P.I. CASTINGS LTD

Davenport Lane, Altrincham,
Cheshire WA14 5DS, England
Telephone +44(0) 161 925 5160
Email: sales@pi-castings.co.uk
Website: www.pi-castings.co.uk

CORROSION & HEAT RESISTING STEELS *** **Where a free machining grade is specified the Sulphur content may be as high as 0.3% and/or other suitable elements may be present.** **† Where indicated thus, 0.2% Proof Stress values are for information only.**

ANC 1A***	13% Cr	--	0.15	0.2	1.2	0.2	1.0	--	1.0	11.5	13.5	--		540	--	340†	15		152	207	56A	410S21	--	403	Z10C13	1.4008	Medium corrosion resistance and a range of strengths and hardnesses
1B***	Feritic/	0.12	0.20	0.2	1.2	0.2	1.0	--	1.0	11.5	13.5	--		620	--	415†	13		183	229	56B	420S29	--	420	Z15C13	1.4027	ANC 1A - Chemical industry use. High ductility engineering parts.
1C***	Martensitic	0.20	0.30	0.2	1.2	0.2	1.0	--	1.0	11.5	13.5	--		695	--	435†	13		201	255	56C	420S37	--	420	Z20C13		ANC 1B - Heat resistant parts not highly stressed.
	(Stainless)																										ANC 1C - Cutting blades, pumps, steam turbines.
ANC 2	18 Cr 2 Ni	0.12	0.25	0.2	1.0	0.2	1.0	1.5	3.0	15.5	20.0	--		850	1000	630†	8		248	302	57	431S29	--	431	Z22 CN 18.02	1.4059	High tensile stainless with improved corrosion resistance. Resists oxidising
	Martensitic																										atmospheres to 760ºC Pumps and Valves. Highly stressed aircrafts and
	(Stainless)																										engineering parts.
ANC 3A***	18 Cr 8 Ni	--	0.12	0.2	2.0	0.2	2.0	8.0	12.0	17.0	20.0	--	--	460	--	200	20		--	--	58A	302S25	--	304	Z12 CN 18.10	1.4312	ANC 3A - Corrosion and acid resistant stainless, excellent stability to -225ºC
3B***	Austenitic	--	0.12	0.2	2.0	0.2	2.0	8.5	12.0	17.0	20.0	--	Nb 8XC min	460	--	200	20		--	--	58F	347S17	HC104	347	Z8 CN NB 18.10	1.4552	Chemical, textile, dairy and food industries, pumps and valves.
	(Stainless)												1.1 max														ANC 3B - Weldable version usable up to 800ºC. Exhaust and marine parts to
																											a certain extent. Corrosion/acid resisting parts not heat treated after welding.
ANC 4A***	18 Cr 11 Ni	--	0.08	0.2	1.5	0.2	2.0	11.0	14.0	18.0	20.0	3.0	4.0	--		500	--	210†	12		--	--	58J	317S16		317	Z6 CND 19.12.03	1.4408	Good corrosion and acid resistance with medium tensile strength.
	3 Mo																										Chemical and processing industries - valves/pumps for acids at high
4B***	Austenitic	--	0.08	0.2	1.5	0.2	2.0	10.0	--	17.0	20.0	2.0	3.0	--		500	--	210†	12		--	--	58H	316S16		316	Z6 CND 17.11.03	1.4408	temperature also chlorides and salts.
4C***	(Stainless)	--	0.12	0.2	1.5	0.2	2.0	10.0	--	17.0	20.0	2.0	3.0	Nb 8XC min		500	--	210†	12		--	--	58H	320S17	HC105	318	Z6 CND NB 17.11.03	1.4581	
														1.1 max														
ANC 5A	Heat Resist	--	0.5	0.2	3.0	0.2	2.0	17.0	22.0	22.0	27.0	--	--	--	--	--	--		--	--		310S24		310	Z12 CNS 25.21	1.4843	Heat resistant alloys. Resistant to cyclic heating and useful creep strength
5B	Ni Cr	--	0.5	0.2	3.0	0.2	2.0	36.0	46.0	15.0	25.0	--	--	--	--	--	--		--	--				330	Fe N37 C18S	1.4865	up to 650ºC. Good resistance to scaling. Furnace parts, salt and lead
5C	Alloys	--	0.75	0.2	3.0	0.2	2.0	55.0	65.0	10.0	20.0	--	--	--	--	--	--		--	--				--	NC 15 Fe	2.4867	baths.
ANC 6A	Heat Resist	0.15	0.3	0.8	2.0	0.2	1.0	10.0	15.0	20.0	25.0	--	--			460	--	--	17		--	--				309	Z20 CNS 25.12	1.4837	Heat resistant with good strength upto 900ºC and useful creep strength up to
6B	Cr-Ni	0.15	0.3	0.8	2.0	0.2	1.0	10.0	15.0	20.0	25.0	--	--	W2.5/3.5		460	--	--	17		--	--	55		HC103		Z25 CNS W22		650ºC. Heat treatment parts and superheaters, welding fixtures, nozzle
6C	Alloys	0.05	0.15	0.8	2.0	0.2	1.0	10.0	18.0	20.0	25.0	--	--	W2.5/3.5		460	--	--	17		--	--					Z15 CNW S22.13		guide vanes for gas turbines.
ANC 8	Nimocast 75	0.08	0.15	0.2	1.0	0.2	1.0	Balance		18.0	22.0	--		Ti 0.2/0.6		--	--	--	--		--	--	--	--		--	--	--	Readily weldable heat resistant alloy. Excellent resistance to oxidation up
	(Proprietary													Fe 5.0 max														to 1100ºC and with useful strength. Furnace parts.
	alloy)													Al 0.3 max														
ANC 20A	Precipitation	--	0.07	0.2	2.0	0.2	1.0	3.0	6.0	12.5	15.5	0.5	2.5	Cu 1.0/3.5		950	1200	800	12	15	--	--	--	--	HC101	--	--	--	
	Hardening													Nb 0.5 max														
20B	Stainless	--	0.07	0.2	2.0	0.2	1.0	3.0	6.0	12.5	15.5	0.5	2.5	S 0.025 max		1250	1500	950	8	8	--	--	--	--	HC102	--	--	--	
														P 0.025 max														High strength with good corrosion resistance, good weldability. Variety of
ANC 22A	17/4 PH	--	0.06	--	1.0	--	0.7	3.6	4.6	15.5	16.7	--		Cu 2.8/3.5		1230	--	1030	8		361	--	--	--	HC106	AMS 5355	--	1.4549	strengths depending on heat treatment. Aerospace and marine parts.
22B	Prec. Hard.	--	0.06	--	1.0	--	0.7	3.6	4.6	15.5	16.7	--		Nb 0.15/0.4		1030	--	895	8		313	--	--	--	--	AMS 5343	--	1.4549	
22C	Stainless	--	0.06	--	1.0	--	0.7	3.6	4.6	15.5	16.7	--		N^2 0.05 max		900	--	830	8		294	--	--	--	--	AMS 5342	--	1.4549	