

# TECHNICAL DATA | GENERAL PURPOSE |

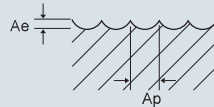
## ZB304 Series

### General Speed Cutting

Work Material	Carbon Steels, Alloy Steels, Cast Iron		Alloy Steels, Tool Steels		Hardened Steels	
Hardness	≤ 30 HRC		30 ~ 40 HRC		45 ~ 65 HRC	
Strength	~ 145,038 lbf / inch <sup>2</sup>		145,038 ~ 181,298 lbf / inch <sup>2</sup>		217,557 lbf / inch <sup>2</sup>	
Cutting Diameter(inch)	RPM	FEED	RPM	FEED	RPM	FEED
1/8	13,100	40.10	10,000	27.00	4,520	8.85
3/16	9,140	48.50	7,300	34.00	3,680	10.50
1/4	7,780	49.50	6,300	37.00	3,160	11.25
5/16	5,260	56.00	4,420	39.00	2,100	11.25
3/8	4,620	60.00	3,780	42.00	1,780	11.25
1/2	3,780	53.00	2,940	39.00	1,360	11.25
5/8	2,740	54.50	2,320	38.50	1,160	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

### High Speed Cutting

Work Material	Carbon Steels, Alloy Steels, Cast Iron		Hardened Steels	
Hardness	≤ 45 HRC		45 ~ 65 HRC	
Strength	~ 217,557 lbf / inch <sup>2</sup>		217,557 lbf / inch <sup>2</sup>	
Cutting Diameter(inch)	RPM	FEED	RPM	FEED
R1/16 X 1/8	21,000	59.00	17,000	30.50
R3/32 X 3/16	21,000	106.25	12,000	35.50
R1/8 X 1/4	21,000	136.50	10,500	37.00
R5/32 X 5/16	15,760	167.50	7,800	43.50
R3/16 X 3/8	13,660	180.00	6,300	49.50
R1/4 X 1/2	10,500	155.50	5,260	49.50
R5/16 X 5/8	8,200	155.50	3,780	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

