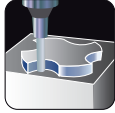
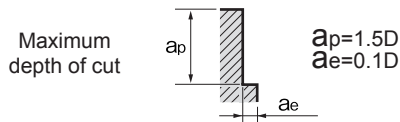


# MILLING CONDITIONS

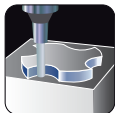
## 4 flute high helix carbide end mill

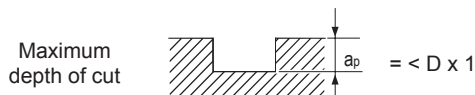
### SIDE MILLING

												HYP-EHS, CR-EHS	
	Cast Iron		Mild Steels Carbon Steels		Alloy Steels Tool Steels Ti (Annealed)		Hardened Steels Titanium Alloys Treated & aged		Hardened Steels Stainless Steels Nickel Base Alloys		Aluminium Alloys		
			< 220 HB		< 30 HRC		< 38 HRC		< 45 HRC				
Vc	102 m/min		120 m/min		96 m/min		72 m/min		48 m/min		132 m/min		
Ø	Speed (min <sup>-1</sup> )	Feed (mm/min.)	Speed (min <sup>-1</sup> )	Feed (mm/min.)	Speed (min <sup>-1</sup> )	Feed (mm/min.)	Speed (min <sup>-1</sup> )	Feed (mm/min.)	Speed (min <sup>-1</sup> )	Feed (mm/min.)	Speed (min <sup>-1</sup> )	Feed (mm/min.)	
4	8,160	840	9,600	1,800	7,680	1,560	5,760	480	3,840	288	10,560	1,320	
6	5,400	960	6,360	2,040	5,040	1,800	3,840	480	2,520	312	6,960	1,560	
8	4,080	840	4,800	1,920	3,840	1,680	2,880	744	1,920	492	5,280	1,440	
10	3,240	816	3,840	1,680	3,000	1,560	2,280	720	1,560	492	4,200	1,320	
12	2,760	792	3,240	1,680	2,520	1,440	1,920	612	1,260	420	3,480	1,200	
16	2,040	660	2,400	1,320	1,920	1,140	1,440	468	960	396	2,640	1,080	
20	1,620	540	2,160	1,080	1,500	900	1,140	384	780	312	2,100	960	



### SLOTTING

												HYP-EHS, CR-EHS	
	Cast Iron		Mild Steels Carbon Steels		Alloy Steels Tool Steels Ti (Annealed)		Hardened Steels Titanium Alloys Treated & aged		Hardened Steels Stainless Steels Nickel Base Alloys		Aluminium Alloys		
			< 220 HB		< 30 HRC		< 38 HRC		< 45 HRC				
Vc	72 m/min		108 m/min		90 m/min		60 m/min		35 m/min		120 m/min		
Ø	Speed (min <sup>-1</sup> )	Feed (mm/min.)	Speed (min <sup>-1</sup> )	Feed (mm/min.)	Speed (min <sup>-1</sup> )	Feed (mm/min.)	Speed (min <sup>-1</sup> )	Feed (mm/min.)	Speed (min <sup>-1</sup> )	Feed (mm/min.)	Speed (min <sup>-1</sup> )	Feed (mm/min.)	
4	5,760	480	8,640	756	7,200	540	4,800	348	2,880	204	9,548	1,080	
6	3,840	480	5,760	876	4,800	756	3,240	408	1,920	276	6,350	1,200	
8	2,880	744	4,320	792	3,600	696	2,400	408	1,440	276	4,775	1,140	
10	2,280	720	3,480	720	2,880	564	1,920	372	1,140	252	3,800	1,080	
12	1,920	612	2,880	696	2,400	540	1,560	348	960	240	3,200	960	
16	1,440	468	2,160	576	1,800	475	1,200	264	720	216	2,400	840	
20	1,140	384	1,680	504	1,440	384	960	216	576	168	1,900	?-720	



$= < D \times 0.5$