

Cooling	
Tolerance	h6
Coating	AlphaSlide Rainbow

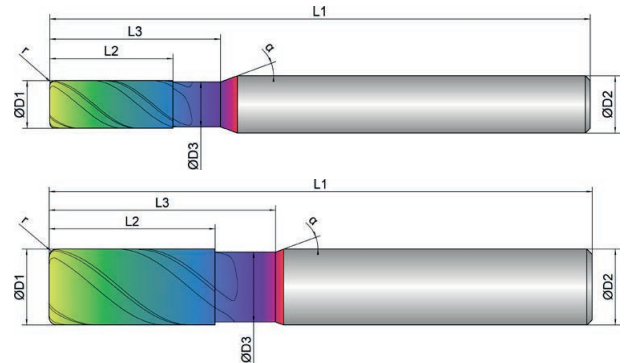
Strategy	HSC	HPC		
Application				
Features	HA	≠	2xD	



- Defined clearance angle for ideal stabilization with high cutting depths
- Special helical pitch for smooth running and soft cut
- Extra large chip chambers for an extreme chip volume

- For process reliable, helical diving and immersion
- For roughing and finishing, up to 1.5xD full slot
- Multipass milling of 3D contours

- Radius tolerance  $r \leq 1.5 \text{ mm}$ :  $\pm 0.003 \text{ mm}$
- Radius tolerance  $r > 1.5 \text{ mm}$ :  $\pm 0.005 \text{ mm}$



**Roughing**

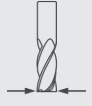
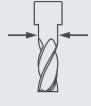
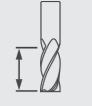
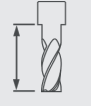
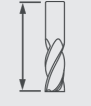
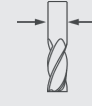






**Finishing**



VEXN1-M06-0003	D1	D3	L2	L3	L1	D2	z	r	$\alpha$
	mm $\varnothing$	mm $\varnothing$	mm	mm	mm	mm $\varnothing$	#	mm	$^\circ$
5/0,5	5.0	4.7	13.0	18.0	57.0	6.0	3	0.50	45
5/1	5.0	4.7	13.0	18.0	57.0	6.0	3	1.00	45
6/0,5	6.0	5.7	13.0	18.0	57.0	6.0	3	0.50	45
6/1	6.0	5.7	13.0	18.0	57.0	6.0	3	1.00	45
8/0,5	8.0	7.4	21.0	25.0	63.0	8.0	3	0.50	45
8/1	8.0	7.4	21.0	25.0	63.0	8.0	3	1.00	45
10/0,5	10.0	9.2	22.0	30.0	72.0	10.0	3	0.50	45
10/1	10.0	9.2	22.0	30.0	72.0	10.0	3	1.00	45
10/2	10.0	9.2	22.0	30.0	72.0	10.0	3	2.00	45
12/0,5	12.0	11.0	26.0	36.0	83.0	12.0	3	0.50	45

VEXN1-M06-0003

VEXN1-M06-0003	 D1 mm ∅	 D3 mm ∅	 L2 mm	 L3 mm	 L1 mm	 D2 mm ∅	 z #	 r mm	 °	 α °
12/1	12.0	11.0	26.0	36.0	83.0	12.0	3	1.00	45	20
12/2	12.0	11.0	26.0	36.0	83.0	12.0	3	2.00	45	20
16/1	16.0	15.0	36.0	42.0	92.0	16.0	3	1.00	45	20
16/2	16.0	15.0	36.0	42.0	92.0	16.0	3	2.00	45	20
16/3	16.0	15.0	36.0	42.0	92.0	16.0	3	3.00	45	20
20/1	20.0	19.0	41.0	52.0	104.0	20.0	3	1.00	45	20
20/2	20.0	19.0	41.0	52.0	104.0	20.0	3	2.00	45	20
20/3	20.0	19.0	41.0	52.0	104.0	20.0	3	3.00	45	20
20/4	20.0	19.0	41.0	52.0	104.0	20.0	3	4.00	45	20

		Dimension														
		Ø5			Ø6			Ø8			Ø10					
		Infeed in mm			Infeed in mm			Infeed in mm			Infeed in mm			Infeed in mm		
		ae=1xD	ae=0.3xD	ae=0.04xD	ae=1xD	ae=0.3xD	ae=0.04xD	ae=1xD	ae=0.3xD	ae=0.04xD	ae=1xD	ae=0.3xD	ae=0.04xD	ae=1xD	ae=0.3xD	ae=0.04xD
		Application			Application			Application			Application			Application		
Material	Strength (N/mm <sup>2</sup> )	Feed (mm/Z)	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz	
N		Vc (m/min)														
1.1	Aluminium, alloyed	<500	500	0.055	0.07	0.08	0.06	0.08	0.09	0.08	0.1	0.11	0.09	0.12	0.13	
1.2	Aluminium, alloyed	<600	480	0.055	0.07	0.08	0.06	0.08	0.09	0.08	0.1	0.11	0.09	0.12	0.13	
2.1-2.3	Aluminium, casted	<600	450	0.05	0.065	0.075	0.055	0.075	0.085	0.075	0.09	0.1	0.08	0.11	0.12	
3.1-3.3	Cooper, alloyed	<650	200	0.045	0.06	0.07	0.05	0.07	0.08	0.07	0.085	0.095	0.075	0.1	0.11	
4.1	Magnesium, alloyed	<250	500	0.055	0.07	0.08	0.06	0.08	0.09	0.08	0.1	0.11	0.09	0.12	0.13	
5.1	Thermoplastic	<100	400	0.04	0.05	0.06	0.045	0.065	0.075	0.055	0.065	0.075	0.065	0.085	0.095	
5.2	Duroplastic	<150	350	0.035	0.04	0.05	0.035	0.055	0.065	0.045	0.055	0.065	0.055	0.075	0.085	

		Dimension											
		Ø12			Ø16			Ø20					
		Infeed in mm			Infeed in mm			Infeed in mm			Infeed in mm		
		ae=1xD	ae=0.3xD	ae=0.04xD	ae=1xD	ae=0.3xD	ae=0.04xD	ae=1xD	ae=0.3xD	ae=0.04xD	ae=1xD	ae=0.3xD	ae=0.04xD
		Application			Application			Application			Application		
Material	Strength (N/mm <sup>2</sup> )	Feed (mm/Z)	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz
N		Vc (m/min)											
1.1	Aluminium, alloyed	<500	500	0.1	0.14	0.16	0.14	0.18	0.2	0.18	0.22	0.24	
1.2	Aluminium, alloyed	<600	480	0.1	0.14	0.16	0.14	0.18	0.2	0.18	0.22	0.24	
2.1-2.3	Aluminium, casted	<600	450	0.09	0.13	0.15	0.13	0.17	0.19	0.17	0.2	0.22	
3.1-3.3	Cooper, alloyed	<650	200	0.085	0.12	0.14	0.12	0.16	0.18	0.16	0.18	0.2	
4.1	Magnesium, alloyed	<250	500	0.1	0.14	0.16	0.14	0.18	0.2	0.18	0.22	0.24	
5.1	Thermoplastic	<100	400	0.075	0.11	0.12	0.11	0.13	0.14	0.13	0.17	0.18	
5.2	Duroplastic	<150	350	0.065	0.1	0.11	0.1	0.12	0.13	0.12	0.16	0.17	

**NOTE |** By using multipass milling the maximum infeed (ae, ap) is 0.5x corner radius!