

ZCET 球形粗铣
ZCEW 双面有孔
仿形加工

用途 Application	产品图片 Product Image	几何尺寸 Dimensioning	规格型号 Specification	尺寸 Dimension (mm)				配套刀柄 Matching Toolholder	PCD CBN-K CBN-S AN-10 AN-10 ZC325 ZP201 ZP150 ZP152 ZP153
				r℄	A	B	T		
球头仿形粗铣加工 Spherical end mill		ZC.. A, T, r℄, 7°	ZCET 080CE 主刃	8	15.6	7.9	3.97	刀柄: (Toolholder) D37	●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●● ●●●●●
			ZCET 100CE	10	18.3	10	4.74		
			ZCEW 100CE	10	18.3	10	4.74		
			ZCET 125CE	12.5	23.1	12.3	6.1		
			ZCEW 125CE	12.5	23.1	12.3	6.1		
			ZCET 150CE	15	28.3	14.9	7.59		
			ZCEW 150CE	15	28.3	14.9	7.59		
			ZCET 160CE	16	28.8	15.4	7.45		
			ZCEW 200CE	20	35.4	20.1	8.0		
			ZCET 080SE 副刃	8	16.8	5.9	3.43		
		ZCET 100SE	10	16.7	8.1	4.24			
		ZCEW 100SE	10	16.7	8.1	4.24			
		ZCET 125SE	12.5	20.8	9.3	5.4			
		ZCEW 125SE	12.5	20.8	9.3	5.4			
		ZCET 150SE	15	25.7	11.8	7.09			
		ZCEW 150SE	15	25.7	11.8	7.09			
		ZCET 160SE	16	26.3	12.4	6.96			
		ZCEW 200SE	20	31.9	15.7	7.0			
		CPMT 080204 外周刃	0.4	7.94	7.94	2.38			
		CPMT 090308	0.8	9.525	9.525	3.18			

刀杆
刀盘

直角
台肩
立
铣刀

圆角
铣刀

球头
铣刀

钻铣
刀杆

倒角
刀杆

玉米
铣刀

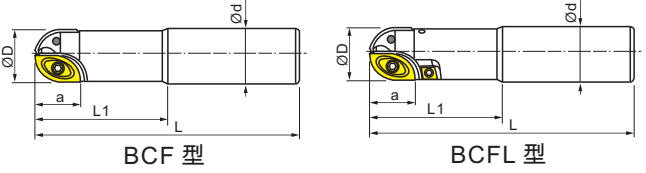
三
面刃
槽刀

快
进给
系列

龙门
平面
铣刀

锁
牙式
刀柄

BCF/BCFL 球形立铣刀 Spherical End Mill



BCF为两刃型 BCFL为四刃型
BCF for the edged-type BCFL for four-edge-type

- 采用精密级刀片可得到高精度加工表面
- 刀片表面凸面设计，不仅刀刃锋利并可降低切削振动的噪音
- ★ Use of available high-precision machining precision blade surface.
- ★ Blade surface of convex design, and reduces not only the sharp cutting edge Vibration noise.

切削参数 (Cutting Parameters): R25-R26
零配件 (Spare Parts): P01-P04

型号 Cat. No	尺寸 Size					刃数 No. of flutes	刀片 Insert			螺钉 Screw	扳手 Wrench	Order Number	BCF型 Price (RMB)	BCFL型 Price (RMB)	BCFL型 Price (RMB)
	D	d	L	L1	a		亲刃(1刃)	子刃(1刃)	外周刃(2刃)						
C20-10R-150	20	20	150	70	30	2/4	ZCEWWT 100CE	ZCEWWT 100SE	CPMT080204	M3.5×9.5 M2.5×6	T10 T8	329400	330	510	580
C20-10R-200	20	20	200	50	30	2						329402	430	-	-
C20-10R-250	20	20	250	50	30	2						329404	530	-	-
C25-10R-150	20	25	150	70	30	2/4						329406	-	510	650
C25-10R-200	20	25	200	80	30	2/4	329408	-	560	650					
C25-10R-250	20	25	250	100	30	2/4	329410	-	790	880					
C32-10R-300	20	32	300	150	30	2/4	329412	-	900	980					
C20-1.25R-150	25	25	150	70	39	2/4	ZCEWWT 125CE	ZCEWWT 125SE	CPMT090308	M4×9	T15	329414	-	620	700
C25-1.25R-150	25	25	150	100	39	2/4						329416	400	790	880
C25-1.25R-200	25	32	200	100	39	2/4						329418	500	790	880
C25-1.25R-250	25	32	250	150	39	2/4						329420	600	900	980
C32-1.25R-300	25	32	300	150	39	2/4	329422	-	1020	1100					
C32-15R-160	30	32	160	70	43	2/4	ZCEWWT 150CE	ZCEWWT 150SE	CPMT090308	M5×12 M4×9	T20 T15	329424	460	730	800
C32-15R-200	30	32	200	100	43	2/4						329426	560	850	950
C32-15R-250	30	32	250	150	43	2/4						329428	700	960	1050
C32-15R-300	30	32	300	150	43	2/4						329430	830	1100	1150
C32-15R-350	30	32	350	200	43	2/4	329432	-	1300	1400					
C32-16R-160	32	32	160	70	43	2/4	ZCEW 160CE	ZCEW 160SE	CPMT090308	M5×12 M4×9	T30 T15	329434	-	740	800
C32-16R-200	32	32	200	100	43	2/4						329436	-	850	950
C32-16R-250	32	32	250	150	43	2/4						329438	-	960	1050
C32-16R-300	32	32	300	150	43	2/4						329440	-	1100	1150
C32-16R-350	32	32	350	200	43	2/4	329442	-	1300	1400					
C42-20R-200	40	42	200	100	50	2/4	ZCEW 200CE	ZCEW 200SE	CPMT090308	M6×18 M4×9	T30 T15	329444	-	1130	1250
C42-20R-250	40	42	250	150	50	2/4						329446	-	1240	1350
C42-20R-300	40	42	300	150	50	2/4						329448	-	1350	1450
C42-20R-350	40	42	350	200	50	2/4						329450	-	1470	1560
MT5-20R-200	40	MT5	200	100	50	2/4	ZCEW 250CE	ZCEW 250SE	CPMT090308	M6×18 M4×9	T30 T15	329452	-	1240	1350
MT5-20R-250	40	MT5	250	150	50	2/4						329454	-	1350	1450
C50.8-25R-200	50	50.8	200	100	50	2/4						329456	-	1300	1400
C50.8-25R-250	50	50.8	250	150	50	2/4						329458	-	1410	1500
C50.8-25R-300	50	50.8	300	150	50	2/4	329460	-	1520	1600					
C50.8-25R-350	50	50.8	350	200	50	2/4	329462	-	1700	1800					
C50.8-25R-400	50	50.8	400	200	50	2/4	329464	-	2030	2150					
MT5-25R-200	50	MT5	200	100	50	2/4	329466	-	1520	1600					
MT5-25R-250	50	MT5	250	150	50	2/4	329468	-	1700	1800					

P3200

球形精铣
双面有孔
仿形加工

切削形态: ● 稳定切削 Stable Cutting ● 一般切削 General Cutting ✖ 不稳定切削 Unstable Cutting

用途 Application	产品图片 Product Image	几何尺寸 Dimensioning	规格型号 Specification	尺寸 Dimension (mm)				配套刀柄 Matching Toolholder
				rℓ	A	B	T	
P 钢 Steel			P3200- D08 D10 D12 D16 D20 D25 D30 D32	4 5 6 8 10 12.5 15 16	8 10 12 16 20 25 30 32	7 8.5 10 12 15 18.5 22.5 23.5	2.4 2.6 3 4 5 6 7 7	FGD OBN-K OBN-S NK01 ZC32S ZP201 ZP150 ZP153

刀杆
刀盘

直角
台肩
立
铣刀

圆角
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球头
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钻铣
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倒角
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玉米
铣刀

三
面刃
槽刀

快
进给
系列

龙门
平面
铣刀

锁
牙式
刀柄

用途 Application	被加工材料 Processed Material	刀片材质 Inserts Material	切削速度 Cutting Speed Vc(m/min)	切削条件 Cutting Condition	切削参数 Cutting Parameter								
					Ø6	Ø8	Ø10	Ø12	Ø16	Ø20	Ø25	Ø30	Ø32
P	普通结构用钢 Mild Steels SS	ZP201 ZC32S ZN60 ZP152	180-230	切削深度 ap(mm) 每刃进给量 f(mm/t)	0.05	0.07	0.1	0.1	0.12	0.12	0.15	0.15	0.15
					0.2	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6
	碳素钢、合金钢 Carbon Steel & Alloy Steels S-C SCM	ZP201 ZC32S ZP150 ZP152	150-200	切削深度 ap(mm) 每刃进给量 f(mm/t)	0.05	0.07	0.1	0.1	0.12	0.12	0.15	0.15	0.15
					0.2	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6
	模具钢 (300HB以下) Die Steel SKD SKT	ZP152 ZP153	130-180	切削深度 ap(mm) 每刃进给量 f(mm/t)	0.05	0.05	0.06	0.09	0.09	0.09	0.11	0.11	0.11
0.15					0.25	0.3	0.4	0.4	0.4	0.5	0.5	0.5	
预硬化钢 (30~40HRC) Pre-Harden Steel	ZP153 ZP163	70-90	切削深度 ap(mm) 每刃进给量 f(mm/t)	0.02	0.04	0.05	0.07	0.09	0.09	0.11	0.11	0.11	
				0.15	0.25	0.3	0.4	0.5	0.5	0.6	0.6	0.6	
M	不锈钢 Stainless Steels SUS	ZP152 ZP153	90-130	切削深度 ap(mm) 每刃进给量 f(mm/t)	0.03	0.05	0.06	0.09	0.09	0.09	0.11	0.11	0.11
					0.15	0.25	0.3	0.4	0.4	0.4	0.5	0.5	0.5
	不锈钢(湿式切削) Stainless Steel (wet condition) SUS	ZP152 ZP153	90-130	切削深度 ap(mm) 每刃进给量 f(mm/t)	0.03	0.05	0.06	0.09	0.09	0.09	0.11	0.11	0.11
					0.15	0.25	0.3	0.4	0.4	0.4	0.5	0.5	0.5
K	铸铁 Cast Iron FC.FCD	ZC32S ZP201 ZP152	200-400	切削深度 ap(mm) 每刃进给量 f(mm/t)	0.06	0.08	0.1	0.15	0.17	0.17	0.19	0.19	0.19
					0.2	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.7
N	铝/铜/镁/锌/塑料/木材 Aluminum/Copper/Magnesium /Zinc/Plastic/Wood	PCD ZK01	150-300	切削深度 ap(mm) 每刃进给量 f(mm/t)	0.12	0.15	0.17	0.2	0.26	0.26	0.3	0.3	0.3
					0.25	0.3	0.5	0.6	0.7	0.7	0.8	0.8	0.8
S	硬质合金/粉末冶金 Carbide/Powder Metallurgy	ZP152 ZP153 ZP163	20-50	切削深度 ap(mm) 每刃进给量 f(mm/t)	0.02	0.04	0.05	0.06	0.08	0.08	0.1	0.1	0.1
					0.1	0.2	0.25	0.25	0.3	0.3	0.5	0.5	0.5
H	钛/高温合金/碳纤维 Titanium/Superalloy /Carbon Fiber	ZP152 ZP153 ZP163	25-60	切削深度 ap(mm) 每刃进给量 f(mm/t)	0.02	0.04	0.05	0.06	0.08	0.08	0.1	0.1	0.1
					0.1	0.2	0.25	0.25	0.3	0.3	0.5	0.5	0.5

T2139

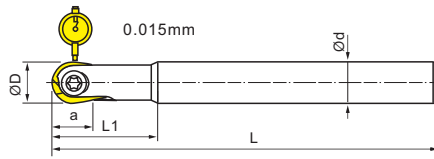
机夹式球头立铣刀 Machine clamped ball end mill

T2139 球形精铣刀

切削参数 (Cutting Parameters): R25-R26
零配件 (Spare Parts): P01-P04



- 采用高性能合金结构钢材
- 刀片切削刃锋利,可加工不同的材质
- 高精度保证其高性能,高速切削亦稳定



- ★ High-performance alloy structural steel.
- ★ Blade cutting edge sharp, can process different materials.
- ★ Precision to ensure its high-performance, high-speed cutting is also stable.

型号 Cat. No	尺寸 Size					刀片 Insert	螺钉 Screw	扳手 Wrench	Stock	Order Number	Price (RMB)	Price (RMB)
	D	d	L	L1	a							
T2139C08-4R-110	8	8	110	25	4	P320 □-D 08	T2139 4R	T8	●	329900	-	195
T2139C10-4R-100	8	10	100	25	4				●	329902	100	195
T2139C12-4R-130	8	12	130	40	4				●	329904	100	220
T2139C16-4R-150	8	16	150	40	4				●	329906	127	-
T2139C10-5R-120	10	10	120	30	5	P320 □-D 10	T2139 5R	T15	●	329908	100	160
T2139C12-5R-150	10	12	150	40	5				●	329910	100	180
T2139C16-5R-150	10	16	150	40	5				●	329912	127	-
T2139C12-6R-130	12	12	120	40	6				●	329914	100	160
T2139C12-6R-150	12	12	150	50	6	P320 □-D 12	T2139 6R	T20	●	329916	100	180
T2139C16-6R-150	12	16	150	50	6				●	329918	127	-
T2139C16-6R-200	12	16	200	50	6				●	329920	150	-
T2139C16-8R-150	16	16	150	50	8				●	329922	133	185
T2139C16-8R-200	16	16	200	60	8	P320 □-D 16	T2139 8R	T20	●	329924	167	240
T2139C20-8R-200	16	20	200	60	8				●	329926	200	-
T2139C25-8R-250	16	25	250	60	8				●	329928	233	-
T2139C20-10R-150	20	20	150	50	10				●	329930	167	260
T2139C20-10R-200	20	20	200	60	10	P320 □-D 20	T2139 10R	T20	●	329932	200	320
T2139C25-10R-250	20	25	250	60	10				●	329934	233	360
T2139C32-10R-300	20	32	300	60	10				●	329936	267	-
T2139C25-12.5R-150	25	25	150	45	12.5				●	329938	200	520
T2139C25-12.5R-200	25	25	200	55	12.5	P320 □-D 25	T2139 12.5R	T30	●	329940	233	580
T2139C25-12.5R-250	25	25	250	60	12.5				●	329942	267	-
T2139C25-12.5R-300	25	32	300	60	12.5				●	329944	300	-
T2139C32-12.5R-200	25	32	200	98	12.5				●	329946	-	630
T2139C32-12.5R-250	25	32	250	120	12.5	P320 □-D 30	T2139 15R	T30	●	329948	-	690
T2139C32-12.5R-300	25	32	300	60	12.5				●	329950	333	-
T2139C32-15R-150	30	32	150	45	15				●	329952	217	-
T2139C32-15R-200	30	32	200	55	15				●	329954	250	750
T2139C32-15R-250	30	32	250	60	15	P320 □-D 30	T2139 16R	T30	●	329956	283	-
T2139C32-15R-300	30	32	300	60	15				●	329958	317	-
T2139C32-15R-350	30	32	350	60	15				●	329960	367	-
T2139C40-15R-250	30	40	250	121	15				●	329962	-	830
T2139C32-16R-150	32	32	150	45	16	P320 □-D 32	T2139 16R	T30	●	329964	217	-
T2139C32-16R-200	32	32	200	55	16				●	329966	250	800
T2139C32-16R-250	32	32	250	60	16				●	329968	283	-
T2139C32-16R-300	32	32	300	60	16				●	329970	317	-
T2139C32-16R-350	32	32	350	60	16	P320 □-D 32	T2139 16R	T30	●	329972	367	-
T2139C40-16R-250	32	40	250	121	16				●	329974	-	920
T2139C40-16R-350	32	40	350	121	16				●	329976	-	1400

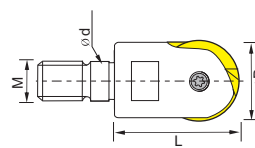
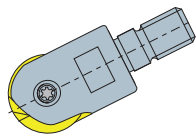
■ 切削能力及精度均佳,排削好,高速切削稳定,有很宽的应用范围。
可应用于模具用材料的精加工及燃气轮机叶片的制造。

■ Cutting ability and precision are good, the row of cut is good, high-speed cutting stability, and has a wide range of applications.
Can be applied to abrasive materials used in finishing and the manufacture of gas turbine blades.

T2139M 球型精铣刀

Ball Precision Cutters (T2139M)

切削参数 (Cutting Parameters): R25-R26
零配件 (Spare Parts): P01-P04



型号 Cat. No	尺寸 Size				Teeth	刀片 Insert	螺钉 Screw	扳手 Wrench	Stock	Order Number	Price (RMB)
	D	L	d	M							
T2139M4R-M4	R4	25	4.5	M4	1	P32..-D08	T2139-4R	T10	●	331120	350
T2139M5R-M5	R5	25	5.5	M5	1	P32..-D10	T2139-5R	T20	●	331122	350
T2139M6R-M6	R6	35	6.5	M6	1	P32..-D12	T2139-6R	T20	●	331100	350
T2139M8R-M8	R8	35	8.5	M8	1	P32..-D16	T2139-8R	T20	●	331102	350
T2139M10R-M10	R10	35	10.5	M10	1	P32..-D20	T2139-10R	T20	●	331104	400
T2139M12.5R-M12	R12.5	40	12.5	M12	1	P32..-D25	T2139-12.5R	T30	●	331106	450
T2139M15R-M16	R15	40	17	M16	1	P32..-D30	T2139-15R	T30	●	331108	500
T2139M16R-M16	R16	40	17	M16	1	P32..-D32	T2139-16R	T30	●	331110	600

刀杆
刀盘

直角
台肩
立
铣刀

圆角
铣刀

球头
铣刀

钻铣
刀杆

倒角
刀杆

玉米
铣刀

三
面刃
槽刀

快
进给
系列

龙门
平面
铣刀

锁
牙式
刀柄