

材質

Name 名称	JIS	AISI / ASTM	Material No. 材料No	Standard 標準	Working Temperature 使用温度 ° C	Tensile Strength 引っぱり強度 N/mm ²	E-Modulus KN//mm ² 弾性係数 KN//mm ²							Thickness range 厚さ範囲 mm	Chemical Analysis in % 化学成分 %											
							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	Al	Co
Spring steel ばね鋼					-50 to +200	1200-1800	206	202	196	—	—	—	—	0.3 to 30	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	—	—	—
Corrosion resistant steel 耐食鋼					-200 to +200	1150-1500	190	186	180	—	—	—	—	0.2 to 4.0	0.05-0.15	≤ 2.0	≤ 2.0	0.045	0.015	16.0-19.0	—	≤ 0.08	6.0-9.5	—	—	—
X 10CrNi 18-8	SUS301	301	1.4310	DIN EN 10151	-200 to +200	1150-1500	190	186	180	—	—	—	—	0.2 to 4.0	0.05-0.15	≤ 2.0	≤ 2.0	0.045	0.015	16.0-19.0	—	≤ 0.08	6.0-9.5	—	—	—
X 5CrNi 18-10	SUS304	304	1.4301	DIN EN 10151	-200 to +200	1000-1500	185	179	171	—	—	—	—	0.2 to 5.0	≤ 0.07	≤ 1.0	≤ 2.0	0.045	0.015	17.0-19.5	—	—	8.0-10.5	≤ 0.11	—	—
X 5CrNiMo 17-12-2	SUS316	316	1.4401	DIN EN 10151	-200 to +200	1000-1500	180	176	171	—	—	—	—	0.2 to 3.5	≤ 0.07	≤ 1.0	≤ 2.0	0.045	0.015	16.5-18.5	—	2.0-2.5	10.0-13.0	≤ 0.11	—	—
X 7CrNiAl 17-7	SUS631	17-7PH	1.4568	DIN EN 10151	-200 to +300	1150-1700	195	190	180	171	—	—	—	0.2 to 30.0	≤ 0.09	≤ 0.7	≤ 1.0	0.04	0.015	16.0-18.0	—	—	6.5-7.8	—	0.7-1.5	—
X5CrNiCuNb 16-4	SUS630	17-4PH	1.4542	DIN EN 10151	-200 to +300	1150-1700	195	190	180	171	—	—	—	0.2 to 30.0	≤ 0.07	≤ 1.0	≤ 1.0	0.035	0.03	15.0-17.0	—	—	3.0-5.0	—	—	—
X8CrNiMoAl 15-7-2	—	15-7Mo	1.4532	DIN EN 10151	-200 to +300	1150-1700	195	190	180	171	—	—	—	0.2 to 9.0	≤ 0.09	≤ 1.0	≤ 1.0	0.04	0.03	14.0-16.0	—	2.0-3.0	6.5-7.75	—	0.75-1.5	—
Heat resistant steel 耐熱鋼					-50 to +400	1200-1400	215	212	205	200	190	—	—	0.3 to 30	0.33-0.45	≤ 1.0	≤ 1.5	0.04	0.03	15.5-17.5	—	0.7-1.3	≤ 1.0	—	—	—
X39CrMo 17-1	—	—	1.4122	DIN EN 10088-2	-50 to +400	1200-1400	215	212	205	200	190	—	—	0.3 to 30	0.33-0.45	≤ 1.0	≤ 1.5	0.04	0.03	15.5-17.5	—	0.7-1.3	≤ 1.0	—	—	—
X 22CrMoV 12-1	—	—	1.4923	DIN EN 10269	-50 to +500	1200-1400	216	209	200	190	179	167	—	1.5 to 20	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	—	—	—
X30WCrV53	SKD4	—	1.2567	—	-50 to +500	≥ 1470	216	209	200	190	179	167	—	0.3 to 30	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	-	-
Tool steel 工具鋼					-150 to +600	1650-1990	206	200	196	189	186	158	—	0.3 to 30	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	—	—	—	—
Nickel and cobalt alloys steel ニッケル合金鋼					-200 to +600	≥ 1170	214	207	198	190	179	170	158	0.1 to 15.0	≤ 0.08	≤ 0.50	≤ 1.0	0.02	0.015	14.0-17.0	-	-	≥ 70	-	0.4-1.0	≤ 1.0
Inconel X750	—	5542L	2.4669	DIN EN 10302	-200 to +600	≥ 1170	214	207	198	190	179	170	158	0.1 to 15.0	≤ 0.08	≤ 0.50	≤ 1.0	0.02	0.015	14.0-17.0	-	-	≥ 70	-	0.4-1.0	≤ 1.0
Inconel X718	—	5596J	2.4668	DIN EN 10302	-200 to +600	≥ 1240	199	195	190	185	179	174	167	0.1 to 15.0	0.02-0.08	≤ 0.35	≤ 0.35	0.015	0.015	17.0-21.0	-	2.8-3.3	50.0-55.0	-	0.3-0.7	≤ 1.0
Nimonic 90	—	5829C	2.4632	DIN EN 10302	-200 to +700	≥ 1100	220	216	208	202	193	187	178	0.1 to 15.0	≤ 0.13	≤ 1.0	≤ 1.0	0.03	0.015	18.0-21.0	-	-	Balance	-	1.0-2.0	15.0-21.0
															Ti	Cu	Nb+Ta	Zr	B	Fe						
Inconel X750	—	5542L	2.4669	DIN EN 10302											2.25-2.75	≤ 0.50	0.7-1.2	-	-	5.0-9.0						
Inconel X718	—	5596J	2.4668	DIN EN 10302											0.70-1.15	≤ 0.20	4.8-5.5	-	≤ 0.006	Balance						
Nimonic 90	—	5829C	2.4632	DIN EN 10302											2.0-3.0	≤ 0.2		≤ 0.15	≤ 0.02	≤ 1.5						