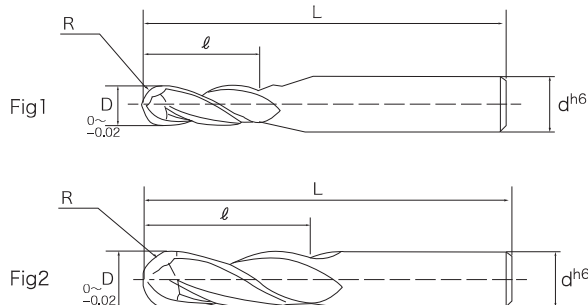


IC2RBV

(ザ・)カットミル 超硬2枚刃高硬度用ボールエンドミル

For High Hardness Steel, Coated Solid Carbide Ball Endmills (2Flutes)



特長 Feature

- 高い耐摩耗性を持った超々微粒子超硬と特殊コーティングで高硬度材も難無く加工
- High hardness material can be processed due to special coating and super micro-grain alloy which is excellent wear resistant.
- エキセントリック刃型の採用により面粗度と刃先強度が飛躍的に向上
- Roughness and edge strength are improved due to eccentric edge type.
- 高速機での使用にも対応
- High-speed machine is available.

単位：mm

商品コード Item Code	R±0.01	D	ℓ 0~0.5	L ±1.0	d	Fig.
IC2RBV-0.5R	0.5	1	2	50	4	1
IC2RBV-1R	1	2	4	50	4	1
IC2RBV-1.5R	1.5	3	6	75	6	1
IC2RBV-2R	2	4	8	75	6	1
IC2RBV-3R	3	6	12	75	6	2
IC2RBV-4R	4	8	16	100	8	2
IC2RBV-5R	5	10	20	100	10	2
IC2RBV-6R	6	12	24	100	12	2
IC2RBV-8R	8	16	32	150	16	2
IC2RBV-10R	10	20	40	150	20	2

標準切削条件表 (加工傾斜角α≤15°) Recommended cutting conditions

被削材 Work	合金鋼/工具鋼/プレハードン鋼 SCM/SKD61/SKD11/NAK等 (~45HRC)				焼入れ鋼 SKD61/SKD11/STAVAX等 (45~55HRC)				焼入れ鋼 SKD61/SKH/SKS等 (55~62HRC)			
	回転数 n (min ⁻¹)	送り速度 F (mm/min)	P (mm)	H (mm)	回転数 n (min ⁻¹)	送り速度 F (mm/min)	P (mm)	H (mm)	回転数 n (min ⁻¹)	送り速度 F (mm/min)	P (mm)	H (mm)
1	70,000	3,000	≤0.2	≤0.05	46,600	1,700	≤0.2	≤0.05	18,000	670	≤0.1	≤0.025
2	40,000	3,000	≤0.4	≤0.10	26,600	1,700	≤0.4	≤0.10	10,400	670	≤0.2	≤0.05
3	30,000	3,000	≤0.6	≤0.15	20,000	1,700	≤0.6	≤0.15	8,000	670	≤0.3	≤0.075
4	25,000	3,000	≤0.8	≤0.20	17,000	1,700	≤0.8	≤0.20	6,400	640	≤0.4	≤0.10
6	20,000	3,000	≤1.2	≤0.30	13,000	1,700	≤1.2	≤0.30	4,200	530	≤0.6	≤0.15
8	15,000	3,000	≤1.6	≤0.40	10,000	1,700	≤1.6	≤0.40	3,200	540	≤0.8	≤0.20
10	12,000	2,900	≤2.0	≤0.50	8,000	1,600	≤2.0	≤0.50	2,500	510	≤1.0	≤0.25
12	10,000	2,500	≤2.4	≤0.60	6,600	1,400	≤2.4	≤0.50	2,100	440	≤1.2	≤0.30
16	7,500	1,900	≤3.2	≤0.80	4,950	1,000	≤3.2	≤0.50	1,550	310	≤1.6	≤0.30
20	6,000	1,700	≤4.0	≤1.00	3,960	800	≤4.0	≤0.50	1,250	250	≤2.0	≤0.30

標準切削条件表 (加工傾斜角α>15°) Recommended cutting conditions

被削材 Work	合金鋼/工具鋼/プレハードン鋼 SCM/SKD61/SKD11/NAK等 (~45HRC)				焼入れ鋼 SKD61/SKD11/STAVAX等 (45~55HRC)				焼入れ鋼 SKD61/SKH/SKS等 (55~62HRC)			
	回転数 n (min ⁻¹)	送り速度 F (mm/min)	P (mm)	H (mm)	回転数 n (min ⁻¹)	送り速度 F (mm/min)	P (mm)	H (mm)	回転数 n (min ⁻¹)	送り速度 F (mm/min)	P (mm)	H (mm)
1	53,000	3,000	≤0.2	≤0.05	35,000	1,700	≤0.2	≤0.05	12,600	350	≤0.1	≤0.025
2	30,000	3,000	≤0.4	≤0.10	20,000	1,700	≤0.4	≤0.10	7,300	350	≤0.2	≤0.05
3	23,000	1,700	≤0.6	≤0.15	15,000	1,000	≤0.6	≤0.15	5,600	350	≤0.3	≤0.075
4	20,000	1,700	≤0.8	≤0.20	13,000	1,000	≤0.8	≤0.20	4,500	340	≤0.4	≤0.10
6	15,000	1,700	≤1.2	≤0.30	10,000	1,000	≤1.2	≤0.30	2,900	270	≤0.6	≤0.15
8	11,000	1,700	≤1.6	≤0.40	7,500	1,000	≤1.6	≤0.40	2,200	280	≤0.8	≤0.20
10	9,000	1,600	≤2.0	≤0.50	6,000	900	≤2.0	≤0.50	1,800	270	≤1.0	≤0.25
12	7,500	1,400	≤2.4	≤0.60	5,000	800	≤2.4	≤0.50	1,500	230	≤1.2	≤0.30
16	5,600	1,120	≤3.2	≤0.80	3,750	600	≤3.2	≤0.50	1,120	180	≤1.6	≤0.30
20	4,500	900	≤4.0	≤1.00	3,000	480	≤4.0	≤0.50	900	140	≤2.0	≤0.30

※切削条件はあくまでも目安です。使用される機械、チャックの剛性や切削油等の状況によって変動致します。

These conditions are for general guidance. Therefore they are subject to change to the situation of the machine used, the tool hold rigidity, cutting oil, etc.

※エキセントリック刃型は、外周逃げ面が凸R形状で、逃げが大きく刃先強度が高い。

The eccentric blade type has a convex R-shaped flank on the outer periphery, and has a large clearance and high blade edge strength.

構造用鋼/炭素鋼 (SS41,S45C)	工具鋼/プリハードン鋼 (SKD,NAK101)	合金鋼 (SCM)	熱処理鋼等 Hardened Steels	硬質材 Hard material
HRC30以下	HRC30~35	HRC35~45	HRC45~55	HRC55~62
△	○	◎	◎	○