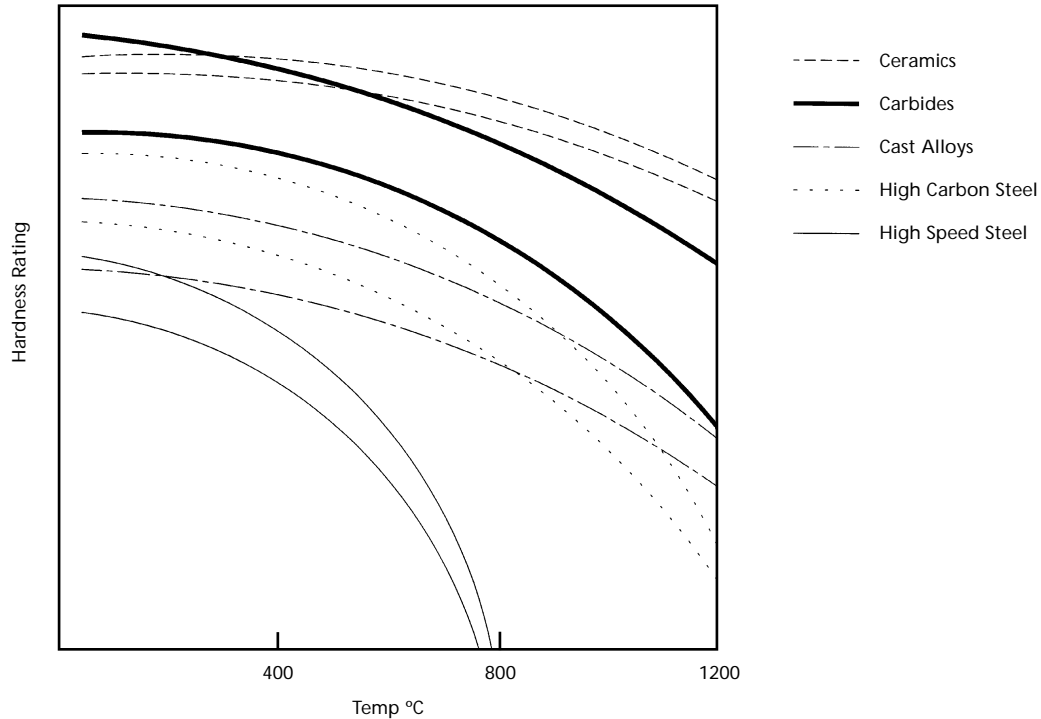


Cutting Tool Materials

Hot Hardness of various Tool Materials



Comparative Properties of High Speed Steel

Melcut Tools can manufacture tools from a wide range of high speed steel including all powered metallurgy grades. M2, M42, and M35 are the most commonly used high speed steels but other grades may be more suitable for specific applications. Melcut Tools will be happy to assist you with your tool material selection.

AISI Type	Hardness Range	Chemical Analysis						Grindability	*Physical Properties			Red Hardness
		C	W	Mo	Cr	V	Co		Wear Resistance	Toughness	Red	
ASP 2023	64-66	1.28	4.2	5.0	6.4	3.1	-	G	G	G	F	
ASP 2030	66-68	1.28	4.2	5.0	6.4	3.1	8.5	G	E	E	E	
ASP 2060	67-69	2.30	4.2	7.0	6.5	6.5	10.5	P	E	E	E	
M-2	64-66	0.85	6.0	5.0	4.0	2.0	-	G	G	G	F	
M-3-2	65-67	1.20	6.0	5.0	4.0	3.0	-	F	G	F	G	
M-7	63-65	1.00	1.75	8.75	4.0	2.0	-	G	G	G	F	
M-35	64-66	0.90	6.3	5.0	4.2	1.85	5.0	G	G	F	E	
M-42	66-68	1.08	1.5	9.5	3.75	1.25	8.0	G	E	G	E	
M-43	67-69	1.25	1.75	8.75	3.75	2.0	8.25	G	E	F	E	
T-15	65-67	1.57	12.0	-	4.0	5.0	5.0	P	E	F	E	

*Physical properties: P=Poor, F=Fair, G=Good, E=Excellent