



AI MATERIALS

BRODER METALS GROUP

Your source for nickel alloy, stainless and duplex/super duplex, nimonics and titanium round bar

Gobal reach, personal touch

Our in-house quality assurance department oversees compliance with all international material specifications . We also believe in training our staff and have developed our own ultrasonic (level 2) capabilities. All operations are covered by our group-wide ISO 9001:2008 TUV accreditation.

Our target on-time delivery performance is 100%. Performance is reviewed monthly and is a major component of our continuous improvement philosophy.

We're here to help you.

Tel: +44 (0) 114 243 1206
Fax: +44 (0) 114 261 1519

MAJOR GRADES

(our designated specification in bold):

Alloy 718

Specifications stocked:

API 6A 718; ASTM B637 ; AMS 5662; AMS 5663 ; UNS N07718; NACE MR0175 / ISO 15156-3

Size Range: 12.7 mm – 304 mm

Alloy 718 Billet – from which we can manufacture bar, shapes, and forgings to your requirements

We can supply:

Alloy 718 Solution Annealed to AMS 5662 with AMS 5663 capability results.

Size Range: 12.7 mm – 304 mm

Alloy 718 Solution Annealed and Aged to NACE.

Size Range: 12.7 mm – 304 mm

Titanium

Grade and specifications stocked:

ASTM B348 Grade 2 and Grade 5

Size Range: 12.7 mm to 400 mm

Alloy 286 / 660

Specifications stocked:

ASTM A453 grade 660 A, B, and D; UNS S66286

Size Range: 12.7 mm – 135 mm

Alloy K500

Specifications stocked:

BS 3076 NA18; UNS N05500; ASTM B865; QQN-286;

NACE MR0175/ISO 15156-3

Size Range: 12.7 mm – 300 mm

Alloy 625

Specifications stocked:

ASTM B446; UNS N06625 Grade 1; AMS 5666; BS3076 NA21; NACE MR0175 /ISO 15156-3

Size Range: 10 mm – 400 mm

NIMONIC 80a

Specifications stocked:

Solution Annealed with ASTM B637 capability results in the aged condition.

Size range: 12.7 mm – 200 mm

Alloy 825

Specifications stocked:

ASTM B425; UNS N008825; BS 3076 NA 16; NACE MR0175 / ISO 15156-3

Size Range: 12.7 mm – 250 mm

Plus our material sourcing service has obtained the following (as examples) for our customers:

15/5PH, 17/4PH, 304, 316, 321, 400, 410, 4130, 4140, 4142, 416, 420, 431, 440C, 60, 600, 725, 800H/HT, 904, 925, Alloy 20, B2, B7, BS1387, BS2870, C22, C276, C61400, C63000, C71500, C95800, CZ121, DS, Durehete 1055, F22, F44, F51, F53, F55, Jethete, N60, N80, N90, NES833, Nitronic 50, PN102, PH13-8MO, SW347, Stellite 6, Titanium Grade 2 & 5, WT grade 25, X22.

AI MATERIALS

Weight Chart

Theoretical Kgs per metre for AI Materials major grades

MM	IN	286/660	625	718	825	80a	F55	K500	254 SMO	Titanium grade 2	Titanium grade 5
13.00	0.51	1.051	1.120	1.087	1.080	1.087	1.037	1.123	1.035	0.599	0.588
15.88	0.63	1.568	1.671	1.621	1.611	1.621	1.546	1.675	1.544	0.893	0.877
16.00	0.63	1.592	1.697	1.647	1.637	1.647	1.570	1.701	1.568	0.907	0.891
19.05	0.75	2.257	2.406	2.334	2.320	2.334	2.226	2.411	2.223	1.285	1.263
20.00	0.79	2.488	2.652	2.573	2.557	2.573	2.454	2.658	2.450	1.417	1.392
22.23	0.88	3.073	3.274	3.177	3.158	3.177	3.030	3.282	3.026	1.750	1.719
25.00	0.98	3.888	4.143	4.020	3.996	4.020	3.834	4.153	3.829	2.214	2.175
25.40	1.00	4.013	4.277	4.150	4.125	4.150	3.957	4.287	3.952	2.285	2.245
28.58	1.13	5.079	5.413	5.252	5.220	5.252	5.009	5.425	5.002	2.892	2.841
30.00	1.18	5.598	5.966	5.789	5.754	5.789	5.521	5.980	5.514	3.188	3.131
31.75	1.25	6.271	6.682	6.484	6.445	6.484	6.183	6.698	6.176	3.571	3.507
34.93	1.38	7.587	8.085	7.846	7.798	7.846	7.482	8.105	7.472	4.321	4.244
35.00	1.38	7.620	8.120	7.880	7.832	7.880	7.514	8.139	7.504	4.339	4.262
38.10	1.50	9.030	9.622	9.337	9.280	9.337	8.904	9.645	8.893	5.142	5.051
40.00	1.57	9.953	10.606	10.292	10.229	10.292	9.814	10.631	9.802	5.667	5.567
44.45	1.75	12.290	13.097	12.709	12.632	12.709	12.120	13.128	12.104	6.999	6.874
45.00	1.77	12.596	13.423	13.026	12.946	13.026	12.421	13.455	12.405	7.173	7.046
50.80	2.00	16.053	17.106	16.600	16.498	16.600	15.830	17.147	15.809	9.141	8.979
55.00	2.17	18.817	20.052	19.458	19.339	19.458	18.555	20.100	18.532	10.715	10.525
57.15	2.25	20.316	21.650	21.009	20.881	21.009	20.034	21.702	20.009	11.569	11.364
60.00	2.36	22.393	23.864	23.157	23.015	23.157	22.082	23.920	22.054	12.752	12.526
63.50	2.50	25.082	26.729	25.937	25.779	25.937	24.734	26.792	24.702	14.283	14.029
69.80	2.75	30.306	32.296	31.339	31.148	31.339	29.885	32.372	29.847	17.258	16.951
75.00	2.95	34.990	37.287	36.182	35.962	36.182	34.504	37.375	34.459	19.925	19.571
76.20	3.00	36.118	38.490	37.349	37.121	37.349	35.617	38.581	35.571	20.567	20.202
82.55	3.25	42.389	45.172	43.834	43.566	43.834	41.800	45.279	41.746	24.138	23.710
88.90	3.50	49.161	52.389	50.837	50.526	50.837	48.478	52.513	48.416	27.994	27.498
95.25	3.75	56.435	60.140	58.359	58.002	58.359	55.651	60.282	55.580	32.136	31.566
100.00	3.94	62.204	66.288	64.324	63.932	64.324	61.340	66.445	61.261	35.422	34.793
101.60	4.00	64.210	68.426	66.399	65.994	66.399	63.318	68.588	63.237	36.564	35.916
114.30	4.50	81.266	86.602	84.036	83.523	84.036	80.137	86.807	80.035	46.276	45.456
115.00	4.53	82.264	87.666	85.069	84.549	85.069	81.122	87.873	81.018	46.845	46.014
127.00	5.00	100.328	106.916	103.749	103.115	103.749	98.935	107.169	98.808	57.131	56.118
130.00	5.12	105.124	112.026	108.708	108.044	108.708	103.664	112.292	103.531	59.862	58.801
139.70	5.50	121.397	129.368	125.536	124.769	125.536	119.711	129.674	119.558	69.129	67.903
150.00	5.91	139.958	149.147	144.730	143.846	144.730	138.014	149.501	137.838	79.698	78.285
152.40	6.00	144.473	153.958	149.398	148.486	149.398	142.466	154.323	142.284	82.269	80.810
165.10	6.50	169.555	180.687	175.335	174.265	175.335	167.200	181.115	166.986	96.552	94.839
177.80	7.00	196.643	209.554	203.347	202.106	203.347	193.912	210.051	193.664	111.978	109.991
180.00	7.09	201.540	214.772	208.411	207.138	208.411	198.741	215.281	198.486	114.766	112.730
200.00	7.87	248.815	265.151	257.297	255.726	257.297	245.359	265.779	245.045	141.686	139.173
203.20	8.00	256.840	273.704	265.596	263.975	265.596	253.273	274.352	252.949	146.256	143.662
228.60	9.00	325.064	346.406	336.145	334.093	336.145	320.549	347.227	320.139	185.106	181.822
250.00	9.84	388.773	414.299	402.027	399.572	402.027	383.373	415.280	382.883	221.385	217.458
254.00	10.00	401.313	427.662	414.994	412.461	414.994	395.739	428.676	395.233	228.526	224.472
304.80	12.00	577.891	615.833	597.592	593.944	597.592	569.865	617.293	569.135	329.077	323.240

Tel: +44 (0) 114 243 1206