

Cold Work Tool Steels

Product Specifications

AISI/ ASTM	MATERIAL			CHEMISTRY									HEAT TREATMENT DETAILS					
	EN	DIN	JIS	C	Si	Mn	P	S	Cr	W	Mo	V	Annealing (Slow Cooling)	Quenchant (Hot Bath)	Quenching	Tempering (Air Cooling)	Annealed (HB)-max	Quenched & (Hrc) Tempered
D3	X210Cr12	1.2080	SKD1	2	0.25	0.45	0.03	0.01	12				830-880	OIL/AIR	930-980	150-200	248	61
D2	X155Cr VMoV12.1	1.2379	SKD11	1.55	0.25	0.35	0.03	0.01	12		0.9	0.9	800-850	AIR/OIL	980-1030	150-200	248	60
O1	100MnCrW4	1.2510	SKS3	0.95	0.25	1.1	0.03	0.01	0.6	0.6	0.1		750-780	OIL	800-850	150-200	220	60
S1	60WCrV7	1.2550		0.6	0.6	0.3	0.03	0.01	1.1	2		0.2	710-750	OIL	780-820	150-200	225	58
O2	90MnCrV8	1.2842		0.9	0.25	2	0.03	0.01	0.4			0.1	680-720	OIL	790-820	150-200	220	56

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Size Range

COLD WORK	AISI	DIN	Supply condition	Rounds	Square	Flat	Application
	D3	1.2080	Annealed	8 ÷ 660	20 ÷ 250	20x10 ÷ 1000x200	Rolls for cold strip mills and wire squeezer mills, dies for small metal parts, punches and drawing dies for sintering.
	D2	1.2379	Annealed	8 ÷ 700	20 ÷ 250	20x10 ÷ 1000x200	Shear blades, blanking punches, die chasers, rolls for cold mills treading rolls and chasers, molds for plastic materials.
	O2	1.2842	Annealed	8 ÷ 660	20 ÷ 250	20x10 ÷ 500x150	Taps, shear knives, moulds for plastic materials, gages, knives for wood and paper working.
	S1	1.2550	Annealed	25 ÷ 210		100x40 ÷ 300x80	Tools exposed to violent impacts such as piercing punches, hammers, debarring And coining tools, shear blades
	O1	1.2510	Annealed	8 ÷ 500	20 ÷ 250	20x10 ÷ 500x150	Dies, blanking punches, moulds for plastic materials