

Materials Datasheet

Name	JIS	AISI / ASTM	Material No.	Standard	Working Temperature °C	Tensile Strength N/mm ²	E-modulus in KN/mm ²							Chemical Analysis in %											Thickness range mm			
							at RT °C	100°C	200°C	300 °C	400°C	500°C	600°C	C	Si	Mn	P max	S max	Cr	V	Mo	Ni	N	Mo		Al		
Spring Steel																												
T8A	SK85	-	1.1830	JIS G 3311	-50 to +100	1200-1800	206	202	-	-	-	-	-	-	0.80-0.08	≤ 0.35	≤ 0.50	≤ 0.03	≤ 0.03	≤ 0.20	-	-	≤ 0.25	-	-	-	Cu ≤ 0.30	0.1 to 3.5
50CrV4	SUP10	6150	1.8159	DIN EN 10132-4	-50 to +200	1200-1800	206	202	196	-	-	-	-	0.47-0.55	≤ 0.4	0.7-1.1	0.025	0.025	0.9-1.2	0.1-0.25	≤ 0.1	≤ 0.4	-	-	-	-	-	0.3 to 30
C75	-	1074	1.0773	DIN EN 10132-4	-50 to +100	1200-1800	206	202	-	-	-	-	-	0.70-0.80	0.15-0.35	0.60-0.90	0.025	0.025	≤ 0.4	-	≤ 0.1	≤ 0.4	-	-	-	-	-	0.3 to 30
60Si2Mn	SUP6	9260	1.0906	DIN EN 10132-4	-50 to +200	1200-1800	206	202	196	-	-	-	-	0.56-0.64	1.50-2.0	0.6-0.9	0.035	0.035	≤ 0.35	-	-	≤ 0.35	-	-	-	-	-	0.3 to 30
Corrosion resistant steel																												
X 10CrNi 18-8	SUS301	301	1.4310	DIN EN 10151	-200 to +200	1150-1500	190	186	180	-	-	-	-	0.05-0.15	≤ 2.0	≤ 2.0	0.045	0.015	16.0-19.0	-	≤ 0.08	6.0-9.5	-	-	-	-	-	0.2 to 4.0
X 50CrNi 18-10	SUS304	304	1.4301	DIN EN 10151	-200 to +200	1000-1500	185	179	171	-	-	-	-	≤ 0.07	≤ 1.0	≤ 2.0	0.045	0.015	17.0-19.5	-	-	8.0-10.5	≤ 0.11	-	-	-	-	0.2 to 4.0
X 5CrNiMo 17-12-2	SUS316	316	1.4401	DIN EN 10151	-200 to +200	1000-1500	180	176	171	-	-	-	-	≤ 0.07	≤ 1.0	≤ 2.0	0.045	0.015	16.5-18.5	-	2.0-2.5	10.0-13.0	≤ 0.11	-	-	-	-	0.2 to 3.5
X 7CrNiAl 17-7	SUS631	17-7PH	1.4568	DIN EN 10151	-200 to +300	1150-1700	195	190	180	171	-	-	-	≤ 0.09	≤ 0.7	≤ 1.0	0.04	0.015	16.0-18.0	-	-	6.5-7.8	-	-	-	0.7-1.5	0.2 to 9.0	
X5CrNiCuNb 16-4	SUS630	17-4PH	1.4542	DIN EN 10151	-200 to +300	1150-1700	195	190	180	171	-	-	-	≤ 0.07	≤ 1.0	≤ 1.0	0.035	0.03	15.0-17.0	-	-	3.0-5.0	-	-	-	-	0.2 to 9.0	
X8CrNiMoAl 15-7-2	-	15-7Mo	1.4532	DIN EN 10151	-200 to +300	1150-1700	195	190	180	171	-	-	-	≤ 0.09	≤ 1.0	≤ 1.0	0.04	0.03	14.0-16.0	-	-	6.5-7.75	-	2.0-3.0	0.75-1.5	-	0.2 to 9.0	
Thermally Stable steel																												
X39CrMo 17-1	-	-	1.4122	DIN EN 10088-2	-50 to +400	1200-1400	215	212	205	200	190	-	-	0.33-0.45	≤ 1.0	≤ 1.5	0.04	0.03	15.5-17.5	-	0.7-1.3	≤ 1.0	-	-	-	-	-	0.3 to 30
X 22CrMoV 12-1	-	-	1.4923	DIN EN 10269	-50 to +500	1200-1400	216	209	200	190	179	167	-	0.18-0.24	≤ 0.5	0.4-0.9	0.025	0.015	11-12.5	0.25-0.35	0.8-1.2	0.3-0.8	-	-	-	-	-	1.5 to 20
X30WCrV53	SKD4	-	1.2567	-	-50 to +500	≥ 1470	216	209	200	190	179	167	-	0.25-0.35	0.15-0.30	0.20-0.40	0.035	0.035	2.2-2.5	0.5-0.7	-	≤ 0.35	W 4-5	-	-	-	0.3 to 30	
Tool Steel																												
X40CrMoV5-1	SKD61	H13	1.2344	-	-150 to +600	1650-1990	206	200	196	189	186	158	-	0.32-0.40	0.8-1.20	0.20-0.50	0.030	0.030	4.75-5.50	0.80-1.20	1.10-1.75	-	-	-	-	-	0.3 to 30	
Nickel and cobalt alloys steel																												
Inconel X750	-	5542L	2.4669	-	-200 to +600	≥ 1170	214	207	198	190	179	170	158	≤ 0.08	≤ 0.50	≤ 1.0	≤ 0.02	0.015	14.0-17.0	≤ 1.0	2.25-2.75	≥ 7.0	0.4-1.0	5.0-9.0	≤ 0.50	-	0.1 to 15.0	
Inconel X718	-	5596J	2.4668	-	-200 to +600	≥ 1240	199	195	190	185	179	174	167	0.02-0.08	≤ 0.35	≤ 0.35	≤ 0.015	0.015	17.0-21.0	≤ 1.0	0.70-1.15	50.0-55.0	0.3-0.7	Balance	≤ 0.20	-	0.1 to 15.0	
Nimonic 90	-	5829C	2.4632	-	-200 to +700	≥ 1100	220	216	208	202	193	187	178	≤ 0.13	≤ 1.0	≤ 1.0	≤ 0.03	0.015	18.0-21.0	15.0-21.0	2.0-3.0	Balance	1.0-2.0	≤ 1.5	≤ 0.2	-	0.1 to 15.0	

Please contact VinSCO Sales Engineers to learn more Materials >