

MOST COMMON QUALITIES AND THEIR EQUIVALENTS

Carbon Steels

AMERICAN STANDARDS		EUROPEAN STANDARDS	
UNS	DESIGNATION	Nº	DESIGNATION
	ASTM A-105	1.0352 1.0460 1.0425	P245 GH P250GH P265 GH EN-10222-2
		1.0038	S235JRG2 EN-10250-2
		1.0116	S235J2G3 EN-10250-2
		1.0570	S355J2G3 EN-10250-2 (St-52.3)
G10350	ASTM A-322 Grade 1035	1.1181	C35E EN-10250-2
G10450	ASTM A-322 Grade 1045	1.1191	C45E EN-10250-2
		1.1203	C55E EN-10250-2
		1.1221	C60E EN-10250-2

Alloy Steels

AMERICAN STANDARDS		EUROPEAN STANDARDS	
UNS	DESIGNATION	Nº	DESIGNATION
		1.7218	25CrMo4 EN-10250-3
		1.7220	34CrMo4 EN-10250-3
G41300	ASTM A-322 Grade 4130		
G41400	ASTM A-322 Grade 4140	1.7225	42CrMo4 EN-10250-3
		1.6582	34CrNiMo6 EN-10250-3
G43400	ASTM A-322 Grade 4340		
		1.6580	30CrNiMo8 EN-10250-3
		1.8159	51CrV4 EN-10250-3
G86300	ASTM A-322 Grade 8630	1.6545	30NiCrMo2-2
	ASTM A-723 Grade 1		
	ASTM A-723 Grade 2		

Weldable Fine Grain Steels With High Proof Strength

AMERICAN STANDARDS		EUROPEAN STANDARDS	
UNS	DESIGNATION	Nº	DESIGNATION
		1.0477	P285NH EN-10222-4
	ASTM A-694 Grade F-42	1.0478	P285QH EN-10222-4
		1.0565	P355NH EN-10222-4
		1.0566	P355NL1 EN-10222-4
		1.1106	P355NL2 EN-10222-4
	ASTM A-694 Grade F-52	1.0571	P355QH1 EN-10222-4
		1.8868	P355QL1 EN-10222-4
		1.8869	P355QL2 EN-10222-4
	ASTM A-694 Grade F-60	1.8932	P420NH EN-10222-4
		1.8936	P420QH EN-10222-4
	ASTM A-694 Grade F-65	1.8871	P460QH EN-10222-4
		1.8872	P460QH EN-10222-4
		1.8834	P460QH EN-10222-4
	ASTM A-694 Grade F-70		

Steels For Low Temperature Service

AMERICAN STANDARDS		EUROPEAN STANDARDS	
UNS	DESIGNATION	Nº	DESIGNATION
	ASTM A350 Grade LF-1		
	ASTM A350 Grade LF-2		
	ASTM A350 Grade LF-3	1.5637	12Ni14 EN-10222-3
	ASTM A350 Grade LF-6		
		1.5680	X12Ni5 EN-10222-3 (80HLES GAM MM04)
	ASTM A-553 Grade 9%Ni	1.5662	X8Ni9 EN-10222-3
	ASTM A-707 Grade L3		
	ASTM A-707 Grade L5		

Alloy Steels For High Temperature Service

AMERICAN STANDARDS		EUROPEAN STANDARDS	
UNS	DESIGNATION	Nº	DESIGNATION
K12822	ASTM A-182 Grade F-1		
		1.5415	16Mo3 EN-10222-2
K11572	ASTM A-182 Grade F-11		
K11564	ASTM A-182 Grade F-12	1.7335	13CrMo4-5 EN-10222-2
K21590	ASTM A-182 Grade F-22	1.7383	11CrMo9-10 EN-10222-2
K31835	ASTM A-182 Grade F-22V		
K41545	ASTM A-182 Grade F-5	1.7366	X16CrMo5-1 EN-10222-2
K90941	ASTM A-182 Grade F-9		
K90901	ASTM A-182 Grade F-91	1.4903	X10CrMoVNb9-1 EN-10222-2
		1.4922	X20CrMoV11-1 EN-10222-2
	ASTM A-508 Grade 3	1.6311	20MnMoNi4-5 Vd TÜV-440/3
		1.6308	18MnMoNi5-5 EN-10222-2
	ASTM A-182 F-36	1.6368	15NiCuMoNb5 Vd TÜV-377/3

Martensitic Stainless Steels

AMERICAN STANDARDS		EUROPEAN STANDARDS	
UNS	DESIGNATION	Nº	DESIGNATION
S41000	ASTM A-182 Grade F-6a ASTM A-473 Grade 410	1.4006	X12Cr13 EN-10250-4
S42000	ASTM A-473 Grade 420	1.4021	X20Cr13 EN-10250-4
S43100	ASTM A-473 Grade 431	1.4057	X17CrNi16-2 EN-10250-4
S41500	ASTM A-182 Grade F6NM ASTM A-473 S41500	1.4313	X3CrNiMo13-4 EN-10222-5, EN-10250-4
		1.4418	X4CrNiMo16-5-1 EN-10250-4
		1.4922	X20CrMoV11-1 EN-10222-2

Austenitic Stainless Steels

AMERICAN STANDARS		EUROPEAN STANDARS	
UNS	DESIGNATION	Nº	DESIGNATION
S30400	ASTM A-182 Grade F-304	1.4301	X5CrNi18-10 EN-10.222-5/EN-10250-4
S30403	ASTM A-182 Grade F-304L	1.4307	X2CrNi18-9 EN-10.222-5/EN-10250-4
S30403	ASTM A-182 Grade F-304L	1.4306	X2CrNi19-11 EN-10222-5
S30453	ASTM A-182 Grade F-304LN	1.4311	X2CrNi18-10 EN-10222-5/EN-10250-4
S30409	ASTM A-182 Grade F-304H	1.4948	X6CrNi18-10 EN-10222-5
S31000	ASTM A-182 Grade F-310	1.4845	X8CrNi25-21 EN-10095
S31600	ASTM A-182 Grade F-316	1.4401	X5CrNiMo 17-12-2 EN-10222-5/EN-10250/4
S31603	ASTM A-182 Grade F-316L	1.4404	X2CrNiMo17-12-2 EN-10222-5/EN-10250-4
S31653	ASTM A-182 Grade F-316LN	1.4406	X2CrNiMoN 17-11-2 EN-10222-5/EN-10250-4
S31603	ASTM A-182 Grade F-316-L UREA GRADE	1.4435	X2CrNiMo18-14-3 EN-10222-5/EN-10250-4
S31700	ASTM A-182 Grade F-317		
S31703	ASTM A-182 Grade F-317L	1.4438	DIN-17440
S32100	ASTM A-182 Grade F-321	1.4541	X6CrNiTi18-10 EN-10222-5/EN-10250-4
S34700	ASTM A-182 Grade F-347	1.4550	X6CrNiNb18-10 EN-10222-5/EN-10250-4
S31635	ASTM A-182 Grade F-316+Ti	1.4571	X6CrNiMoTi17-12-2 EN-10222-5/EN-10250-4
s20910	ASTM A-182 Grade F XM-19	1.3964	X2CrNiMnMoNb 21-16-5-3 SEW-390

Age Hardening Stainless Steel

AMERICAN STANDARS		EUROPEAN STANDARS	
UNS	DESIGNATION	Nº	DESIGNATION
S17400	ASTM A-564/705 Type-630 (17.4 PH)	1.4542	X5CrNiCuNb16-4 EN-10250-4
S15500	ASTM A-564/705 Type-XM-12(15.5 PH)		
S13800	ASTM A-564/705 Type-XM-13 (13.8 PH)		

Ferritic-Austenitic Stainless Steels (Duplex)

AMERICAN STANDARS		EUROPEAN STANDARS	
UNS	DESIGNATION	Nº	DESIGNATION
S31803	ASTM A-182 Grade F-51	1.4462	X2CrNiMoN22-5-3 EN-10222-5/EN-10250-4
S32750	ASTM A-182 Grade F-53	1.4410	X2CrNiMoN25-7-4 EN-10222-5/EN-10250-4
S32760	ASTM A-182 Grade F-55	1.4501	X2CrNiMoCuWN25-7-4 EN-10250-4
S32205	ASTM A-182 Grade F-60	1.4462	X2CrNiMoN22-5-3 EN-10222-5/EN-10250-4

Super Austenitic Stainless Steel

AMERICAN STANDARDS		EUROPEAN STANDARDS	
UNS	DESIGNATION	Nº	DESIGNATION
N08904	ASTM A-182 Grade F-904-L	1.4539	X1NiCrMoCu25-20-5 EN-10250-4
N08028	ASTM B-709 / B-668 Alloy-28	1.4563	X1NiCrMoCu31-27-4 EN-10250-4
S31254	ASTM A-182 Grade F-44 (254SMO)	1.4547	X1CrNiMoCuN20-18-7 EN-10250-4

Super Alloys

AMERICAN STANDARDS		EUROPEAN STANDARDS	
UNS	DESIGNATION	Nº	DESIGNATION
N04400	ASTM B-564 Grade N04400 (MONEL-400)	2.4360	NiCu30Fe DIN-17743
N06600	ASTM B-564 Grade ALLOY-600	2.4816	NiCr15Fe EN-10095
N06625	ASTM B-564 Grade ALLOY-625	2.4856	NiCr22Mo9Nb EN-10095
N08020	ASTM B-462 Grade ALLOY-20	2.4660	NiCr20CuMo DIN-17744
n08028	ALLOY-28	1.4563	X1NiCrMoCuN31-27-4 EN-10250-4
N08800	ASTM B-564 Grade ALLOY-800	1.4876	X10NiCrAlTi32-21 EN-10095
N08810	ASTM B-564 Grade ALLOY-800H	1.4876	X10NiCrAlTi32-20H Vd TÜV-434
N08811	ASTM B-564 Grade ALLOY-800HT		
N08825	ASTM B-564 Grade ALLOY-825	2.4858	NiCr21Mo Vd TÜV-432
N010276	ASTM B-564 Grade ALLOY C-276	2.4819	NiMo16Cr15W Vd TÜV-400
N07718	ASTM B-637 Grade 718 (ALLOY-718)	2.4668	NiCr19Fe19Nb5Mo3 EN-10302
N05500	ASTM B-865 Grade N05500 (MONEL K-500)	2.4375	NiCu30Al DIN-17743

Case Hardening Steel

AMERICAN STANDARDS		EUROPEAN STANDARDS	
UNS	DESIGNATION	Nº	DESIGNATION
		1.7243	18CrMo4 EN-10084 (F-155)
		1.6587	18CrNiMo7-6 EN-10084
		1.6657	14NiCrMo13.4 EN-10084 (F-156)

Nitriding Steel

AMERICAN STANDARDS		EUROPEAN STANDARDS	
UNS	DESIGNATION	Nº	DESIGNATION
		1.8519	31CrMoV9 EN-10085
		1.8509	41CrAlMo7-10 EN-10085 (F-174)

Tool Steel

AMERICAN STANDARDS		EUROPEAN STANDARDS	
UNS	DESIGNATION	Nº	DESIGNATION
		1.2067	102Cr6 EN-ISO 4957
		1.2714	55NiCrMoV7 EN-ISO 4957
		1.2842	95MnCrV5 EN-ISO 4957
		1.2344	X40CrMoV-5 EN-ISO 4957
		1.2365	X32CrMoV12-28 EN-ISO 4957
		1.2379	X153CrMoV12 EN-ISO 4957

*These are the most common qualities used in **GAINZA FORGE**, if you need any other material not listed above please do not hesitate to enquire.*