

Cooling	   
Tolerance	e8
Coating	AlphaSlide Rainbow

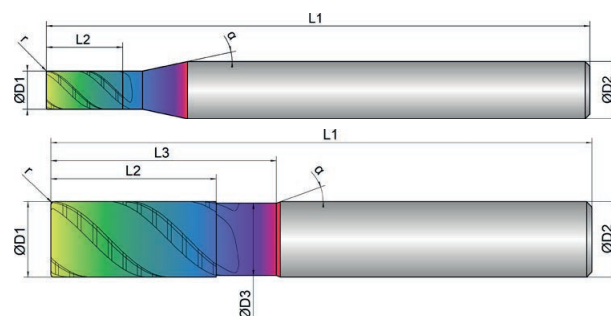
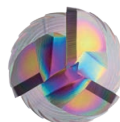
Strategy	ETC	HPC			
Application					
Features	HA	≠		2xD	



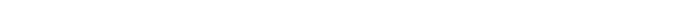
- Roughing teeth for the smallest chips in volume machining
- Special helical pitch for smooth running and soft cut
- Extra large chip chambers for an extreme chip volume

- For roughing, up to 2xD full slot
- For process reliable, helical diving and immersion

- Also ideally designed for trochoidal milling

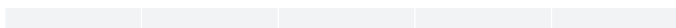


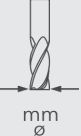
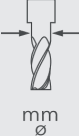
Roughing



inappropriate optimal

Finishing

	
inappropriate	optimal

	D1	D3	L2	L3	L1	D2	z	r		α
EXN1-M02-0023										
	mm Ø	mm Ø	mm	mm	mm	mm Ø	#	mm	°	°
4	4.0	0.0	8.0	0.0	57.0	6.0	3	0.10	45	12
5	5.0	0.0	9.0	0.0	57.0	6.0	3	0.20	45	12
6	6.0	5.6	13.0	19.0	57.0	6.0	3	0.20	45	20
8	8.0	7.6	19.0	25.0	63.0	8.0	3	0.20	45	20
10	10.0	9.6	22.0	30.0	72.0	10.0	3	0.32	45	20
12	12.0	11.4	26.0	36.0	83.0	12.0	3	0.32	45	20
16	16.0	15.4	31.0	42.0	92.0	16.0	3	0.32	45	20
20	20.0	19.4	41.0	52.0	104.0	20.0	3	0.50	45	20

 Download Catalog Pages (PDF)			<table><tr><th>Dimension</th><th colspan="2">Ø 4</th><th colspan="2">Ø 5</th><th colspan="2">Ø 6</th><th colspan="2">Ø 8</th><th colspan="2">Ø 10</th><th colspan="2">Ø 12</th></tr><tr><th>Infeed in mm</th><td>ae= 1xD</td><td>ae= 0.6xD</td><td>ae= 1xD</td><td>ae= 0.6xD</td><td>ae= 1xD</td><td>ae= 0.6xD</td><td>ae= 1xD</td><td>ae= 0.6xD</td><td>ae= 1xD</td><td>ae= 0.6xD</td><td>ae= 1xD</td><td>ae= 0.6xD</td></tr><tr><th></th><td>ap= 2xD</td><td>ap= 2xD</td><td>ap= 2xD</td><td>ap= 2xD</td><td>ap= 2xD</td><td>ap= 2xD</td><td>ap= 2xD</td><td>ap= 2xD</td><td>ap= 2xD</td><td>ap= 2xD</td><td>ap= 2xD</td><td>ap= 2xD</td></tr><tr><th>Application</th><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td></tr><tr><th>Material</th><th>Strength (N/mm²)</th><th>Feed (mm/Z)</th><td>fz</td><td>fz</td><td>fz</td><td>fz</td><td>fz</td><td>fz</td><td>fz</td><td>fz</td><td>fz</td><td>fz</td></tr></table>												Dimension	Ø 4		Ø 5		Ø 6		Ø 8		Ø 10		Ø 12		Infeed in mm	ae= 1xD	ae= 0.6xD	ae= 1xD	ae= 0.6xD	ae= 1xD	ae= 0.6xD	ae= 1xD	ae= 0.6xD	ae= 1xD	ae= 0.6xD	ae= 1xD	ae= 0.6xD		ap= 2xD	ap= 2xD	ap= 2xD	ap= 2xD	ap= 2xD	ap= 2xD	ap= 2xD	ap= 2xD	ap= 2xD	ap= 2xD	ap= 2xD	ap= 2xD	Application													Material	Strength (N/mm²)	Feed (mm/Z)	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz
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Material	Strength (N/mm²)	Feed (mm/Z)	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz																																																																			
N	Vc (m/min)																																																																														
1.1	Aluminium, alloyed	<500	500	0.035	0.05	0.05	0.07	0.07	0.09	0.09	0.11	0.11	0.13	0.13	0.15																																																																
1.2	Aluminium, alloyed	<600	480	0.035	0.05	0.05	0.07	0.07	0.09	0.09	0.11	0.11	0.13	0.13	0.15																																																																
2.1-2.3	Aluminium, casted	<600	450	0.03	0.045	0.045	0.065	0.065	0.085	0.085	0.1	0.1	0.12	0.12	0.14																																																																
3.1-3.3	Cooper, alloyed	<650	200	0.025	0.04	0.04	0.06	0.06	0.08	0.08	0.095	0.09	0.11	0.11	0.13																																																																
4.1	Magnesium, alloyed	<250	500	0.035	0.05	0.05	0.07	0.07	0.09	0.09	0.11	0.11	0.13	0.13	0.15																																																																
5.1	Thermoplastic	<100	350	0.03	0.045	0.035	0.05	0.05	0.07	0.06	0.07	0.07	0.09	0.07	0.11																																																																
5.2	Duroplastic	<150	300	0.025	0.04	0.03	0.045	0.045	0.06	0.05	0.06	0.06	0.08	0.06	0.1																																																																

Dimension	Ø 16		Ø 20					
Infeed in mm	ae= 1xD	ae= 0.6xD	ae= 1xD	ae= 0.6xD				
	ap= 2xD	ap= 2xD	ap= 2xD	ap= 2xD				
Application								
Material	Strength (N/mm²)	Feed (mm/Z)	fz	fz	fz	fz		
N	Vc (m/min)							
1.1	Aluminium, alloyed	<500	500	0.14	0.16	0.18	0.22	
1.2	Aluminium, alloyed	<600	480	0.14	0.16	0.18	0.22	
2.1-2.3	Aluminium, casted	<600	450	0.13	0.15	0.16	0.2	
3.1-3.3	Cooper, alloyed	<650	200	0.12	0.14	0.14	0.18	
4.1	Magnesium, alloyed	<250	500	0.14	0.16	0.18	0.22	
5.1	Thermoplastic	<100	350	0.11	0.14	0.14	0.18	
5.2	Duroplastic	<150	300	0.1	0.13	0.13	0.17	

NOTE | The values marked in turquoise are side applications!