





## NEGATIVE BASIC SHAPE TURNING INSERTS IN "P" GRADE STEELS

TYPE	OPERATION	INSERT ANSI #	CHIP BREAKER	GRADE	RADIUS	Feed Rate - Inches/rev	RADIAL DEPTH OF CUT
	LIGHT CUTS/FINISH	CNMG431	FP5	WPP10S/WPP20S	0.016	.002-.008	.004-.059
	LIGHT CUTS/FINISH	CNMG432	FP5	WPP10S/WPP20S	0.031	.003-.010	.008-.079
	MEDIUM/LIGHT ROUGH	CNMG432	MP3	WPP10S/WPP20S	0.031	.005-.013	.024-.126
	MEDIUM to ROUGHING	CNMG431	MP5	WPP10S/WPP20S	0.016	.006-.010	.020-.157
	MEDIUM to ROUGHING	CNMG432	MP5	WPP10S/WPP20S	0.031	.007-.016	.024-.197
	MEDIUM to ROUGHING	CNMG433	MP5	WPP10S/WPP20S	0.047	.008-.018	.039-.197
	ROUGH	CNMG432	RP5	WPP10S/WPP20S	0.031	.008-.016	.031-.236
	ROUGH	CNMG433	RP5	WPP10S/WPP20S	0.047	.010-.022	.039-.236
	LIGHT CUTS/FINISH	DNMG431	FP5	WPP10S/WPP20S	0.016	.002-.008	.004-.059
	LIGHT CUTS/FINISH	DNMG432	FP5	WPP10S/WPP20S	0.031	.003-.010	.008-.079
	LIGHT CUTS/FINISH	DNMG441	FP5	WPP10S/WPP20S	0.016	.002-.008	.004-.059
	LIGHT CUTS/FINISH	DNMG442	FP5	WPP10S/WPP20S	0.031	.003-.010	.008-.079
	MEDIUM/LIGHT ROUGH	DNMG432	MP3	WPP10S/WPP20S	0.031	.005-.013	.024-.126
	MEDIUM/LIGHT ROUGH	DNMG442	MP3	WPP10S/WPP20S	0.031	.005-.013	.024-.126
	MEDIUM to ROUGHING	DNMG431	MP5	WPP10S/WPP20S	0.016	.006-.010	.020-.157
	MEDIUM to ROUGHING	DNMG432	MP5	WPP10S/WPP20S	0.031	.007-.014	.024-.197
	MEDIUM to ROUGHING	DNMG433	MP5	WPP10S/WPP20S	0.047	.008-.016	.039-.197
	MEDIUM to ROUGHING	DNMG441	MP5	WPP10S/WPP20S	0.016	.006-.010	.020-.157
	MEDIUM to ROUGHING	DNMG442	MP5	WPP10S/WPP20S	0.031	.007-.014	.024-.197
	MEDIUM to ROUGHING	DNMG443	MP5	WPP10S/WPP20S	0.047	.008-.016	.039-.197
	ROUGH	DNMG432	RP5	WPP10S/WPP20S	0.031	.006-.014	.031-.197
	ROUGH	DNMG433	RP5	WPP10S/WPP20S	0.047	.008-.016	.039-.197
	ROUGH	DNMG442	RP5	WPP10S/WPP20S	0.031	.006-.014	.031-.197
	ROUGH	DNMG443	RP5	WPP10S/WPP20S	0.047	.008-.016	.039-.197
	LIGHT CUTS/FINISH	WNMG431	FP5	WPP10S/WPP20S	0.016	.002-.008	.004-.059
	LIGHT CUTS/FINISH	WNMG432	FP5	WPP10S/WPP20S	0.031	.003-.010	.008-.079
	MEDIUM/LIGHT ROUGH	WNMG432	MP3	WPP10S/WPP20S	0.031	.005-.013	.024-.126
	MEDIUM to ROUGHING	WNMG431	MP5	WPP10S/WPP20S	0.016	.006-.010	.020-.157
	MEDIUM to ROUGHING	WNMG432	MP5	WPP10S/WPP20S	0.031	.007-.016	.024-.197
	MEDIUM to ROUGHING	WNMG433	MP5	WPP10S/WPP20S	0.047	.008-.018	.039-.197
	ROUGH	WNMG432	RP5	WPP10S/WPP20S	0.031	.008-.016	.031-.236
	ROUGH	WNMG433	RP5	WPP10S/WPP20S	0.047	.010-.022	.039-.236
	MEDIUM/LIGHT ROUGH	TNMG432	MP3	WPP10S/WPP20S	0.031	.005-.013	.024-.118

### RECOMMENDED SURFACE FOOTAGE BY MATERIAL AND GRADE

MATERIAL	MACHINING GROUP	GRADE	SURFACE FEET PER MINUTE		COMMENTS	
1018/1045	P1/P2	WPP10S	P1=1550-2040	P2=1250-1740	P1 FIGURED AT BRINELL 125	P2 FIGURED AT BRINELL 190
4140/4140 HT	P7/P9	WPP10S	P7=1120-1510	P9=600-830	P7 FIGURED AT BRINELL 175	P9 FIGURED AT BRINELL 380
400 SST	P14	WPP10S	P14=990-1250		P14 FIGURED AT BRINELL 200	
17-4 PH SST	P15	WPP10S	P15=660-920		P15 FIGURED AT BRINELL 330	
15-5 PH SST	P15	WPP10S	P15=660-920		P15 FIGURED AT BRINELL 330	
1018/1045	P1/P2	WPP20S	P1=1250-1710	P2=1020-1450	P1 FIGURED AT BRINELL 125	
4140/4140 HT	P7/P9	WPP20S	P7=920-1250	P9=500-690	P7 FIGURED AT BRINELL 175	P9 FIGURED AT BRINELL 380
400 SST	P14	WPP20S	P14=830-1020		P14 FIGURED AT BRINELL 200	
17-4 PH SST	P15	WPP20S	P15=500-730		P15 FIGURED AT BRINELL 330	
15-5 PH SST	P15	WPP20S	P15=500-730		P15 FIGURED AT BRINELL 330	

**\*\*THESE ARE MODERATE RECOMMENDATIONS AND IN SOME CASES MAY NEED TO BE INCREASED OR DECREASED DEPENDING ON THE CONDITIONS OF THE APPLICATION\*\***



## NEGATIVE BASIC SHAPE TURNING INSERTS IN "K" CAST IRONS