FERROUS METALS
Stainless Steels

SPECIFICATION	GRADE	TYPE OF STEEL	AFNOR	DIN	WERKSTOFF	AISI	ACI	AMS	BS970 BRITISH / USA	1970 EN	UTS Min	UTS N/mm² Max	EI %	IZOD Ft lbs	HARDNESS HB Min	CHARACTERISTICS AND TYPICAL APPLICATIONS
ANC 1	A B C	13% Cr Martensitic Steels	Z10C13 Z15C13 Z20C13	GX12 Cr14 GX2O Cr14 GX22 Cr14	1.4008 1.4027	403 420 420	CA 15 CA40	5349:535 0D	410C21 420C29 BS3100:1	4 S 56 1 2 A 0 1 56	540 620 695	- - -	15 13 13	- -	207 183 229	Medium corrosion resistance and a range of strengths and hardnesses. ANC 1A—Chemical industry. High ductility engineering parts.
ANC 2	-	18% Cr 2% Ni Martensitic Steel	Z22 CN 1802	GX22 Cr Ni 17	1.4059	431	CB 30	5363	S80 BS3100:1 976	[431] S 57 2 9	850	1000	8	- -	248 302	High tensile stainless with improved corrosion resistance. Resists oxidising atmospheres to 760°C. Pumps valves, highly stressed aircraft
ANC 3	A B	Austenitic 18% Cr 8% Ni Steels	Z12 CN 1810 Z8 CN MB 1810	GX10 Cr Ni 18.8 GX7 Cr Ni Nb 18.9	1.4312 1.4552	304 347	CF 8 CF 8C	5358:534 1 5362E	304C15 347C17	3 S 58 0 2 A 2 5 58	460 460	- -	20 20	-	-	ANC 3A—Corrosion and acid resistant stainless, excellent stability to – 225°C. Chemical, textile, dairy food industries eg pumps and valves. ANC
ANC 4	A B C	Austenitic 18% Cr 10% Ni 3% Mo	Z6 CND 19.12.03 Z6 CND	GX6 Cr Ni Mo 18.10 GX6 Cr Ni Mo 18.10	1.4408 1.4408 1.4581	317 316 318	CG 8M CF 8M	5524C	317C16 316C16 318C17	3 S 58 1 1 J 7 6 58	- 500 500	- -	12 12 12	-	-	Good corrosion and acid resistance with medium tensile strength. Chemical and processing industries—valves/pumps for acids at high
ANC 5	A B C	Nickel Chromium Steels	Z12 CNS 25.21 Fe N37 C18S	Ni Cr 25.20 GX40 Ni Cr Si 36.16 Ni Cr	1.4843 1.4865 2.4867	310 330	CK 20:HK CK	5366B	310C45 331C60 334C11	[310] S 2 4	-		-	-	-	Heat resistant alloys. Resistant to cyclic heating and useful creep strength up to 650°C. Good resistance to scaling. Furnace parts, salt and
ANC 6	A B C	Nickel Chromium Steels	Z20 CNS 25.12 Z25 CNS W22	GX 35 Cr Ni Si 25.12	1.4837	309	CH20: HF		309C30 309C30	55	- 460 460	- -	17 17 17	-	-	Heat resistant with good strength up to 900°C and useful creep strength to 650°C. Heat treatment parts and superheaters, welding
ANC 19	-	Nickel-Cr Nb Mo Fe W Alloy	NC20NbDW	-	-	-	-	-	PE 10† MC 102†	-	680		5	-	260 340	High strength, precipitation hardening alloy. Resistant to thermal shock & oxidation. Applications include diesel engine combustion chamber sleeves.
ANC 20	A B	Cr Ni Cu Mo Steels	-	-	-	-	-	-	BS3146-2:1975	A	950- 1200 1250-		12 8	15 8	-	High strength with good corrosion resistance, good weldability. Variety of strengths depending on heat treatment. Aerospace and marine parts.
ANC 21	-	Cr Ni Cu Mo Steel	1.4513	-	-	-	CD 3 MCu	-	-	>700	700 - 0		18	10	-	Good corrosion resistance. Marine applications
ANC 22	A B C	16% Cr 4% Ni 3% Cu Steel	-	-	-	-	-	-	-	-	-		-	-	-	Components with high strength,heat and corrosion resistance: mechanical engineering, automotive industry, building and construction

This list gives details of the main alloys cast but we would be pleased to discuss any other materials required.
As this is intended to be a guide only, the full relevant standard specifications should be referred to when determining suitable materials for a particular product and its application.