



THE ALLIED FOUNDERS PVT. LTD.

An ISO 9001:2015 certified Company, Manufacturers & Exporters of Cast Iron Castings, Ductile Iron Castings, Machined Components & Assemblies

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INTERNATIONAL SPECIFICATIONS FOR CAST (BRONZE) STANDARDS

Lead Free
(Where Lead is an impurity)

Class	Country	Specification	Cu	Sn	Pb	Zn	Fe	Ni	Al	Mn	Sb	Si	S	As	P	UTS (ksi)	YS (ksi)	Elong %
Gunmetal	USA	C 83600	84-86.0	4-6.0	4-6.0	4-6.0	0.3 max	1 max	0.005 max	-	0.25 max	0.005 max	0.08 max	-	0.05 max	30	14	20
	USA	C 92410	Bal	6-8.0	2.5-3.5	1.5-3.0	0.2 max	0.2 max	0.005 max	0.05 max	0.25 max	0.005 max	-	-	-			
	USA	C 93200	81-85.0	6.3-7.5	6-8.0	1-4.0	0.2 max	1 max	0.005 max	-	0.35 max	0.005 max	0.08 max	-	0.15 max	30	14	15
	United Kingdom	LG2	Bal	4-6.0	4-6.0	4.5-6.0	0.25 max	2 max	0.01 max	-	0.5 max	0.02 max	0.1 max	-	0.02 max	Similar to C83600 ASTM		
	United Kingdom	LG4	Bal	6-8.0	2.7-3.5	1.7-3.2	0.2 max	2 max	0.01 max	-	0.4 max	0.01 max	0.1 max	-	0.02 max	45	20	40
	United Kingdom	Rg7	81-84.5	6.2-8.0	5.2-8	2.3-5.0	0.2 max	2 max	0.01 max	-	0.3 max	0.01 max	0.08 max	-	0.03 max	Similar to C93200 ASTM		
	Germany	GB-Cu Sn5 Zn Pb	83.5-85.5	4.3-6.0	4-6.0	4.5-6.5	0.2 max	2.3 max	0.01 max	0.1 max	0.25 max	0.01 max	0.06 max	0.1 max	0.03 max	Similar to C83600 ASTM		
	Germany	GB-Cu Sn6 Zn Ni	83.5-87.0	5.8-7.0	2.8-4.0	1.8-3.0	0.2 max	1.5-2.3	0.01 max	0.1 max	0.2 max	0.01 max	0.06 max	0.1 max	0.03 max	Similar to C83600 ASTM		
	Germany	GB-CU Sn7 Zn Pb	81-84.5	6.3-8.0	5.3-7.0	3.3-5.0	0.2 max	1.8 max	0.01 max	0.1 max	0.25 max	0.01 max	0.06 max	0.1 max	0.03 max	Similar to C93200 ASTM		
	Japan	BCIn6	83-87.0	4-6.0	4-6.0	4-6.0	0.3 max	0.8 max	0.005 max	-	0.2 max	0.005 max	-	-	0.03 max	Similar to C83600 ASTM		
Japan	BCIn7	86-85.0	5-7.0	1-3.0	3-5.0	0.2 max	0.8 max	0.005 max	-	0.2 max	0.005 max	-	-	0.03 max	Similar to C83600 ASTM			
Italy	G-Cu Sn 5 Zn5 Pb5	Bal	4-6.0	4-6.0	4-6.0	0.3 max	2 max	-	0.1 max	0.4 max	-	0.1 max	-	0.05 max	Similar to C83600 ASTM			
India	LTB-2	Bal	4-6.0	4-6.0	4.5-6.0	0.35 max	2 max	0.01 max	-	0.4 max	0.02 max	-	-	-	Similar to C83600 ASTM			
Tin Bronze	USA	C 90500	86-89.0	9-11.0	0.3 max	1-3.0	0.2 max	1 max	0.005 max	-	0.2 max	0.005 max	0.05 max	-	0.05 max	40	18	20
	United Kingdom	G1	Bal	9.7-10.5	1.50	1.75-2.75	0.15 max	1 max	0.01 max	-	-	0.02 max	0.1 max	-	0.02 max	Similar to C90500 ASTM		
	Germany	GB-Cu Sn10 Zn	86-88.5	9.2-11.0	1.30	1-3.0	0.2 max	1.8 max	0.01 max	0.1 max	0.25 max	0.01 max	0.06 max	0.1 max	0.03 max	Similar to C90500 ASTM		
	Japan	BCIn3	86.5-89.5	9-11.0	1.00	1-3.0	0.2 max	0.8 max	0.005 max	-	0.2 max	0.005 max	-	-	0.03 max	Similar to C90500 ASTM		
Phosphor Bronze	USA	C 90800	85-89.0	11-13.0	0.25 max	0.25 max	0.15 max	0.5 max	0.005 max	-	0.2 max	0.005 max	0.05 max	-	0.3 max	35	17	10
	United Kingdom	PB2	Bal	11.2-13.0	0.5 max	0.3 max	0.1 max	0.5 max	0.01 max	-	-	0.02 max	0.1 max	-	0.25-0.6	45	25	5
	Japan	PBCIn2	87-91.0	9-12.0	0.3 max	0.3 max	0.2 max	0.5 max	0.005 max	-	0.05 max	0.005 max	-	-	0.1 max	Similar to BS1400 PB2		
Lead Bronze	USA	C 93700	78-82.0	9-11.0	8-11.0	0.8 max	0.7 max	0.5 max	0.005 max	-	0.5 max	0.005 max	0.08 max	-	0.1 max	30	16	12
	United Kingdom	LB2	Bal	9.2-11.0	9-10.5	1 max	0.15 max	2 max	0.01 max	0.2 max	0.5 max	0.02 max	0.1 max	-	0.05 max	Similar to C93700 ASTM		
	Germany	GB-Cu Pb10 Sn	78-81.0	9.3-11.0	8.5-10.5	0.8 max	0.15 max	1.3 max	0.01 max	0.1 max	0.3 max	0.01 max	0.08 max	0.1 max	0.03 max	Similar to C93700 ASTM		
	Japan	LBCIn3	77-81.0	9-11.0	9-11.0	1 max	0.2 max	1 max	0.005 max	-	0.5 max	0.005 max	-	-	0.05 max	Similar to C93700 ASTM		
Aluminium Bronze	USA	C 95200	Min 86	-	-	-	2.5-4.0	-	8.5-9.5	-	-	-	-	-	-	65	25	20
	USA	C 95800	Min 79	-	0.03 max	-	3.5-4.5	4-5.0	8.5-9.5	0.8-1.5	-	0.01 max	-	-	-	85	35	15
	USA	C 95500	Min 78	-	-	-	3-5.0	3-5.5	10-11.5	3.5 max	-	-	-	-	-	90	40	6
	USA	C 95900	Bal	-	-	-	3-5.0	0.5 max	12-13.5	1.5 max	-	-	-	-	-			
	United Kingdom	AB1	Bal	0.1 max	0.03 max	0.5 max	1.5-3.5	1 max	8.7-10.5	1 max	0.05 max	0.2 max	-	-	-	68	26	20
	United Kingdom	AB2	Bal	0.1 max	0.03 max	0.5 max	4-5.5	4-5.5	8.8-10.0	3 max	0.05 max	0.1 max	-	-	-	93	36	13
	Germany	GB-Cu Al10 Fe	83-89.0	0.2 max	0.1 max	0.4 max	2-3.8	2.7 max	8.7-10.7	0.8 max	-	0.1 max	0.04 max	-	-	Similar to C95200 ASTM		
	Germany	GB-Cu Al10 Ni	76-80.5	0.1 max	0.03 max	0.2 max	3.5-5.3	4.5-6.3	9-10.6	2.3 max	-	0.07 max	0.04 max	-	-	Similar to C95800 ASTM		
Japan	AIBCIn1	85.00	0.1 max	0.1 max	0.5 max	1-4.0	0.1-1.0	8-10.0	0.1-1.0	-	-	-	-	-	Similar to C95200 ASTM			
Japan	AIBCIn4	71.00	0.1 max	0.1 max	0.5 max	2-5.0	1-4.0	6-9.5	7-15.0	-	-	-	-	-	Similar to C95800 ASTM			
Manganese Bronze	USA	C 86300	60-66.0	0.2 max	0.2 max	22-28.0	2-4.0	1 max	5-7.5	2.5-5.0	-	-	-	-	-	110	60	12
	United Kingdom	HTB3	Min 55	0.2 max	0.2 max	Bal	1.5-3.25	1 max	3-6.0	1.5-4.0	-	0.1 max	-	-	-	107	58	14
	Germany	GB-Cu Zn 25 Al5	60-66.0	0.05 max	0.1 max	Bal	3.5-4.5	2.7 max	4-6.5	3-5	0.03 max	0.05 max	-	0.08 max	0.02 max	Similar to C86300 ASTM		
	Japan	HBsCIn4	60-65.0	0.2 max	0.2 max	Bal	2-4.0	0.5 max	5-7.5	2.5-5.0	-	0.1 max	-	-	-	Similar to C86300 ASTM		

NOTE: The above standards for ordering reference only the customer can specify any special requirement. All specifications are subject to change without prior notice.