

Speeds and Feeds



How To Use This Chart:

- 1) Select your material in the ISO colored chart
- 2) Select your Thread range in the columns (in tpi or mm)
- 3) Start with the middle range of the recommended sfm (vc)
-Adjust the sfm based on your cutting conditions.

Threading												
ISO	ANSI	Material Description		Insert Grade HU25	Thread Range							
				Threads Per Inch (tpi)	48 - 32	28 - 24	20 - 16	14 - 12	11.5 - 9	8 - 6	5 - 4	3 - 2
				Metric Pitch (mm)	0.5 - 0.75	0.8 - 1.0	1.25 - 1.50	1.75 - 2.0	2.5 - 3.0	3.5 - 4.0	4.5 - 6.0	8
P	P1-3	Non-alloy steel	●	Cutting Speed (vc = sfm)	200 - 600	200 - 600	200 - 600	200 - 600	200 - 600	200 - 600	200 - 600	200 - 600
				Number of Passes	4 - 5	5 - 6	6 - 8	8 - 10	9 - 12	12 - 15	14 - 16	15 - 25
P	P4-P6	Low alloy steel	●	Cutting Speed (vc = sfm)	200 -520	200 -520	200 -520	200 -520	200 -520	200 -520	200 -520	200 -520
				Number of Passes	4 - 5	5 - 6	6 - 8	8 - 10	9 - 12	12 - 15	14 - 16	15 - 25
M	M1-M3	Stainless steel	●	Cutting Speed (vc = sfm)	150 - 480	150 - 480	150 - 480	150 - 480	150 - 480	150 - 480	150 - 480	150 - 480
				Number of Passes	4 - 5	5 - 6	6 - 8	8 - 10	9 - 12	12 - 15	14 - 16	15 - 25
K	K1-K3	Grey cast iron	●	Cutting Speed (vc = sfm)	200 - 480	200 - 480	200 - 480	200 - 480	200 - 480	200 - 480	200 - 480	200 - 480
				Number of Passes	4 - 5	5 - 6	6 - 8	8 - 10	9 - 12	12 - 15	14 - 16	15 - 25
N	N1-N7	Non-ferrous metals		Cutting Speed (vc = sfm)	300 - 1800	300 - 1800	300 - 1800	300 - 1800	300 - 1800	300 - 1800	300 - 1800	300 - 1800
				Number of Passes	4 - 5	5 - 6	6 - 8	8 - 10	9 - 12	12 - 15	14 - 16	15 - 25
S	S1-S3	Super Alloys	●	Cutting Speed (vc = sfm)	40 - 300	40 - 300	40 - 300	40 - 300	40 - 300	40 - 300	40 - 300	40 - 300
				Number of Passes	4 - 5	5 - 6	6 - 8	8 - 10	9 - 12	12 - 15	14 - 16	15 - 25
H	H1-H4	Hardened		Cutting Speed (vc = sfm)	50 - 200	50 - 200	50 - 200	50 - 200	50 - 200	50 - 200	50 - 200	50 - 200
				Number of Passes	4 - 5	5 - 6	6 - 8	8 - 10	9 - 12	12 - 15	14 - 16	15 - 25

● Optimal

Secondary

