

# GABRIEL & COMPANY LTD CASTING SPECIFICATIONS

CORROSION RESISTANT ALLOYS				NOMINAL COMPOSITION %									
MATERIAL DESIGNATION				C	Cr	Ni	Mo	Cu	Nb	N	W	Al	Ti
GABRIEL CODE	ASTM	BS 3100	UNS										
G10	A217 CA15	420 C29	J91150	0.10	12.0		0.6						
G13	A487 CA6NM	425 C11	J91540	0.05	12.0	4.0	0.6						
G41	A747 CB7 Cu1		J92180	0.04	16.0	4.0		3.0	0.25				
G7	A351 CF3	304 C12	J92500	0.02	18.0	10.0							
G2	A351 CF8	304 C15	J92600	0.04	18.0	10.0							
G5	A351 CF8C	347 C17	J92710	0.04	19.0	10.0			0.65				
G8	A351 CF3M	316 C12	J92800	0.02	18.0	10.0	2.5						
G4	A351 CF8M	316 C16	J92900	0.04	19.0	10.0	2.5						
G6		318 C17		0.04	18.0	10.0	2.5		0.65				
G16	A351 CG8M	317 C16	J93000	0.04	19.0	10.0	3.5						
G101	A890 1A-A351 CD4MCu	332 C13	J93370	0.03	25.5	5.0	2.0	3.0					
G115	A890 2A-A351 CE8MN		J93345	0.04	24.0	10.0	3.5			0.2			
G106	A890 3A	332 C15	J93371	0.04	25.0	5.0	2.0			0.2			
G103	A890 4A		J92205	0.02	22.0	5.0	3.0			0.2			
G102	A890 5A		J93404	0.02	25.0	7.0	4.5			0.2			
G100	A890 6A-A351 CD3MWCuN		J93380	0.02	25.0	7.0	3.5	0.7		0.25	0.7		
G222	A351 CK20		J94202	0.10	25.0	20.0							
G110	A351 CK3MCuN		J93254	0.02	20.0	18.0	6.5	0.7		0.2			
G123	A351 CN7M	332 C11	N08007	0.04	20.0	29.0	2.5	3.5					
G120	INCOLOY 800H		N08810	0.06	21.0	33.0						0.5	0.5
G121	INCOLOY 825		N08825	0.04	21.0	42.0	3.0	2.0	1.0				

NICKEL BASE ALLOYS				NOMINAL COMPOSITION %									
MATERIAL DESIGNATION				Fe	Si	Mn	Cu	Mo	V	W	Cr	Nb	Ti
GABRIEL CODE	ASTM	BS 3071	UNS										
G300	A494 CZ100		N02100	2.0	1.0	1.0							
G33	A494 M35-1	NA1	N24135	2.0	1.0		30.0						
G302	A494 M35-2	NA2		2.0	1.5		30.0						
G303	A494 M-25S	NA3	N24025	2.0	4.0		30.0						
G304	A494 N7M		N30007	2.0				32.0					
G305	A494 N12MV		N30012	5.0				28.0	0.4				
G31	A494 CW12MW		N30002	6.0				17.0	0.3	4.5	16.5		
G307	A494 CY40		N06040	7.0							15.0		
G308	A494 CW6MC		N26625	2.0				9.0			21.0	4.0	

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LOW ALLOY STEELS MATERIAL DESIGNATION				NOMINAL COMPOSITION %									
GABRIEL CODE	ASTM	BS 3100	UNS	C	Cr	Ni	Mo	Mn	Nb	N	W	Al	Ti
G21	A216 WCA	A1	J02502	0.18				0.90					
G22	A216 WCB	A2	J03002	0.18				1.10					
G23	A216 WCC	A3	J02503	0.18				1.15					
G21	A352 LCA		J02504	0.18				0.90					
G22	A352 LCB		J03003	0.18				1.10					
G24	A352 LCC		J02505	0.18				1.15					
G40	A487 9		J13345	0.25	1.0		0.25	0.8					
G40	A217 WC6	B2	J12072	0.18	1.25		0.55	0.6					
G45	A217 WC9	B3	J21890	0.15	2.50		1.0	0.6					
G46	A352 LC3	BL2	J31550	0.10		3.5		0.7					
G47	A217 C5	B5	J42045	0.18	5.0		0.55	0.6					

NOTE: ADDITIONAL CARBON STEEL AND LOW ALLOY MATERIALS CAN ALSO BE PRODUCED FOR HIGH AND LOW TEMPERATURE PRESSURE SERVICE APPLICATIONS

HEAT RESISTANT ALLOYS MATERIAL DESIGNATION				NOMINAL COMPOSITION %									
GABRIEL CODE	ASTM	BS 3100	UNS	C	Cr	Ni	Mo	Mn	Nb	N	W	Al	Ti
G220	A217 C12	B6	J82090	0.18	9.0		1.0	0.6					
G221	A297 HF	302 C35	J92603	0.30	19.0	9.0							
G14	A297 HH	309 C30	J93503	0.30	25.0	12.0							
G223	A297 HK	310 C45	J94224	0.30	25.0	20.0							
G14	A297 HE	309 C40	J93403	0.30	29.0	9.0							
G225	A297 HT	330 C11	N08605	0.50	15.0	35.0							
G226	A297 HU	331 C40	N08004	0.50	19.0	39.0							
G227	A297 HW	334 C11	N08001	0.50	12.0	60.0							
G228	A297 HX		N06006	0.50	17.0	66.0							
G229	A297 HL		N08604	0.30	29.0	20.0							
G230	A297 HN	331 C11	J94213	0.30	20.0	25.0							
G231	A297 HP		N08705	0.50	26.0	35.0							

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