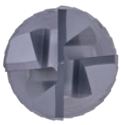
Cooling	
Tolerance	e8
Coating	BetaUni Iron

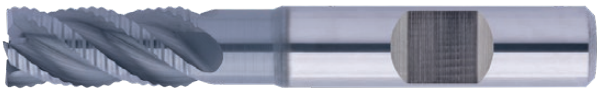
Strategy	HPC, UNI
Application	
Features	HB, ≠, 2xD

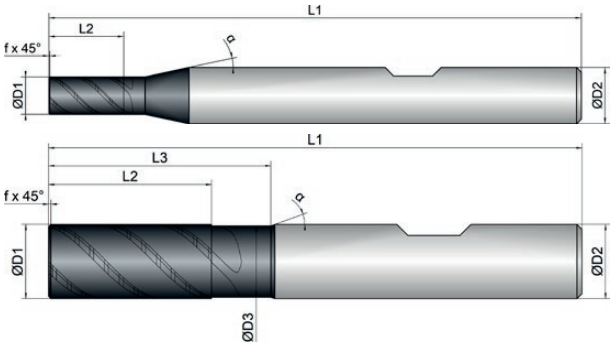
Basic

- Optimized chip chambers for a large chip volume
- Adapted roughing teeth for small chips

- For roughing under HPC conditions







Roughing

inappropriate — optimal

Finishing

inappropriate — optimal

BCU1-M02-0104	D1 mm ⌀	D3 mm ⌀	L2 mm	L3 mm	L1 mm	D2 mm ⌀	z #	45° mm	°	α °
4	4.0	0.0	8.0	0.0	57.0	6.0	4	0.10	45	12
5	5.0	0.0	9.0	0.0	57.0	6.0	4	0.20	45	12
6	6.0	5.6	13.0	19.0	57.0	6.0	4	0.20	45	20
8	8.0	7.6	19.0	25.0	63.0	8.0	4	0.20	45	20
10	10.0	9.6	22.0	30.0	72.0	10.0	4	0.32	45	20
12	12.0	11.4	26.0	36.0	83.0	12.0	4	0.32	45	20
16	16.0	15.4	31.0	42.0	92.0	16.0	4	0.32	45	20
20	20.0	19.4	41.0	52.0	104.0	20.0	4	0.50	45	20

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	Material	Strength (N/mm²)	Dimension	Ø4		Ø5		Ø6		Ø8		Ø10		Ø12	
			Infeed in mm	ae= 1xD ap= 1xD	ae= 0.3xD ap= 1xD	ae= 1xD ap= 1xD	ae= 0.3xD ap= 1xD	ae= 1xD ap= 1xD	ae= 0.3xD ap= 1xD	ae= 1xD ap= 1xD	ae= 0.3xD ap= 1xD	ae= 1xD ap= 1xD	ae= 0.3xD ap= 1xD	ae= 1xD ap= 1xD	ae= 0.3xD ap= 1xD
			Application												
			Feed (mm/Z)	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz	fz
P			Vc (m/min)												
1.1-1.3	Steel, unalloyed	<850	155	0.015	0.02	0.02	0.03	0.03	0.04	0.04	0.055	0.06	0.08	0.065	0.09
2.1-2.2	Steel, low-alloyed	<950	145	0.012	0.018	0.018	0.028	0.028	0.037	0.037	0.052	0.055	0.075	0.06	0.085
3.1-3.2	Steel, high-alloyed	<1100	135	0.01	0.015	0.015	0.025	0.025	0.034	0.034	0.048	0.05	0.07	0.055	0.08
K			Vc (m/min)												
1.1-1.2	Grey cast iron	<1000	170	0.012	0.018	0.018	0.028	0.028	0.037	0.037	0.052	0.055	0.075	0.06	0.085
M			Vc (m/min)												
1.1	Inox, ferritic/martensitic	<850	65		0.01		0.015		0.025		0.035		0.05		0.06
2.1	Inox, austenitic	<650	55		0.008		0.012		0.022		0.031		0.045		0.055
N			Vc (m/min)												
1.1-2.3	Alu, alloyed, casted	<600	340	0.02	0.035	0.035	0.04	0.04	0.06	0.06	0.08	0.08	0.1	0.1	0.12
3.1-3.3	Cooper, alloyed	<600	160	0.015	0.025	0.025	0.03	0.03	0.05	0.05	0.07	0.07	0.09	0.09	0.11
T			Vc (m/min)												
2.1-2.2	Titanium, pure, alloyed	<1000	40		0.01		0.015		0.025		0.035		0.045		0.055
S			Vc (m/min)												
1.1-1.3	Super alloys	<1450													

	Material	Strength (N/mm²)	Dimension	Ø16		Ø20	
			Infeed in mm	ae= 1xD ap= 1xD	ae= 0.3xD ap= 1xD	ae= 1xD ap= 1xD	ae= 0.3xD ap= 1xD
			Application				
			Feed (mm/Z)	fz	fz	fz	fz
P			Vc (m/min)				
1.1-1.3	Steel, unalloyed	<850	155	0.07	0.095	0.08	0.12
2.1-2.2	Steel, low-alloyed	<950	145	0.065	0.09	0.075	0.11
3.1-3.2	Steel, high-alloyed	<1100	135	0.06	0.085	0.07	0.1
K			Vc (m/min)				
1.1-1.2	Grey cast iron	<1000	170	0.065	0.09	0.075	0.11
M			Vc (m/min)				
1.1	Inox, ferritic/martensitic	<850	65		0.07		0.08
2.1	Inox, austenitic	<650	55		0.065		0.07
N			Vc (m/min)				
1.1-2.3	Alu, alloyed, casted	<600	340	0.11	0.13	0.12	0.14
3.1-3.3	Cooper, alloyed	<600	160	0.1	0.12	0.11	0.13
T			Vc (m/min)				
2.1-2.2	Titanium, pure, alloyed	<1000	40		0.065		0.07
S			Vc (m/min)				
1.1-1.3	Super alloys	<1450					

NOTE | The values marked in turquoise are side applications!