STELLRAM

Speed v_c (m/min)

For all Families

Wear Resistance: – ⟵ +

Speed min. - max.

Coolant Recommendation
Recommended ● Possible ⦿

ISO	Materials	Rm and Hardness	PVD Standard SP5419		PVD X Grade X400		CVD X Grade X500		PVD X Grade X700		PVD Standard SP6519		Uncoated Micrograin GH2		PVD Standard SP4019	
P	Unalloyed Steel	<600 N/mm² <180 HBN	115 - 205	⦿ ●	120 - 260	⦿ ●	130 - 270	⦿ ●			130 - 295	⦿ ●			140 - 315	
		<950 N/mm² <280 HBN	105 - 185		105 - 230		115 - 240				115 - 260				120 - 275	●
	Alloyed Steel	700-950 N/mm² 200-280 HBN	90 - 160	⦿ ●	95 - 200	⦿ ●	100 - 210	⦿ ●			100 - 230	⦿ ●			105 - 245	
		950-1200 N/mm² 280-355 HBN	70 - 120		70 - 150		75 - 160				75 - 175				80 - 190	●
		1200-1400 N/mm² 355-415 HBN	45 - 80	●	45 - 95	●	50 - 100	●			50 - 110	●			50 - 120	●
M	Stainless Steel	Austenitic + Ferritic 300 series					115 - 250	⦿ ●	115 - 260	⦿ ●	115 - 270	⦿ ●			120 - 280	⦿ ●
		Martensitic 400 series					100 - 220		105 - 230		105 - 235				110 - 250	
	PH Stainless	Refractory P.H.					50 - 110	●	50 - 115	●	50 - 120				50 - 130	●
K	Cast Iron	Grey GG-Ft					120 - 280				140 - 295		120 - 250		145 - 330	
		Spheroidal-Ductile GGG-FGS					105 - 205	⦿ ●		⦿ ●	110 - 240	⦿ ●	105 - 215		115 - 255	●
		Malleable GTS - MN/MP					95 - 170				100 - 220		100 - 185		105 - 235	
N	Aluminium & Alloys	Aluminium & Alloys < 16% Si 116 HBN											400 - 2745		400 - 2895	
		Aluminium + Silicon > 16% Si 92 HBN										●	295 - 2135	●	295 - 2320	
S	High Temperature Alloys	Iron Based					23 - 48		23 - 52		23 - 55				24 - 63	
		Cobalt Based					21 - 44	●	22 - 46	●	22 - 48			●	23 - 52	
		Nickel Based					24 - 51		25 - 53		25 - 55				26 - 59	
		Titanium Based					35 - 73		36 - 75		36 - 79				37 - 84	
H	Hard Materials	Hard Steel >1400 N/mm² >415 HBN			45 - 95										50 - 100	
		Chilled Cast Iron >1400 N/mm² > 400 HBN		●	35 - 80										40 - 90	●

Technical