

Low Alloys Steels

Longwear Certified Air Melt Ingots - Alloy Cross Reference Index - Low Alloys Steels

In addition to the above Specifications we can offer manufacturing to Customer individual requirements and specifications including Toll Melting and re-melting. Longwear Alloys Ltd assumes no liability for errors or omissions. In relationship to the information contained in this document.

Alloy Spec	Asso- ciated Specifi- cations			C	Si	Mn	P	S	Cr	Ni	Mo	Cu	Fe	Others
				Min/Max	Min/Max									
1.0401	C15			0.12/0.18	0.40	0.30/0.80	0.045	0.045					Bal	
1.0443	CLA1A			0.11	0.50	0.7	0.12	0.025					Bal	>0.02Al
1.0503	C45			0.42/0.50	0.40	0.50/0.80	0.045	0.045	0.4	0.4	0.1		Bal	Cr+Mo+Ni < 0.63
1.0553	S355JO			0.20	0.55	1.60	0.03	0.03					Bal	<0.009N
1.1178	C30E	CLA1B		0.27/0.34	0.40	0.50/0.80	0.035	0.035	0.4	0.4	0.1		Bal	Cr+Mo+Ni < 0.63
1.1181	C35E	(CLA8)		0.32/0.39	0.40	0.50/0.80	0.035	0.035	0.4	0.4	0.1		Bal	Cr+Mo+Ni < 0.63
1.1191	C45E			0.42/0.50	0.40	0.50/0.80	0.035	0.035	0.4	0.4	0.1		Bal	Cr+Mo+Ni < 0.63
1.3505	100Cr6			0.93/1.05	0.15/0.35	0.25/0.45	0.025	0.025	1.35/1.60	0.30	0.10	0.3	Bal	
1.5637	CLA 10			0.15	0.35	0.30/0.80	0.020	0.01		3.25/3.75			Bal	0.05V
1.5918	17NiCr6	16NC6		0.14/0.20	0.40	0.50/0.90	0.035	0.035	1.40/1.70	1.40/1.70			Bal	
1.6580	30CrNiMo8			0.26/0.34	0.40	0.30/0.60	0.035	0.035	1.80/2.20	1.80/2.20	0.30/0.50		Bal	
1.6582	34CrNiMo6			0.30/0.38	0.40	0.30/0.60	0.035	0.035	1.80/2.20	1.80/2.20	0.30/0.50		Bal	
1.6740	EN24			0.30/0.36	0.60	0.50/0.80	0.015	0.007	0.90/1.20	1.50/1.80	0.35/0.50		Bal	
1.6926	38NiCr-MoV7.3			0.35/0.40	0.15/0.40	0.50/0.80	0.015	0.01	0.65/0.95	1.60/2.00	0.30/0.40		Bal	0.08/0.15V
1.7131	16MnCr5			0.14/0.19	0.4	1.00/1.30	0.025	0.035	0.80/1.10				Bal	0.0008/0.0050 B
1.7139	16MnCrS5			0.15/0.19	0.40	1.00/1.30	0.025	0.02/0.04	0.80/1.10				Bal	
1.7218	25CrMo4			0.22/0.29	0.40	0.60/0.90	0.025	0.03	0.90/1.20		0.15/0.30		Bal	
1.7225	42CrMo4			0.38/0.45	0.40	0.60/0.90	0.025	0.035	0.90/1.20		0.15/0.30		Bal	
1.7228	50CrMo4	CLA12C		0.46/0.54	0.40	0.50/0.80	0.035	0.035	0.90/1.20		0.15/0.30		Bal	
1.7254				0.28/0.28	0.30/0.50	0.50/0.70	0.02	0.015	0.80/1.10	0.30	0.20/0.30		Bal	
1.7321	20MoCr4			0.17/0.23	0.40	0.70/1.00	0.02	0.035	0.30/0.60		0.40/0.50		Bal	
1.7365	GX15Cr-Mo5	CLA11		0.12/0.19	0.80	0.50/0.80.80	0.025	0.025	4.00/6.00		0.45/0.65			
1.7701	52CrMoV4			0.48/0.52	0.400	0.7/1.1	0.025	0.025	0.9/1.2		0.15/0.30		Bal	0.10V
4140	AISI 4140			0.38/0.43	0.15/0.35	0.75/1.00	0.03	0.04	0.80/1.10	0.25	0.15/0.25	0.35	Bal	
100Cr6	1.3505			0.97/1.10	0.15/0.35	0.25/0.45	0.03	0.03	1.40/1.60	0.30		0.30	Bal	
1.5752	15NiCr14			0.14/0.20	0.4	0.40/0.70	0.025	0.035	0.60/0.90	3.00/3.50			Bal	
14NiCr18	1.5860			0.10/0.17	0.15/0.35	0.40/0.70	0.035	0.035	0.90/1.30	4.25/4.75			Bal	

Alloy Spec	Associated Specifications			C	Si	Mn	P	S	Cr	Ni	Mo	Cu	Fe	Others
				Min/Max	Min/Max									
15CrMoV6				0.12/0.18	0.25	0.4/0.7	0.02	0.015	1.35/1.65		0.80/1.00		Bal	0.20/0.30V
15CrNi6	1.5919			0.12/0.17	0.15/0.35	0.40/0.60	0.035	0.035	1.40/1.70	1.40/1.70			Bal	
15NiCr13	1.5752			0.14/0.20	0.4	0.40/0.70	0.025	0.025	0.60/0.90	3.00/3.50			Bal	
16CrNi4				0.13/0.18	0.15/0.40	0.70/1.00	0.035	0.04	0.80/1.10	0.80/1.10	0.10		Bal	
16MnCr5	1.7131			0.14/0.19	0.40	1.00/1.30	0.025	0.03	0.80/1.10				Bal	
16NiCr11	16NC11			0.12/0.18	0.10/0.40	0.35/0.60	0.04	0.04	0.60/0.90	2.50/3.00	0.08	0.50	Bal	
16NiCrMo12				0.13/0.19	0.15/0.40	0.40/0.70	0.035	0.035	0.85/1.10	2.70/3.20	0.30/0.40		Bal	
16NiCrMo13				0.12/0.17	0.15/0.40	0.30/0.60	0.025	0.025	0.80/1.10	3.00/3.50	0.20/0.30		Bal	
18CrMo4	1.7243			0.15//0.21	0.40	0.60/0.90	0.025	0.035	0.90/1.20		0.15/0.25	0.50	Bal	
18NiCrMo5				0.15/0.21	0.15/0.40	0.60/0.90	0.035	0.035	0.70/1.00	1.20/1.50	0.15/0.25		Bal	
20CDV12				0.15/0.25	0.80	0.80	0.030	0.025	2.75/3.30	0.30/0.50			Bal	
20M5	1.1170	28Mn6		0.25/0.32	0.40	1.30/1.65	0.035	0.035	0.40	0.40	0.10	0.30	Bal	
20NiCrMo2	1.6522			0.17/0.23	0.4	0.60/0.95	0.025	0.015	0.35/0.65	0.40/0.70	0.15/0.25		Bal	0.012N2
25CrMo4	1.7214			0.22/0.29	0.15/0.35	0.50/0.80	0.02	0.015	0.90/1.20	0.3	0.15/0.30		Bal	
30CrNiMo8	1.6580			0.26/0.34	0.40	0.50/0.80	0.025	0.035	1.80/2.20	1.80/2.20	0.30/0.50		Bal	
30NiCrMo12	30NCD12			0.25/0.35	0.10/0.40	0.15/0.55	0.03	0.025	0.70/1.10	2.80/3.20	0.25/0.45		Bal	
31CrMo12	1.8515			0.28/0.35	0.4	0.40/0.70	0.025	0.035	2.80/3.30		0.30/0.50		Bal	
32CrMoV13				0.26/0.35	0.50	0.70	0.03	0.025	2.80/3.30		0.80/1.20		Bal	0.15/0.35V
34CrNiMo6	1.6582			0.30/0.38	0.40	0.50/0.80	0.025	0.035	1.30/1.70	1.30/1.70	0.15/0.30		Bal	
35CD4	34CrMo4	1.7220		0.26/0.37	0.40	0.60/0.90	0.025	0.035	0.90/1.20		0.15/0.30	0.30	Bal	
38NiCrMoV7.3	1.6926			0.26/0.38	0.15/0.40	0.50/0.80	0.015	0.01	0.65/0.95	1.60/2.00	0.30/0.40		Bal	0.08/0.15V
39NiCrMo3	1.6510			0.35/0.43	0.4	0.50/0.80	0.025	0.035	0.60/1.00	0.70/1.00	0.15/0.25	0.15	Bal	
40CrMn-Mo8.6.4	1.2738			0.35/0.45	0.20/0.40	1.30/1.60	0.035	0.035	1.80/2.10	0.90/1.20	0.15/0.25		Bal	
40CrMn-MoS8-6	1.2312			0.35/0.45	0.30/0.50	1.40/1.60	0.03	0.05/0.10	1.80/2.00		0.15/0.25		Bal	
42CrMo4	1.7225			0.38/0.45	0.40	0.60/0.90	0.035	0.035	0.90/1.20		0.15/0.30		Bal	
440C	1.4125	X105Cr-Mo11		0.95/1.20	1.00	1.00	0.04	0.015	16.00/18.00		0.40/0.80		Bal	
45SiCrMo6	1.8062	45SCD6		0.42/0.50	1.30/1.70	0.50/0.80	0.025	0.025	0.50/0.80		0.20/0.30		Bal	
52CrMoV4	1.7701			0.48/0.56	0.15/0.40	0.70/1.10	0.03	0.04	0.90/1.20		0.15/0.30		Bal	0.10/0.20V
52SiCrNi5	1.7711			0.46/0.56	1.20/1.50	0.70/1.00	0.025	0.025	0.70/1.00	0.50/0.70			Bal	
55Si7	1.5026			0.26/0.49	1.60/2.00	0.60/0.90	0.025	0.025	0.4	0.4	0.1		Bal	
ASTM A 487 Grade 1				0.30	0.80	1.00	0.035	0.035	0.35	0.50	0.10/0.25	0.50	Bal	0.04/0.12V

Alloy Spec	Associated Specifications			C	Si	Mn	P	S	Cr	Ni	Mo	Cu	Fe	Others			
				Min/Max	Min/Max												
ASTM A 487 Grade 4				0.30	0.80	1.00	0.035	0.035	0.40/0.80	0.40/0.80	0.15/0.30		Bal				
ASTM A 487 Grade 10				0.30	0.80	1.00	0.035	0.035	0.55/0.90	1.40/2.00	0.20/0.40	0.50	Bal				
C10	1.0301			0.07/0.13	0.40	0.30/0.60	0.045	0.045					Bal				
C20				0.15/0.25	0.10/0.40	0.60/0.90	0.045	0.045					Bal				
C40	1.0511			0.26/0.61	0.40	0.50/0.80	0.045	0.045	0.40	0.40	0.10		Bal	0.63(Cr+Mo+Ni)			
C45	1.0503			0.26/0.62	0.40	0.50/0.80	0.045	0.045	0.40	0.40	0.10		Bal	0.63(Cr+Mo+Ni)			
C50	1.0540			0.26/0.63	0.40	0.60/0.90	0.045	0.045	0.40	0.40	0.10		Bal	0.63(Cr+Mo+Ni)			
CLA10	1.5637	12n14	BS3146 Pt1 1974	0.26/0.65	0.20/0.40	0.30/0.60	0.030	0.030	0.30	2.75/3.50	0.10	0.30	Bal				
CLA11			BS3146 Pt1 1974	0.20/0.30	0.30/0.80	0.30/0.60	0.035	0.035	2.90/3.50	0.40	0.40/0.70	0.30	Bal				
CLA12 A			BS3146 Pt1 1974	0.45/0.55	0.30/0.80	0.50/1.00	0.035	0.035	0.80/1.20	0.40	0.10	0.30	Bal				
CLA12 B			BS3146 Pt1 1974	0.26/0.68	0.30/0.80	0.50/1.00	0.035	0.035	0.80/1.20	0.40	0.10	0.30	Bal				
CLA12 C	1.7228	50CrMo4	BS3146 Pt1 1974	0.55/0.65	0.30/0.80	0.50/1.00	0.035	0.035	0.80/1.50	0.40	0.20/0.40	0.30					
CLA13			BS3146 Pt1 1974	0.26/0.70	0.20/0.60	0.30/0.70	0.04	0.04	0.30	1.50/2.00	0.20/0.30	0.30	Bal				
CLA1A	1.0443	EN32	BS3146 Pt1 1974	0.26/0.71	0.20/0.60	0.40/1.00	0.04	0.04	0.30	0.40	0.10	0.30	Bal	Residues < 0.80			
CLA1B	1.0551		BS3146 Pt1 1974	0.26/0.72	0.20/0.60	0.40/1.00	0.04	0.04	0.30	0.40	0.10	0.30	Bal	Residues < 0.80			
CLA1C			BS3146 Pt1 1974	0.26/0.73	0.20/0.60	0.40/1.00	0.04	0.04	0.30	0.40	0.10	0.30	Bal	Residues < 0.80			
CLA2	BS3100/A4	EN14	BS3146 Pt1 1974	0.26/0.74	0.20/0.50	1.20/1.70	0.04	0.04	0.30	0.40	0.10	0.30	Bal				
CLA4		EN24	BS3146 Pt1 1974														
CLA5A			BS3146 Pt1 1974	0.26/0.80										UTS 1000 Proof 880	EI 9	Izod 30	Brin 269/321
CLA5B			BS3146 Pt1 1974	0.26/0.79										UTS 1160 Proof 1000	EI 5	Izod 10	Brin 341/388
CLA7	1.7273		BS3146 Pt1 1974	0.15/0.25	0.30/0.80	0.30/0.60	0.04	0.04	2.50/3.50	0.40	0.35/0.60	0.30	Bal				
CLA8		EN8	BS3146 Pt1 1974	0.26/0.81	0.20/0.60	0.50/0.80	0.04	0.04	0.30	0.40	0.10	0.30	Bal				

Alloy Spec	Associated Specifications			C	Si	Mn	P	S	Cr	Ni	Mo	Cu	Fe	Others
				Min/Max	Min/Max									
CLA9	1.1141		BS3146 Pt1 1974	0.26/0.82	0.20/0.60	0.60/1.00	0.04	0.04	0.30	0.40	0.10	0.30	Bal	
EN19A				0.26/0.83	0.10/0.35	0.70/1.00	0.04	0.05	0.90/1.20		0.15/0.25		Bal	
EN24	CLA4			0.26/0.84	0.30/0.60	0.45/0.70	0.05	0.05	0.90/1.40	1.30/1.80	0.20/0.35	0.30	Bal	
EN32C				0.26/0.85	0.10/0.40	0.60/1.00	0.05	0.05					Bal	
EN36A	1.5752			0.15	0.10/0.35	0.30/0.60	0.035	0.035	0.60/1.10	3.00/3.75			Bal	
EN36B	14NiCr14			0.12/0.18	0.10/0.35	0.30/0.60	0.05	0.05	0.60/1.10	3.00/3.75			Bal	
EN36C	1.6657			0.10/0.16	0.10/0.35	0.35/0.60	0.04	0.04	0.70/1.00	3.00/3.75	0.10/0.25		Bal	
EN39B			835M15	0.26/0.89	0.10/0.35	0.25/0.50	0.05	0.04	1.00/1.40	3.90/4.30	0.15/0.30		Bal	
EN40B			722M24	0.26/0.90	0.10/0.35	0.45/0.75	0.025	0.025	3.00/3.50		0.45/0.65		Bal	
EN40C	40Cr-MoV4			0.26/0.91	0.10/0.35	0.45/0.70	0.025	0.025	3.00/3.50		0.80/1.00		Bal	0.15/0.25V
Fe Si 2.5%				0.26/0.92	2.45/2.60	0.20/0.50	0.04	0.03	0.20	0.20	0.10		Bal	0.050Al
X120Mn12	1.3401		BW10	0.26/0.95	0.40/1.00	11/14.00	0.08	0.03	0.80	0.30	0.50	0.05	Bal	0.01V 0.04Al 0.20Co
X35Cr-MoV05				0.32/0.40	0.80/1.20	0.20/0.40	0.03	0.02	4.70/5.50	0.40	1.25/1.60		Bal	0.35/0.50V 1.10/1.60W
ZF63				0.30/0.37	0.40	0.60/0.90	0.025	0.02/0.04	0.90/1.20				Bal	

Please contact the Sales Office to confirm specification details prior to placing an order. Tel: +44 (0)121 553 4974