

DONGYING JACHUAN METAL

MAIN ALLOY & CHEMICAL COMPOSITION

Alloy Type	Standard Specification					Datas													
	DIN	AISI	ASTM ACI	BS3100 BS3146	JIS	C	Si	Mn	P	S	Cr	Ni	Mo	Others	Tensile Strength σ b Mpa	Yield Strength σ s Mpa	Tensile Stretch δ %	Hardnes s HBS	Heat Treatment
	(W-Nr.)																		
Heat Resistant Steel	GX40CrNiSi2512		HH		SCH13	0.2-0.5	2.0	2.0	0.04	0.04	24-28	11--14	0.5		515	240	10		Not Heat Treated
			HU	309C35		0.35-0.75	2.0	2.5	0.04	0.04	17-21	37--41	0.5		450		4		Not Heat Treated
	GX15CrNiSi2520		HK30	331C40	SCH21	0.25-0.35	1.75	1.5	0.04	0.04	23-27	19--22	0.5		450	240	10		Not Heat Treated
	GX40CrNiSi2520		HK40		SCH22	0.35-0.45	1.75	1.5	0.04	0.04	23-27	19-22	0.5	N<0.2	235	440	8		Not Heat Treated
	GX40CrNiSi3525		HP		SCH24	0.35-0.75	2.0	2.0	0.04	0.04	24-28	33--37	0.5		430	235	4.5		Not Heat Treated
Stainless Steel	1.4305	303		303S21	SUS303	0.15	1.0	2.0	0.2	≥1.5	17-19	8--10	0.6						Quenching
	1.4308	304	CF-8	ANC3A	SCS13	0.08	1.0	2.0	0.04		18-20	8--10.5	0.5		440	185	30	183	Solution Annealing
	1.4306	304L	CF-8	304C12	SCS19A	0.03	1.0	2.0	0.04		18-20	8--12	0.5		480	205	33	183	Solution Annealing
	1.4408	316	CF-8M	ANC4B	SCS14A	0.08	1.0	2.0	0.04		16-18	10--14	2--3		485	205	30	183	Solution Annealing
	1.4404	316L	CF-3M	316C12	SCS16A	0.03	1.0	2.0	0.04		16-18	10--14	2--3		485	205	30	183	Solution Annealing
	G-X10Cr13	410	CA-15	410C21	SCS1	0.15	1.5	1.0	0.04		11.5-14	1.0	0.5		620	450	18	183	Hardening+Temper
	1.4507	431		ANC2	SUS431	0.2	0.2-1	0.2-1	0.035		15.5-20	1.5--3			850-1000		8	248-302	Hardening+Temper
	1.4581	318	CF8C	ABC4C	SCS21	0.08	2.0	1.5	0.04		18-20	10.5-12.5	Mo2-2.5	Nb8xC-1.55	485	205	28	183	Solution Annealing
		17--4	CB7Cu-1		SCS24	0.07	1.0	1.0	0.04		15.5-17.5	3.5--5	Nb0.15-0.45	Cu3.0-5.0	980	885	9	311	ProceptaionH1025
	1.4460					≤0.05	≤1.00	≤2.00	≤0.035	≤0.015	25.0-28.0	4.50-6.50	1.30-2.00	N0.05-0.20	620-880			≤260	Solution Annealing
	1.4462					≤0.03	≤1.00	≤2.00	≤0.035	≤0.015	21.0-23.0	4.50-6.50	2.5-3.5	N0.10-0.22	650-880			≤270	Solution Annealing
Carbon Steel & Low Alloy Steel	1.0416 GS-38	1020	415-205	CLAIA	SC410	0.15-0.25	0.2-0.6	0.4-1.0	0.04	0.04					415	205			Anneal
	1.0446 GS-45	1025	WCB	ALAIB	SC450	0.2-0.3	0.2-0.6	0.4-1.0	0.04	0.04					485	250	22		Anneal
	GS-34CrMo4	4135			SCM435	0.3-0.37	0.3-0.5	0.5-0.8	0.035	0.035	0.8-1.2		0.2-0.3		880-1080	665	12	269-332	Hardening+Temper
	GS-42CrMo4	4143		CLA3	SCM440	0.38-0.43	0.15-0.35	0.75-1.0	0.04	0.04	0.8-1.1		0.15-0.25		980-11180	765	11	285-352	Hardening+Temper
		8620		805A20	SNCM220	0.18-0.23	0.15-0.35	0.7-0.9	0.04	0.04	0.4-0.6	0.4-0.7	0.15-0.25		830		17	248-341	Hardening+Temper
Tool Steel	100MnCrW4		1	BO1	SKS3	0.9-1.0	1	0.9-1.2	0.04	0.04	0.5-1.0			W0.5-1				HRB<96	Anneal
	4CrMoSiV1		H13	BH13	SKD61	0.32-0.42	0.8-1.2	0.75	0.04	0.04	4.5-5.5		1.0-1.5	V0.8-1.2				HRC>53	
	W6Mo5Cr4V2		M2	BM2	SKH9	0.8-0.9	<1.0	0.75	0.04	0.04	3.8-4.5	W5.5-6.7	4.5-5.5	V1.6-2.2				HRC>62	Hardening-Temper
High Mn Steel	G-X120Mn13		B-3	BW-10		1.1-1.3	1	12~14	0.07	0.04					637		20	<229	Hardening-Temper
			B-1		SCMnH2	0.9-1.2	0.8	11~14	0.07	0.04					735		35	<229	Quenching

Alloy Type	Standard	C	Si	Mn	P	S	Cr	Ni	Mo	W	Co	Fe	Others	σ b Mpa	σ s Mpa	δ %	Hardne ss HBS	Heat Treatment
	ASTM																	
Nickel Bases Alloys	MORE2	0.15	0.5	0.5-10	0.03	0.03	34.5	47	0.5	15		<3.1						Not Heat Treated
	Hastelloy X	0.2	1.0	10	0.03	0.04	20.5-23	Balance	8--10	0.2-1.0	0.5-2.5	17-20		434-483	283-310	10--15	85-96HRB	Not Heat Treated
	NW-22	0.05-0.15	0.25-0.75	0.3-1.0	0.015	0.03	20-24	Balance	1--3	13-15	<5	<3	Al 0.2-0.5					Not Heat Treated
Cobalt Based Alloys	UMCo50	0.08	0.75	0.65			28				50	20.5					55-60	Not Heat Treated
	Cobalt J	2.2-2.7	1.0	1.0	0.03	0.03	31-34	2.5		16-19	Balance	3	0.25B					Not Heat Treated
	Cobalt 21	0.2-0.3	1.0	1.0	0.04	0.04	25-29	1.75-3.75	5--6		Balance	3	0.007B	688-895	448--655	8--20	24-32	Not Heat Treated

The above lists details of the main alloy cast, and whilst many other material are also regularly cast. It is not practical to include them all in this brochure. However, we will be pleased to discuss any other material with you. As the list only performs as a guide, for full information, the relevant standard specifications should be referred to. The comparable specifications have been compiled on the basis of chemical analysis and it is important for other factories to be taken into account.