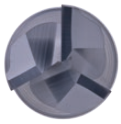
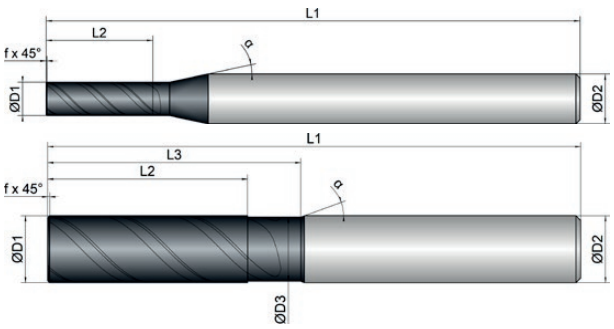
Cooling	
Tolerance	e8
Coating	BetaUni Iron

Strategy	HPC, UNI
Application	
Features	HA, ≠

Basic

- Adapted clearance angle for reliable machining
- Unequal tooth pitch for smooth running
- Large chip chambers for good chip evacuation





Roughing

inappropriate — optimal

Finishing

inappropriate — optimal

BCU1-M01-0123	D1 mm ø	D3 mm ø	L2 mm	L3 mm	L1 mm	D2 mm ø	z #	45° mm	°	α °
4	4.0	0.0	13.0	0.0	65.0	6.0	3	0.10	45	12
5	5.0	0.0	16.0	0.0	65.0	6.0	3	0.20	45	12
6	6.0	5.6	18.0	24.0	65.0	6.0	3	0.20	45	20
8	8.0	7.6	24.0	30.0	70.0	8.0	3	0.20	45	20
10	10.0	9.6	30.0	38.0	80.0	10.0	3	0.20	45	20
12	12.0	11.4	36.0	46.0	93.0	12.0	3	0.20	45	20
16	16.0	15.4	48.0	58.0	110.0	16.0	3	0.30	45	20
20	20.0	19.4	60.0	74.0	126.0	20.0	3	0.30	45	20

Download Catalog Pages (PDF)

	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	160	0.015	0.02	0.025	0.03	0.035	0.04	0.045	0.055	0.05	0.065	0.055	0.075
2.1-2.2	Steel, low-alloyed	<950	150	0.012	0.018	0.022	0.028	0.032	0.035	0.04	0.05	0.045	0.06	0.05	0.07
3.1-3.2	Steel, high-alloyed	<1100	140	0.01	0.015	0.02	0.025	0.03	0.032	0.038	0.048	0.04	0.055	0.045	0.065
K			**Vc (m/min)**												
1.1-1.2	Grey cast iron	<1000	175	0.012	0.018	0.025	0.028	0.032	0.035	0.04	0.05	0.045	0.06	0.05	0.07
M			**Vc (m/min)**												
1.1	Inox, ferritic/martensitic	<850	70		0.015		0.025		0.032		0.048		0.055		0.065
2.1	Inox, austenitic	<650	55		0.012		0.022		0.03		0.045		0.05		0.06
N			**Vc (m/min)**												
1.1-2.3	Alu, alloyed, casted	<600	340	0.025	0.04	0.04	0.045	0.045	0.065	0.065	0.085	0.085	0.11	0.11	0.13
3.1-3.3	Cooper, alloyed	<600	160	0.02	0.03	0.03	0.035	0.035	0.055	0.055	0.075	0.075	0.1	0.1	0.12
T			**Vc (m/min)**												
2.1-2.2	Titanium, pure, alloyed	<1000	45		0.012		0.022		0.03		0.045		0.05		0.06
S			**Vc (m/min)**												
1.1-1.3	Super alloys	<1450	20		0.01		0.018		0.025		0.04		0.045		0.055

	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	160	0.065	0.085	0.085	0.1
2.1-2.2	Steel, low-alloyed	<950	150	0.055	0.075	0.075	0.09
3.1-3.2	Steel, high-alloyed	<1100	140	0.05	0.07	0.07	0.08
K			**Vc (m/min)**				
1.1-1.2	Grey cast iron	<1000	175	0.055	0.075	0.075	0.09
M			**Vc (m/min)**				
1.1	Inox, ferritic/martensitic	<850	70		0.07		0.08
2.1	Inox, austenitic	<650	55		0.06		0.07
N			**Vc (m/min)**				
1.1-2.3	Alu, alloyed, casted	<600	340	0.12	0.14	0.13	0.15
3.1-3.3	Cooper, alloyed	<600	160	0.11	0.13	0.12	0.14
T			**Vc (m/min)**				
2.1-2.2	Titanium, pure, alloyed	<1000	45		0.06		0.07
S			**Vc (m/min)**				
1.1-1.3	Super alloys	<1450	20		0.055		0.065

NOTE | The values marked in turquoise are side applications!