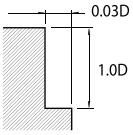
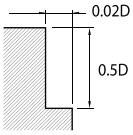
RPM : rev./min FEED : mm/min

4HPE	Cutting Condition			
Material	Alloy Steels/Prehardened Steels **NAK80/KP4M**		Hardened Steels **STAVAX/SKD11**	
Hardness	**40 ~ 45HRC**		**45 ~ 55HRC**	
Outside Dia	**RPM**	**FEED**	**RPM**	**FEED**
Ø 1	31,500	1050	20300	710
Ø 2	20,200	1250	14300	840
Ø 3	14,300	1250	8500	840
Ø 4	11,400	1300	7200	880
Ø 5	10,500	1500	6700	1000
Ø 6	8,450	1400	5600	950
Ø 7	7,800	1380	4200	900
Ø 8	6,500	1350	3830	840
Ø 9	6,150	1260	3500	840
Ø 10	5,250	1260	2800	800
Ø 11	4,300	1150	2500	800
Ø 12	4,300	1150	2300	760
Ø 14	3,500	1050	2100	760
Ø 16	3,500	1050	2000	700
Ø 18	2,800	1000	2000	700
Ø 20	2,600	980	1800	650
Depth of Cut	~ 55HRC 		55HRC ~ 	

- When milling workpiece HRC below 55(Alloy steel,tool steel),raise up 20% RPM and feed compared to the same diameter.
- Note that 4HPE series performs better in side milling rather than groove millling.
- Use the table for your reference.Adjust the parameters depending on your machining geometry,machining purpose and CNC.
- If the table over the maximum RPM and feed of your machine or found red heat on the material,adjust RPM and feed in the same proportion.
- Use suitable cutting oil for material and machining geometry.