

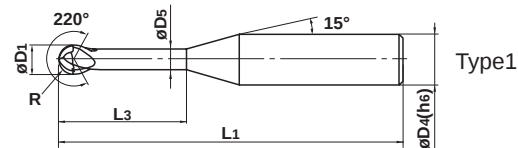
IMPACT MIRACLE END MILLS

VF2WB

Wide ball nose, Medium cut length, 2 flute



Carbon Steel, Alloy Steel, Cast Iron (≤30HRC)	Tool Steel, Pre-Hardened Steel, Hardened Steel (≤45HRC)	Hardened Steel (≤55HRC)	Hardened Steel (>55HRC)	Austenitic Stainless Steel	Titanium Alloy, Heat Resistant Alloy	Copper Alloy	Aluminium Alloy
○	◎	○		◎	◎		



R	$1 \leq R \leq 3$				
	± 0.01				
h6	$D4=6$				
	$\begin{matrix} 0 \\ -0.008 \end{matrix}$				

- Ball nose end mill suitable for machining of undercut geometries and complex geometries using a 5-axis machine.

Unit : mm

Order Number	R	D1	L3	D5	L1	D4	Flutes	Stock	Type
VF2WBR0100N060	1	2	6	1.6	60	6	2	★	1
R0150N080	1.5	3	8	2.4	60	6	2	★	1
R0200N100	2	4	10	3.2	60	6	2	★	1
R0300N120	3	6	12	4.8	80	6	2	★	1

RECOMMENDED CUTTING CONDITIONS

Work material	Carbon steel, Cast iron, Alloy steel (—30HRC)			Alloy steel, Tool steel, Pre-hardened steel			Austenitic stainless steel, Titanium alloy			Hardened steel (45—55HRC)		
	Cf53, GG25			X40CrMoV51			X5CrNi1810, X5CrNiMo17-12-2, Ti6Al4V			X40CrMoV51		
R (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Depth of cut (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Depth of cut (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Depth of cut (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Depth of cut (mm)
R1	40000	5000	0.07	40000	5000	0.06	32000	2500	0.05	32000	3000	0.03
R1.5	32000	5000	0.12	32000	5000	0.11	26000	2500	0.10	26000	3000	0.07
R2	24000	3800	0.15	24000	3800	0.13	20000	2000	0.12	20000	2800	0.10
R3	16000	2800	0.20	16000	2800	0.18	13000	1500	0.15	13000	2100	0.12
Depth of cut												
	R:Radius											

- 1) When cutting austenitic stainless steels, the use of water-soluble cutting fluid is effective.
 2) If the depth of cut is shallow, the revolution and feed rate can be increased.

● : Inventory maintained. ★ : Inventory maintained in Japan.