



Aluminium Bronze Casting Grades with Chemical Composition

Aluminium Bronze Casting Specification	CU	SN	PB	ZN	FE	NI	AI	MN	SI	Impurities
Standard : BS 1400, AB-1	Rem.	0.1	0.05	0.5	1.5 - 3.5	1.0	8.5 - 10.5	1.0	0.25	0.30
Standard : BS 1400, AB-2	Rem.	0.1	0.05	0.5	4 - 5.5	4 - 5.5	8.8 - 10	1.5	0.1	0.30
Standard : JIS, ALBC - 1	85 - 90	0.1	0.1	0.5	1 - 3	0.1 - 1	8 - 10	0.1 - 1	-	--
Standard : JIS, ALBC - 2	80 - 88	0.1	0.1	0.5	2.5 - 5	1 - 3	8 - 10.5	0.1 - 1.5	-	--
Standard : JIS, ALBC - 3	78 - 85	0.1	0.1	0.5	3 - 6	3 - 6	8.5 - 10.5	0.1 - 1.5	-	--
Standard : JIS, ALBC - 4	71 - 84	0.1	0.1	0.5	2 - 5	1 - 4	6 - 9	7 - 15	-	--
Standard : ASTM, C95400	83 Min.	0.1	0.03	0.1	3 - 5	1.5	10 - 11.5	0.5	-	--
Standard : ASTM, C95500	78 Min.	0.1	0.03	0.1	3 - 5	3 - 5.5	10 - 11.5	3.5	-	--
Standard : ASTM, C95800	78 Min.	0.1	0.03	0.1	3.5 - 4.5	4 - 5	8.5 - 9.5	0.8 - 1.5	0.1	--
Standard : DIN, G-CuAl10Fe	83 - 89	0.2	0.1	0.4	2 - 3.8	2.7	8.7 - 10.7	0.8	0.1	1.00
Standard : DIN, G-CuAl9Ni	82 - 86.5	0.2	0.1	0.2	1 - 2.8	1.5 - 3.8	8.7 - 9.8	2.3	0.07	0.80
Standard : DIN, G-CuAl10Ni	76 - 80.5	0.1	0.03	0.2	3.5 - 5.3	4.5 - 6.3	9 - 10.6	2.3	0.07	0.80
Standard : DIN, G-CuAl11Ni	72 - 77	0.1	0.03	0.2	4.3 - 5.8	5.3 - 6.8	9.3 - 11.3	2.3	0.07	0.80

Aluminium Bronze Casting Mechanical Properties

Aluminium Bronze Casting Specification	Tensile Strength (Min.)	Elongation % (Min.)	Brinell Hardness (Min.)
Standard : BS 1400, AB - 1	550 Mpa.	18%	130 BHN.
Standard : BS 1400, AB - 2	650 Mpa.	12%	150 BHN.
Standard : JIS, ALBC - 1	470 Mpa.	15%	100 BHN.
Standard : JIS, ALBC - 2	490 Mpa.	20%	120 BHN.
Standard : JIS, ALBC - 3	590 Mpa.	15%	150 BHN.
Standard : JIS, ALBC - 4	620 Mpa.	15%	180 BHN.
Standard : ASTM, C95400	515 Mpa.	12%	150 BHN.
Standard : ASTM, C95500	620 Mpa.	6%	190 BHN.
Standard : ASTM, C95800	585 Mpa.	15%	180 BHN.
Standard : DIN, G-CuAl10Fe	550 Mpa.	18%	130 BHN.
Standard : DIN, G-CuAl9Ni	550 Mpa.	20%	120 BHN.
Standard : DIN, G-CuAl10Ni	650 Mpa.	12%	150 BHN.
Standard : DIN, G-CuAl11Ni	750 Mpa.	5%	185 BHN.

Aluminium Bronze Physical Properties :

Aluminium Bronze Density = 7.45 gm/cm³ at 20° C.

Melting Point - Liquidus = 1038° C.

Melting Point - Solidus = 1027° C.