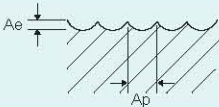


## ZB304 Series | General Speed Cutting

Material	Carbon Steels · Alloy Steels · Cast Iron		Alloy Steels · Tool Steels		Hardened Steels		
Hardness	~ HRC30		HRC30 ~ HRC40		HRC55 ~ HRC65		
Strength	~ 1000N/mm <sup>2</sup>		1000 ~ 1250N/mm <sup>2</sup>		1500N/mm <sup>2</sup>		
Diameter (INCH)	RPM	FEED	RPM	FEED	RPM	FEED	
R1/16 X 1/8	13100	40.10	10000	27.00	4520	8.85	
R3/32 X 3/16	9140	48.50	7300	34.00	3680	10.50	
R1/8 X 1/4	7780	49.50	6300	37.00	3160	11.25	
R5/32 X 5/16	5260	56.00	4420	39.00	2100	11.25	
R3/16 X 3/8	4620	60.00	3780	42.00	1780	11.25	
R1/4 X 1/2	3780	53.00	2940	39.00	1360	11.25	
R5/16 X 5/8	2740	54.50	2320	38.50	1160	11.25	
RPM = rev. / min. FEED = inch / min.		Ae: D1/8~D1/4=.008 inch D5/16~D5/8=.012 inch Ap: 0.02 X D				Ae: D1/8~D1/4=.008 inch D5/16~D5/8=.012 inch Ap: 0.1 X D	

## ZB304 Series | High Speed Cutting

Material	Carbon Steels · Alloy Steels · Cast Iron		Alloy Steels · Tool Steels	
Hardness	~ HRC45		HRC45 ~ HRC65	
Strength	~ 1500N/mm <sup>2</sup>		~ 1500N/mm <sup>2</sup>	
Diameter (INCH)	RPM	FEED	RPM	FEED
R1/16 X 1/8	21000	59.00	17000	30.50
R3/32 X 3/16	21000	106.25	12000	35.50
R1/8 X 1/4	21000	136.50	10500	37.00
R5/32 X 5/16	15760	167.50	7800	43.50
R3/16 X 3/8	13660	180.00	6300	49.50
R1/4 X 1/2	10500	155.50	5260	49.50
R5/16 X 5/8	8200	155.50	3780	42.00
RPM = rev. / min. FEED = inch / min.		Ae: D1/8~D1/4=.008 inch D5/16~D5/8=.012 inch Ap: 0.05 X D		