

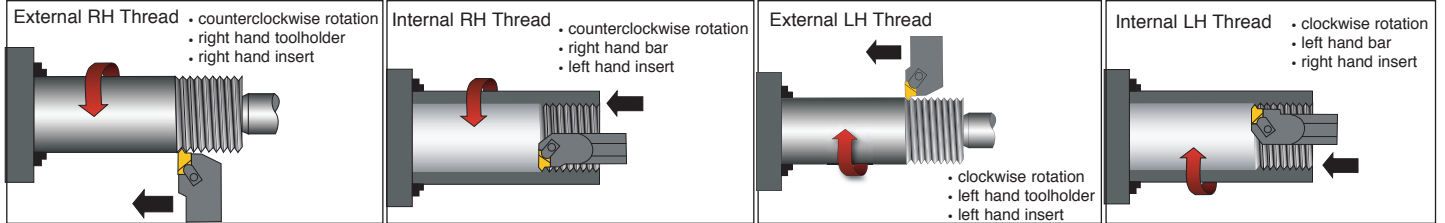


Recommended SFM for Grooving Applications

Workpiece Group	Uncoated	TiN PVD Coated				AlTiN PVD Coated			TiN Cermet	CBN		PCD
	C3	GP22	GP3	GP4	GP50	AT22	AT3	AT50	GPM6	CB200	CB400	PC33
Free Machining Carbon Steels	---	150-300	200-400	60-175	200-600	200-400	250-450	400-800	600-1500	---	---	---
Plain Carbon Steels	---	150-300	200-400	60-175	200-600	200-400	250-450	450-800	600-1200	---	---	---
Alloy Steels 190-330 HB	---	150-300	200-400	60-150	200-500	200-350	250-400	400-800	500-1100	---	---	---
Alloy Steels 330-450 HB	---	150-300	200-350	60-150	200-450	200-350	250-400	400-750	600-800	---	---	---
Martensitic/Ferritic Stainless Steel 400 Series	---	150-300	200-400	60-150	200-500	200-400	250-450	350-700	500-800	---	---	---
Austenitic Stainless 300 Series	200-400	150-400	200-500	60-150	---	300-600	250-700	---	500-1000	---	---	---
Gray Cast Iron 190-330 HB	100-375	150-400	200-600	60-150	---	300-600	250-700	---	400-1100	1400-2500	---	---
Gray Cast Iron 330-450 HB	100-350	150-350	200-500	60-150	---	200-550	250-600	---	350-950	1200-1800	---	---
Alloy / Ductile Irons	100-350	150-300	200-400	60-150	200-500	250-450	200-450	300-700	350-950	---	---	---
Free Machining Aluminum Alloys	500-2000	150-2000	300-2000	60-150	---	600-2200	600-2500	---	---	---	---	1000-8000
High-Silicon Aluminum Alloys	---	---	---	---	---	---	---	---	---	---	---	1000-5000
Copper / Zinc / Brass	200-700	150-700	200-900	---	---	300-900	400-1000	---	---	---	---	1000-4000
Non-Metallics	400-1400	150-1500	300-1500	---	---	350-1200	400-1500	---	---	---	---	1000-4500
High Temperature Alloys 200-260 HB	80-130	100-175	100-200	50-80	---	80-200	100-250	---	---	300-600	---	---
High Temperature Alloys 260-450 HB	50-100	80-150	100-175	50-80	---	80-175	100-200	---	---	250-450	---	---
Titanium Alloys (Ti 6Al-4V)	100-200	100-250	150-300	50-80	---	80-300	100-300	---	---	---	---	---
Hardened Materials 48-65 HRC	---	---	---	---	---	---	80-150	---	---	150-350	200-550	---

Bold print items denote the top choices for the materials listed, provided it can be machined within the SFM stated under the appropriate machining conditions. For the best performance in optimal machining conditions, select the grade that will provide you with the highest allowable SFM.

Feed direction towards the chuck



Feed direction towards the tailstock

