

## 4HPB

### High Speed Milling Condition

피삭재		프리하든강			고경도강(열처리강)					
Workpiece		Preharden Steel NAK, HPM			Hardened Steels SKD 61, STAVAX			Hardened Steels SKD 11		
HRC		HRC 30 ~ 45			HRC 45 ~ 55			HRC 55 ~ 65		
Radius of Ball Nose	Depth of Cut Ad(mm)	Speed (min <sup>-1</sup> )	Feed (mm/min)	Depth of Cut Ad(mm)	Speed (min <sup>-1</sup> )	Feed (mm/min)	Depth of Cut Ad(mm)	Speed (min <sup>-1</sup> )	Feed (mm/min)	
R0.5	0.08	25,000	1,500	0.08	20,000	1,200	0.05	10,000	1,000	
R0.75	0.12	22,000	1,500	0.12	18,000	1,200	0.08	9,500	1,000	
R1.0	0.15	20,000	1,500	0.15	16,000	1,500	0.10	8,500	1,200	
R1.25	0.20	18,000	2,000	0.20	13,000	1,500	0.13	6,500	1,200	
R1.5	0.23	16,000	2,000	0.23	10,500	1,500	0.15	5,500	1,200	
R2.0	0.30	15,000	3,000	0.30	9,000	3,000	0.20	6,200	2,000	
R2.5	0.38	10,000	2,500	0.38	8,500	3,500	0.25	5,500	2,000	
R3.0	0.45	9,000	2,500	0.45	8,000	3,500	0.30	5,000	2,000	
R4.0	0.60	6,500	3,300	0.60	6,200	3,000	0.40	4,500	1,800	
R5.0	0.75	5,000	3,000	0.75	4,500	2,700	0.50	3,600	1,800	
R6.0	0.90	4,000	3,000	0.90	3,750	2,700	0.60	3,000	1,800	

  

Depth of Cut	<p style="text-align: center;">Pf = 0.05D</p>
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### ⚠ 경고 Warning

1. 경밀하고 강성이 있는 홀더와 장비를 사용해주시시오.
  2. 절입량의 Ad는 축방향 절입량을 표시합니다.
  3. 강재 가공 시 Air Blow나 Oil Mist 사용을 추천합니다.
  4. 회전수와 테이블 이송은 같은 비율로 조정해주시시오.
  5. 상기 조건표는 참고 자료이니 실제 가공 시 가공 형상, 기계 용량, 작업환경에 따라 조건을 조정해서 가공하시기 바랍니다.
1. Use a rigid precise machine and holder.
  2. Ad(mm) : Axial Depth of Cut.
  3. For milling steels, air blow or MQL(Oil Mist) are recommended.
  4. Adjust both Spindle speed and Feedrate by the same proportion.
  5. The above condition are only reference. In actual machining conditions adjust these parameters according to the milling shape, machine capability and the operation environment.