

MSTAR END MILLS**MS2SB...E**

Ball nose, Short cut length, 2 flute

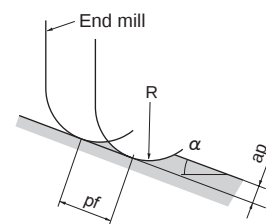
MS2MB...E

Ball nose, Medium cut length, 2 flute

RECOMMENDED CUTTING CONDITIONS

Work material	Alloy steel, Tool steel, Pre-hardened steel (—45HRC)				Hardened steel (45—58HRC)			
R (mm)	$\alpha \leq 15^\circ$		$\alpha > 15^\circ$		$\alpha \leq 15^\circ$		$\alpha > 15^\circ$	
	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)
R1	35000	2400	25000	1400	25000	1500	20000	900
R1.5	30000	2500	23000	1400	20000	1500	15000	900
R2	25000	2600	20000	1500	17000	1500	13000	900
R2.5	23000	2600	17000	1500	15000	1500	11000	900
R3	20000	2600	15000	1500	13000	1500	10000	900
R4	15000	2700	11000	1500	10000	1500	7500	900
R5	12000	2700	9000	1500	8000	1500	6000	900
R6	10000	2500	7500	1400	6600	1400	5000	800
Depth of cut	(MS2SB...E) $\leq 0.2R$ (R = 1) $\leq 0.4R$ (R > 1)				(MS2MB...E) $\leq 0.1R$ $\leq 0.06R$			

R:Radius



Work material	Titanium		High Nickel (Inconel)	
R (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Revolution (min ⁻¹)	Feed rate (mm/min)
R1	24000	1600	7300	500
R1.5	16000	1300	5000	420
R2	12000	1300	3600	370
R2.5	10000	1100	3000	340
R3	8000	1000	2500	330
R4	6000	1100	1900	340
R5	5000	1100	1500	340
R6	4000	1000	1200	300
Depth of cut	(MS2SB...E) $\leq 0.2R$ (R = 1) $\leq 0.4R$ (R > 1)		(MS2MB...E) $\leq 0.1R$ $\leq 0.06R$	

R:Radius