

**SPEEDS AND FEEDS FOR KEY CUTTERS**

MATERIAL	TYPE	SPEED SURFACE FEET PER MINUTE
PLASTIC	TEFLON	200
	NYLON	200
	PHENOLIC	180
	GLASS FILLED	150
MAGNESIUM	AZ,AM,EZ,ZE,HK	300
ALUMINUM	2021 THRU 6061	300
COPPER	101-707	100
	834-978	200
BRASS		250
BRONZE		230
CAST IRON	GRAY	180
	DUCTILE	140
	MALLEABLE	100
STEEL	1005-1029	180
	1030-1055	180
	1060-1095	170
	10L45-10L50	165
	12L13-12L15	160
	41L30-41L50	150
	4140-4150	140
	4140 (35 HRC)	130
	8617-8622	120
	M1-M6	110
	H10-H19	100
	D2-D7	90
	A2-A9, 01-07	80
	W1, W2	70
M-50, 52100	60	
TITANIUM	TI-9Al-6V	90
STAINLESS	201-385	100
	405-446	110
	15-5PH,16-6PH,14-4PH	120
NICKEL	NICKEL 200-230	80
MONEL		80
INCONEL		80
WASPALOY		80
HASTELLOY		80

FORMULA FOR COMPUTING SPINDLE SPEED IS.

SURFACE FEET PER MINUTE FACTOR X 4 = ?

? DIVIDED BY DIAMETER OF CUTTER =      RPM

EXAMPLE CUTTING ALUMINUM  
WITH A 3/4" KEY CUTTER

300 X 4 = 1200 divided by .750 = 1600 RPM

surface feet                      MULTIPLIER                      cutter diameter

FORMULA FOR COMPUTING TABLE SPEED IS.

.001 X NUMBER OF TEETH IN CUTTER X RPM

EXAMPLE CUTTING ALUMINUM  
WITH A 3/4" KEY CUTTER

.001 X 10 X 1600 = 16

MULTIPLIER                      NUMBER OF TEETH                      RPM                      INCHES PER MINUTE

NOTE: ALL SPEEDS AND FEEDS LISTED HERE ARE PROVIDED FOR REFERENCE ONLY.