



MASTER ALLOYS Brass INGOTS GUN METAL
 BRONZE LEAD BRONZE TIN BRONZE MASTER
INGOTS CUPRO IRON CUPRO NICKEL
 MANGANESE BRONZE
 SILICON BRONZE PHOSPHORUS COPPER
 GUN METAL CUPRO MANGANESE **TIN**
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Laxmi Alloys & Casting Co.

An ISO 9001 : 2008 Certified Co.

Specialised in : GUN METAL, LEAD BRONZE & TIN BRONZE INGOTS



Company Profile

Laxmi Alloys & Casting Co. is present in the market of non-ferrous metals over past 50 years under the banner of Laxmi Group. Expanding from the trading business the enthusiastic entrepreneurs plunged into the manufacturing business in 1981 and since then Laxmi Alloys & Casting Co. has never looked back.

As it is said that every success story is first a plan, 1960 was the stepping stone for Laxmi Group when Mr. Bhanwarlal H. Nahar entered the market of Non-Ferrous Metals getting initially associated in trading of Non-Ferrous Metals.

In the year 1981 expanding from trading business the enthusiastic entrepreneurs established their first foundry and has been one of the leading producers of Bronze, Brass, Gunmetal Ingots and Master Alloys, With a massive production capacity of 3600 M.T. Per Annum and a wide range of products served as per the needs of the buyer and we are able to satisfy a wide range of industry.

Currently Laxmi Alloys & Casting Co. is growing under the vision and strong determination of Bhanwarlal H. Nahar and his Son Kamlesh B. Nahar.

Our Goal

Our goal for **Laxmi Alloys & Casting Co.** is to be the most respected Non-Ferrous Alloys Manufacturer globally. Like any other producer, we're obligated to deliver the best quality and we take this responsibility seriously being aware of the precise use of the product made by our customers. To abide by all the highest global standards of quality, disclosure, openness and ethics has always been our mission which we have successfully carried out for past 50 years and pledge to continue further.





Founders & Gen Next

Time to time Laxmi Alloys & Casting Co. has done necessary upgradations of Technology and has expanded business with many more products. Generation to Generation we have seen new thought process.

The rich and vast experience of promoters has established them in market with a Trust of Quality. The Enthusiastic Young Generation has added their Knowledge and Technology and wishes to touch new heights in business.

Mr. Bhanwarlal H. Nahar :

Mr. Bhanwarlal H. Nahar is the pioneer promoter of the group for more than 5 decades. He is a person with dynamic administration, excellent planning and a long experience in managing manufacturing activities. Due to an expert knowledge of metals, the rich experience gained over the years and the inborn quality of leadership to guide the team & associates helps him to achieve new heights. Many new entrepreneurs have got trained under his excellent guidance. His association with different management institutions have made him energetic and capable of doing hard work for the organisation as well as clients. He is also associated with many educational and religious institution to pass on the benefit of his progress to society at large and performing his duties towards society.

Mr. Kamlesh B. Nahar :

Mr. Kamlesh B. Nahar belongs to the next generation who is taking the organisation ahead to a new era of technological advancement and up gradation. With the technical knowledge gained and usage of new machineries and practices he has not only improved the performance of the company but has also achieved new levels of customer satisfaction by delivering improved quality of product range.





Quality Assurance

The laboratory has sophisticated equipments like optical emission Spectrometer with XRF & Niton analyzer and Expert Technicians to assure best quality products affirming all international standards. All the equipments are calibrated using the international standard samples on day to day basis. Continuous improvements in the systems have enabled us to achieve new heights in the turnover.

The latest technology used assures us of providing the best quality that too at the most competitive prices. Quality Control is not an end level process but the maintenance of quality is to be assured at each level of production and this is one of the factors that gives a cutting edge to our company as compared to other producers of the industry. The Quality is insured by our well equipped in-house laboratory and efficient employee force to meet the requirements of our prestigious clients.

"The ultimate goal is to satisfy the customer with highest Level of Quality and Timely Delivery of Material."





Production



We follow two well known processes of Melting via Induction as well as oil furnaces. Each lot is separately processed in our foundry as per your requirement and the result is just as per Buyers / Consumers needs.



Products



- Brass Ingots
- All Grades of Tin Base Alloy Ingots
- All Grades of Gun Metal Ingots
- Nickel Aluminium Bronze Ingots
- Aluminium Bronze Ingots
- All Grades of Phosphor Bronze Ingots
- High Tensile Brass Ingots
- Master Alloys Such as :
 - Cupro - Ferrous Ingots
 - Cupro Magnanese Ingots / Strips
 - Base Cupro Silicon Ingots
 - Base Cupro Nickel Ingots
 - Phosphor Copper Ingots
 - Copper Chromium Ingots



Copper Alloys	Cu	Sn	Pb	Zn	Fe	Ni	P	Al	Mn	Si	Sb	S	Bi
Tin Bronze													
C50200	Rem.	1-1.5	0.05		0.1		0.04						
C50500	Rem.	1-1.7	0.05	0.3	0.1		0.03-0.35						
C50510	Rem.	1-1.5		0.1-0.25		0.15-0.4	0.02-0.07						
C50580	Rem.	1-1.7	0.05	0.3	0.5-0.2	0.05-0.2	0.01-0.35						
C50590	Rem.	0.5-1.5	0.02	0.5	0.05-0.4		0.02-0.15						
C50700	Rem.	1.5-2	0.05		0.1		0.3						
C50705	Rem.	1.5-2	0.02	0.5	0.1-0.4		0.04-0.15						
C50710	Rem.	1.7-2.3				0.1-0.4	0.15						
C50715	Rem.	1.7-2.3	0.02		0.05-0.15		0.025-0.04						
C50725	Rem.	1.5-2.5	0.02	1.5-3	0.05-0.2		0.02-0.06						
C50780	Rem.	1.7-2.3	0.05	0.3	0.05-0.2	0.05-0.2	0.01-0.35						
C50900	Rem.	2.5-3.8	0.05	0.3	0.1		0.03-0.3						
C51000	Rem.	4.2-5.8	0.05	0.3	0.1		0.03-0.35						
C51080	Rem.	4.8-5.8	0.05	0.3	0.05-0.2	0.05-0.2	0.01-0.35						
C51100	Rem.	3.5-4.9	0.05	0.3	0.1		0.03-0.35						
C51180	Rem.	3.5-4.9	0.05	0.3	0.05-0.2	0.05-0.2	0.01-0.35						
C51190	Rem.	3-6.5	0.02		0.05-0.15		0.025-0.045						
C51800	Rem.	4-6	0.02				0.10-0.35	0.01					
C51900	Rem.	5-7	0.05	0.3	0.1		0.3-0.35						
C51980	Rem.	5.5-7	0.05	0.3	0.05-0.2	0.05-0.2	0.01-0.35						
C52100	Rem.	7-9	0.05	0.2	0.1		0.03-0.35						
C52180	Rem.	7-9	0.05	0.3	0.05-0.2	0.05-0.2	0.01-0.35						
C52400	Rem.	9-11	0.05	0.2	0.1		0.03-0.35						
C52480	Rem.	9-11	0.05	0.3	0.05-0.2	0.05-0.2	0.1-0.35						
C53400	Rem.	3.5-5.8	0.8-1.2	0.3	0.1		0.03-0.35						
C53800	Rem.	13.1-13.9	0.4-0.6	0.1	0.03	0.03			0.06				
C89325	84-88	9-11	0.1	1	0.15	1	0.1	0.005		0.005	0.5	0.08	2.7-3.7
C89510	86-88	4-6	0.25	4-6	0.2	1	0.05	0.005		0.005	0.25	0.08	0.5-1.5
C89520	85-87	5-6	0.25	4-6	0.2	1	0.05	0.005		0.005	0.25	0.08	1.6-2.2
C89530	84-89	3.5-6	0.2	7-9	0.3	1	0.05	0.01		0.01	0.2		1-2
C89831	87-91	2.7-3.7	0.1	2-4	0.3	1	0.05	0.005		0.005	0.25	0.08	2.7-3.7
C89833	87-91	4-6	0.1	2-4	0.3	1	0.05	0.005		0.005	0.25	0.08	1.7-2.7
C89835	85-89	6-7.5	0.1	2-4	0.2	1	0.1	0.005		0.005	0.35	0.08	1.7-2.7
C89836	87-91	4-7	0.25	2-4	0.35	0.9	0.06	0.005		0.005	0.25	0.08	1.5-3.5
C89837	84-88	3-4	0.1	6-10	0.3	1	0.05	0.005		0.005	0.25	0.08	0.7-1.2
C89844	83-86	3-5	0.2	7-10	0.3	1	0.05	0.005		0.005	0.25	0.08	2-4
C89940	64-68	3-5	0.01	3-5	0.7-2	20-23	0.1-0.15	0.005		0.15	0.2	0.05	4-5.5
C90300	86-89	7.5-9	0.3	3-5	0.2	1	0.05	0.005		0.005	0.2	0.05	
C90200	91-94	6-8	0.3	0.5	0.2	0.5	0.05	0.005		0.005	0.2	0.05	
C90500	86-89	9-11	0.3	1-3	0.2	1	0.05	0.005		0.005	0.2	0.05	
C90700	88-90	10-12	0.5	0.5	0.15	0.5	0.3	0.005		0.005	0.2	0.05	
C90710	Rem.	10-12	0.25	0.05	0.1	0.1	0.05-1.2	0.005		0.005	0.2	0.05	



Copper Alloys	Cu	Sn	Pb	Zn	Fe	Ni	P	Al	Mn	Si	Sb	S	Bi
Aluminium Bronze													
C60800	Rem.		0.1		0.1			5-6.5					
C61000	Rem.		0.02	0.2	0.5			6-8.5		0.1			
C61300	Rem.	0.2-0.5	0.01	0.1	2-3	0.15	0.015	6-7.5	0.2	0.1			
C61400	Rem.		0.01	0.2	1.5-3.5		0.015	6-8	1				
C61500	Rem.		0.015			1.8-2.2		7.7-8.3					
C61550	Rem.	0.05	0.05		0.2	1.5-2.5		5.5-6.5	1				
C61800	Rem.		0.02	0.02	0.5-1.5			8.5-11		0.1			
C61900	Rem.	0.6	0.02	0.8	3-4.5			8.5-10					
C62200	Rem.		0.02	0.02	3-4.2			11-12		0.1			
C62300	Rem.	0.6			2-4	1		8.5-10	0.5	0.25			
C62400	Rem.	0.2			2-4.5			10-11.5	0.3	0.25			
C62500	Rem.				3.5-5.5			12.5-13.5	2				
C62580	Rem.		0.02	0.02	3-5			12-13		0.04			
C62581	Rem.		0.02	0.02	3-5			13-14		0.04			
C62582	Rem.		0.02	0.2	3-5			14-15		0.04			
C63000	Rem.	0.2		0.3	2-4	4-5.5		9-11	1.5	0.25			
C63010	78 Min	0.2		0.3	2-3.5	4.5-5.5		9.7 -10.9	1.5				
C63020	74.5 Min	0.25	0.03	0.3	4-5.5	4.2-6		10-11	1.5				
C63200	Rem.		0.02		3.5-4.3	4-4.8		8.7-9.5	1.2-2	0.1			
C63280	Rem.		0.02		3-5	4-5.5		8.5-9.5	0.6-3.5				
C63380	Rem.		0.02	0.15	2-4	1.5-3		7-8.5	11-14	0.1			
C95200	86 Min				2.5-4			8.5-9.5					
C95210	86 Min	0.1	0.05	0.5	2.5-4	1		8.5-9.5	1	0.25			
C95220	Rem.				2.5-4	2.5		9.5-10.5	0.5				
C95300	86 Min				0.8-1.5			9-11					
C95400	83 Min				3-5	1.5		10-11.5	0.5				
C95410	83 Min				3-5	1.5-2.5		10-11.5	0.5				
C95420	83.5 Min				2-4.5	0.5		10.5-12	0.5				
C95500	78 Min				3-5	3-5.5		10-11.5	3.5				
C95510	78 Min	0.2		0.3	2-3.5	4.5-5.5		9.7-10.9	1.5				
C95520	74.5 Min	0.25	0.03	0.3	4-5.5	4.2-6		10.5-11.5	1.5	0.15			
C95700	71 Min				2-4	1.5-3		7-8.5	11-14	0.1			
C95710	71 Min	1	0.05	0.5	2-4	1.5-3		7-8.5	11-14	0.15			
C95720	73 Min	0.1	0.03	0.1	1.5-3.5	3-6		6-8	12-15	0.1			
C95800	78 Min		0.03		3.5-4.5	4-5		8.5-9.5	0.8-1.5	0.1			
C95810	79 Min		0.1	0.5	3.5-4.5	4.5		8.5-9.5	0.8-1.5	0.1			
C95820	77.5 Min	0.2	0.02	0.2	4-5	4.5-5.8		9-10	1.5	0.1			
C95900	Rem.				3-5	0.5		12-13.5	1.5				
Tin Bronze													
C89320	87-91	5-7	0.09	1	0.2	1	0.3	0.005		0.005	0.35	0.08	4-6
C40820	94 min	1-2.5	0.02	0.2-2.5		0.1-0.5	0.05						
C50100	Rem.	0.5-0.8	0.05		0.05		0.01-0.05						



Copper Alloys	Cu	Sn	Pb	Zn	Fe	Ni	P	Al	Mn	Si	Sb	S	Bi
Tin Bronze													
C90800	85-89	11-13	0.25	0.25	0.15	0.5	0.3	0.005		0.005	0.2	0.05	
C90810	Rem	11-13	0.25	0.3	0.15	0.5	0.15-0.8	0.005		0.005	0.2	0.05	
C90900	86-89	12-14	0.25	0.25	0.15	0.5	0.05	0.005		0.005	0.2	0.05	
C91000	84-86	14-16	0.2	1.5	0.1	0.8	0.05	0.005		0.005	0.2	0.05	
C91100	82-85	15-17	0.25	0.25	0.25	0.5	1	0.005		0.005	0.2	0.05	
C91300	79-82	18-20	0.25	0.25	0.25	0.5	1	0.005		0.005	0.2	0.05	
C91600	86-89	9.7-10.3	0.25	0.25	0.2	1.2-2	0.3	0.005		0.005	0.2	0.05	
C91700	84-87	11.3-12.5	0.25	0.25	0.2	1.2-2	0.3	0.005		0.005	0.2	0.05	
C92200	86-90	5.5-6.5	1-2	3-5	0.25	1	0.05	0.005		0.005	0.25	0.05	
C92300	85-89	7.5-9	0.3-1	2.5-5	0.25	1	0.05	0.005		0.005	0.25	0.05	
C92310	Rem.	7.5-8.5	0.3-1.5	3.5-4.5		1		0.005	0.03	0.005			
C92400	86-89	9-11	1-2.5	1-3	0.25	1	0.05	0.005		0.005	0.25	0.05	
C92500	85-88	10-12	1-1.5	0.5	0.3	0.8-1.5	0.3	0.005		0.005	0.25	0.05	
C92600	86-88.5	9.3-10.5	0.8-1.5	1.3-2.5	0.2	0.7	0.03	0.005		0.005	0.25	0.05	
C92610	Rem.	9.5-10.5	0.3-1.5	1.7-2.8	0.15	1		0.005	0.03	0.005			
C92700	86-89	9-11	1-2.5	0.7	0.2	1	0.25	0.005		0.005	0.25	0.05	
C92710	Rem.	9-11	4-6	1	0.2	2	0.1	0.005		0.005	0.25	0.05	
C92800	78-82	15-17	4-6	0.8	0.2	0.8	0.05	0.005		0.005	0.25	0.05	
C92810	78-82	12-14	4-6	0.5	0.5	0.8-1.2	0.05	0.005		0.005	0.25	0.05	
C92900	82-86	9-11	2-3.2	0.25	0.2	2.8-4	0.5	0.005		0.005	0.25	0.05	
C93100	Rem.	6.5-8.5	2-5	2	0.25	1	0.3	0.005		0.005	0.25	0.05	
C93200	81-85	6.3-7.5	6-8	1-4	0.2	1	0.15	0.005		0.005	0.35	0.08	
Gun Metal													
C83300	92-94	1-2	1-2	2-6									
C83450	87-89	2.2-3	1.5-2.5	5.5-7.5	0.25	0.8-1.5	0.03	0.005		0.005	0.25	0.08	
C83500	86-88	5.5-6.5	3.5-5.5	1-2.5	0.25	0.5-1	0.03	0.005		0.005	0.25	0.08	
C83600	84-86	4.3-6	4-5.7	4.3-6	0.25	1	0.05	0.005		0.005	0.25	0.08	
C83800	82-83.5	3.5-4.2	5.8-6.8	5.5-8	0.25	1	0.03	0.005		0.005	0.25	0.08	
C83810	Rem	2-3.5	4-6	7.5-9.5	0.5	2		0.005		0.1			
C84200	78-82	4-6	2-3	10-16	0.4	0.8	0.05	0.005		0.005	0.25	0.08	
C84400	79-86	2.5-3.5	6-8	7-10	0.4	0.8	0.02	0.005		0.005	0.25	0.08	
C84410	Rem.	3-4.5	7-9	7-11		1		0.01		0.2			0.05
C84500	77-79	2-4	6-7.5	10-14	0.4	1	0.02	0.005		0.005	0.25	0.08	
C84800	75-76.7	2-3	5.5-7	13-17	0.4	1	0.02	0.005		0.005	0.25	0.08	
C92210	86-89	4.5-5.5	1.7-2.5	3-4.5	0.25	0.7-1	0.03	0.005		0.005	0.2	0.05	
C92220	86-88	5-6	1.5-2.5	3.5-5	0.25	0.5-1	0.05						
C54400	Rem	3.5-4.5	3.5-4.5	1.5-4.5	0.1		0.01-0.5						
Leaded Bronze													
C92410	Rem.	6-8	2.5-3.5	1.5-3	0.2	0.2		0.005	0.05	0.005	0.25		
C93400	82-85	7-9	7-9	0.8	0.2	1	0.5	0.005		0.005	0.5	0.08	
C93500	83-86	4.3-6	8-10	2	0.2	1	0.05	0.005		0.005	0.3	0.08	
C93600	79-83	6-8	11-13	1	0.2	1	0.15	0.005		0.005	0.55	0.08	



Copper Alloys	Cu	Sn	Pb	Zn	Fe	Ni	P	Al	Mn	Si	Sb	S	Bi
Leaded Bronze													
C93700	78-82	9-11	8-11	0.8	0.7	0.5	0.1	0.005		0.005	0.5	0.08	
C93720	83 Min	3.5-4.5	7-9	4	0.7	0.5	0.1				0.5		
C93800	75-79	6.3-7.5	13-16	0.8	0.15	1	0.05	0.005		0.005	0.8	0.08	
C93900	76.5-79.5	5-7	14-18	1.5	0.4	0.8	0.15	0.005		0.005	0.5	0.08	
C94000	69-72	12-14	14-16	0.5	0.25	0.50-1	0.05	0.005		0.005	0.5	0.08	
C94100	72-79	4.5-6.5	18-22	1	0.25	1	0.5	0.005		0.005	0.8	0.08	
C94300	67-72	4.5-6	23-27	0.8	0.15	1	0.08	0.005		0.005	0.8	0.08	
C94310	Rem.	1.5-3	27-34	0.5	0.5	0.25-1	0.05				0.5		
C94320	Rem.	4-7	24-32		0.35								
C94330	68.5-75.5	3-4	21-25	3	0.7	0.5	0.1				0.5		
C94400	Rem.	7-9	9-12	0.8	0.15	1	0.5	0.005		0.005	0.8	0.08	
C94500	Rem.	6-8	16-22	1.2	0.25	1	0.05	0.005		0.005	0.8	0.08	
C98200	Rem.	0.6-2	21-27	0.5	0.7	0.5	0.1				0.5		
C98400	Rem.	0.5	26-33	0.5	0.7	0.5	0.1				0.5		
C98600	60-70	0.5	30-40		0.35								
C98800	56.5-62.5	0.25	37.5-42.5	0.1	0.35		0.02						
C98820	Rem.	1-5	40-44		0.35								
C98440	Rem.	1-5	44-58		0.35								
Brass													
C2100	94-96		0.05	Rem.	0.05								
C22000	89-91		0.05	Rem.	0.05								
C22600	86-89		0.05	Rem.	0.05								
C23000	84-86		0.05	Rem.	0.05								
C23400	81-84		0.05	Rem.	0.05								
C24000	78.5-81.5		0.05	Rem.	0.05								
C24080	78-82		0.2	Rem.				0.1					
C25600	71-73		0.05	Rem.	0.05								
C26000	68.5-71.5		0.07	Rem.	0.05								
C26130	68.5-71.5		0.05	Rem.	0.05								
C26200	67-70		0.07	Rem.	0.05								
C26800	64-68..5		0.15	Rem.	0.05								
C27000	63-68.5		0.1	Rem.	0.07								
C27200	62-65		0.07	Rem.	0.07								
C27400	61-64		0.1	Rem.	0.05								
C28000	59-63		0.3	Rem.	0.07								
C31200	87.5-90.5		0.7-1.2	Rem.	0.1	0.25							
C31400	87.5-90.5		1.3-2.5	Rem.	0.1	0.7							
C31600	87.5-90.5		1.3-2.5	Rem.	0.1	0.7-1.2	0.04-0.1						
C32000	83.5-86.5		1.5-2.2	Rem.	0.1	0.25							
C33000	65-68		0.25-0.7	Rem.	0.07								
C33200	65-68		1.5-2.5	Rem.	0.07								
C33500	62-65		0.25-0.7	Rem.	0.15								



Copper Alloys	Cu	Sn	Pb	Zn	Fe	Ni	P	Al	Mn	Si	Sb	S	Bi
Brass													
C34000	62-65		0.8-1.5	Rem.	0.15								
C34200	62-65		1.5-2.5	Rem.	0.15								
C34500	62-65		1.5-2.5	Rem.	0.15								
C35000	60-63		0.8-2	Rem.	0.15								
C35300	60-63		1.5-2.5	Rem.	0.15								
C35330	59-64		1.5-3.5	Rem.									
C35600	60-63		2-3	Rem.	0.15								
C36000	60-63		2.5-3.7	Rem.	0.35								
C36500	58-61	0.25	0.25-0.7	Rem.	0.15								
C37000	59-62		0.8-1.5	Rem.	0.15								
C37100	58-62		0.6-1.2	Rem.	0.15								
C37700	58-61		1.5-2.5	Rem.	0.3								
C37710	56.5-60		1-3	Rem.	0.3								
C38000	55-60	0.3	1.5-2.5	Rem.	0.35			0.5					
C38500	55-59		2.5-3.5	Rem.	0.35								
C40400	Rem.	0.35-0.7		2-3									
C40500	94-96	0.7-1.3	0.05	Rem.	0.05								
C40810	94.5-96.5	1.8-2.2	0.05	Rem.	0.08-0.12	0.11-0.2	0.028-0.4						
C40850	94.5-96.5	2.6-4	0.05	Rem.	0.05-0.2	0.05-0.2	0.01-0.2						
C40860	94-96	1.7-2.3	0.05	Rem.	0.01-0.05	0.05-0.2	0.02-0.04						
C41000	91-93	2-2.8	0.05	Rem.	0.05								
C41100	89-92	0.3-0.7	0.1	Rem.	0.05								
C41120	89-92	0.3-0.7	0.05	Rem.	0.05-0.2	0.05-0.2	0.01-0.35						
C41300	89-93	0.7-1.3	0.1	Rem.	0.05								
C41500	89-93	1.5-2.2	0.1	Rem.	0.05								
C42000	88-91	1.5-2		Rem.			0.25						
C42200	86-89	0.8-1.4	0.05	Rem.	0.05		0.35						
C42220	88-91	0.7-1.4	0.05	Rem.	0.05-0.2	0.05-0.2	0.02-0.05						
C42500	87-90	1.5-3	0.05	Rem.	0.05		0.35						
C42520	88-91	1.5-3	0.05	Rem.	0.05-0.2	0.05-0.2	0.01-0.2						
C42600	87-90	2.5-4	0.05	Rem.	0.05-0.2	0.05-0.2	0.01-0.2						
C43000	84-87	1.7-2.7	0.1	Rem.	0.05								
C43400	84-87	0.4-1	0.05	Rem.	0.05								
C43500	79-83	0.6-1.2	0.1	Rem.	0.05								
C43600	80-83	0.2-0.5	0.05	Rem.	0.05								
C44250	73-76	0.5-1.5	0.07	Rem.	0.2	0.2	0.1						
C44300	70-73	0.8-1.2	0.07	Rem.	0.06								
C44400	70-73	0.8-1.2	0.07	Rem.	0.06						0.02-0.1		
C44500	70-73	0.8-1.2	0.07	Rem.	0.06		0.02-0.1						
C46200	62-65	0.5-1	0.2	Rem.	0.1								
C46400	59-62	0.5-1	0.2	Rem.	0.1								
C46500	59-62	0.5-1	0.2	Rem.	0.1								



USA - ASTM

Copper Alloys	Cu	Sn	Pb	Zn	Fe	Ni	P	Al	Mn	Si	Sb	S	Bi
High Tensile Brass													
C86700	55-60	1.5	0.5-1.5	30-38	1-3	1		1-3	0.1-3.5				
C86800	53.5-57	1	0.2	Rem.	1-2.5	2.5-4		2	2.5-4				
C99700	54 Min	1	0.2	19-25	1	4-6		0.5-3	11-15				
C99750	55-61		0.5-2.5	17-23	1	5		0.25-3	17-23				
Silicon Brass													
C23030	83.5-85.5		0.05	Rem.	0.05					0.2-0.4			
C69050	70-75			Rem.		0.5-1.5		3-4		0.1-0.6			
C69100	81-84	0.1	0.05	Rem.	0.25	0.8-1.4		0.7-1.2	0.1	0.8-1.3			
C69300	73-77	0.2	0.1	Rem.	0.1	0.1	0.04-0.15		0.1	2.7-3.4			
C69400	80-83		0.3	Rem.	0.2					3.5-4.5			
C69430	80-83		0.3	Rem.	0.2					3.5-4.5			
C69700	75-80		0.5-1.5	Rem.	0.2				0.4	2.5-3.5			
C69710	75-80		0.5-1.5	Rem.	0.2				0.4	2.5-3.5			
C69750	78-83	0.05	0.8-1.3	Rem.	0.05	0.01	0.02		0.05	1.9-2.22			
C87400	79 Min		1	12-16				0.8		2.5-4			
C87500	79 Min		0.5	12-16				0.5		3-5			
C87600	88 Min		0.5	4-7	0.2				0.25	3.5-5.5			
C87610	90 Min		0.2	3-5	0.2				0.25	3-5			
C87800	80 Min	0.25	0.15	12-16	0.15	0.2	0.01	0.15	0.15	3.8-4.2	0.05	0.05	
C87850	74-78	0.3	0.1	Rem.	0.1	0.2	0.05-0.2		0.1	2.7-3.4	0.1		
Silicon Bronze													
C63400	Rem.	0.2	0.05	0.5	0.15	0.15		2.6-3.2		0.25-0.45			
C63600	Rem.	0.2	0.05	0.5	0.15	0.15		3-4		0.7-1.3			
C63800	Rem.		0.05	0.8	0.2	0.2		2.5-3.1	0.1	1.5-2.1			
C64200	Rem.	0.2	0.05	0.5	0.3	0.25		6.3-7.6	0.1	1.5-2.2			
C64210	Rem.	0.2	0.05	0.5	0.3	0.25		6.3-7	0.1	1.5-2			
C87300	94 Min		0.2	0.25	0.2				0.8-1.5	3.5-4.5			
C95600	88 Min					0.25		6-8		1.8-3.2			
Cu Ni Bronze													
C94700	85-90	4.5-6	0.1	1-2.5	0.25	4.5-6	0.05	0.005	0.2	0.005	0.15	0.05	
C94800	84-89	4.5-6	0.3-1	1-2.5	0.3	4.5-6	0.05	0.005	0.2	0.005	0.15	0.05	
C94900	79-81	4-6	4-6	4-6	0.25	4-6	0.05	0.005	0.1	0.005	0.25	0.08	
C96200	Rem.		0.01		1-1.8	9-11	0.02		1.5	0.5			
C96300	Rem.		0.01		0.5-1.5	18-22	0.02		0.25-1.5	0.5			
C96400	Rem.		0.01		0.25-1.5	28-32	0.02		1.5	0.5			
C96600	Rem.		0.01		0.8-1.1	29-33			1	0.15			
C96700	Rem.		0.01		0.4-1	29-33			0.4-1	0.15			
C96800	Rem.	7.5-8.5	0.005	1	0.5	9.5-10.5			0.05-0.3	0.05			
C96900	Rem.	7.5-8.5	0.02	0.5	0.5	14.5-15.5			0.05-0.3				
C96950	Rem.	5.8-8.5	0.02		0.05	11-15.5			0.05-0.4	0.3			



Copper Alloys	Cu	Sn	Pb	Zn	Fe	Ni	P	Al	Mn	Si	Sb	S	Bi
Brass													
C47000	57-61	0.25-1	0.05	Rem.				0.01					
C47940	63-66	1.2-2	1-2	Rem.	0.1-1	0.1-0.5							
C48200	59-62	0.5-1	0.4-1	Rem.	0.1								
C48500	59-62	0.5-1	1.3-2.2	Rem.	0.1								
C48600	59-62	0.3-1.5	1-2.5	Rem.									
C66200	86.6-91	0.2-0.7	0.05	Rem.	0.05	0.30-1	0.05-0.2						
C66300	84.5-87.5	1.5-3	0.05	Rem.	1.4-2.4		0.35						
C66400	Rem.	0.05	0.015	11-12	1.3-1.7								
C66410	Rem.	0.05	0.015	11-12	1.8-2.3								
C66420	Rem.			12.7-17	0.5-1.5								
C66430	Rem.	0.6-0.9	0.05	13-15	0.6-0.9		0.1						
C67500	57-60	0.5-1.5	0.2	Rem.	0.8-2			0.25	0.05-0.5				
C67600	57-60	0.5-1.5	0.5-1	Rem.	0.4-1.3				0.05-0.5				
C68000	56-60	0.75-1.1	0.05	Rem.	0.25-1.25	0.2-0.8		0.01	0.01-0.5	0.04-0.15			
C68100	56-60	0.75-1.1	0.05	Rem.	0.25-1.2			0.01	0.01-0.5	0.04-0.15			
C68700	76-79		0.07	Rem.	0.06			1.8-2.5					
C68800	Rem.		0.05	21.3-24.1	0.2			3-3.8					
C83400	88-92	0.2	0.5	8-12	0.25	1	0.03	0.005		0.005	0.25	0.08	
C85200	70-74	0.7-2	1.5-3.58	20-27	0.6	1	0.02	0.005		0.05	0.2	0.05	
C85400	65-70	0.5-1.5	1.5-3.8	24-32	0.7	1		0.35		0.05			
C85500	59-63	0.2	0.2	Rem.	0.2	0.2			0.2				
C85700	58-64	0.5-1.5	0.8-1.5	32-40	0.7	1		0.8		0.05			
C85710	58-63	1	1-2.5	32-39	0.8	1		0.2-0.8	0.5	0.05			
C85800	57 Min	1.5	1.5	31-41	0.5	0.5	0.01	0.55	0.25	0.25	0.05	0.05	
C89540	58-64	1.2	0.1	32-38	0.5	1		0.1-0.6					0.6-1.2
C89550	58-64	1.2	0.1	32-38	0.5	1	0.01	0.1-0.6		0.25	0.05	0.05	0.6-1.2
High Tensile Brass													
C66700	68.5-71.5		0.07	Rem.	0.1				0.8-1.5				
C66800	60-63	0.3	0.5	Rem.	0.35	0.25		0.25	2-3.5	0.5-1.5			
C66900	62.5-64.5		0.05	Rem.	0.25				11.5-12.5				
C66950	Rem.		0.01	14-15	0.5			1-1.5	14-15				
C67000	63-68	0.5	0.2	Rem.	2-4			3-6	2.5-5				
C67300	58-63	0.3	0.4-3	Rem.	0.5	0.25		0.25	2-3.5	0.5-1.5			
C67400	57-60	0.3	0.5	Rem.	0.35	0.25		0.5-2	2-3.5	0.5-1.5			
C67420	57-58.5	0.35	0.25-0.8	Rem.	0.15-0.55	0.25		1-2	1.5-2.5	0.25-0.7			
C86100	66-68	0.2	0.2	Rem.	2-4			4.5-5.5	2.5-5				
C86200	60-66	0.2	0.2	22-28	2-4	1		3-4.9	2.5-5				
C86300	60-66	0.2	0.2	22-28	2-4	1		5-7.5	2.5-5				
C86400	56-62	0.5-1.5	0.5-1.5	34-42	0.4-2	1		0.5-1.5	0.1-1.5				
C86500	55-60	1	0.4	36-42	0.4-2	1		0.5-1.5	0.1-1.5				
C86550	57 Min	1	0.5	Rem.	0.7-2	1		0.5-2.5	0.1-3	0.1			



Copper Alloys	Cu	Sn	Pb	Zn	Fe	Ni	P	Al	Mn	Si	Sb	Impurities
Aluminium Bronze IS:305-1981												
AB-1	Rem.	0.1	0.05	0.5	1.5-3.5	1		8.5-10.5	1	0.25		0.3
AB-2	Rem.	0.1	0.05	0.5	4.5 - 5	4.-5.5		8.8 -10	1.5	0.10		0.3
IS:3091 - 1963												
Al.Bronze	Rem.				4-5			9-11	0.1-0.5			
IS:8631-1977												
Grade - 1	Rem.	0.1	0.05	0.5	4-5.5	4-5.5		8.8-10	1	0.1		
Tin Bronze IS:1458-1965												
Ph. Bz. Class -1	Rem.	6-8	0.5	0.5	0.3		0.4-0.6	0.01			0.1	0.6
IS:28-1985												
Ph. Bz (Grade - 1)	Rem.	6-8	0.25	0.5	0.3	0.7	0.3-0.5	0.01		0.02	0.1	1.2
Ph. Bz (Grade -2)	Rem.	10 Min	0.25	0.05	0.1	0.1	0.5 Min	0.01		0.02		0.6
Ph. Bz (Grade -3)	Rem.	6.5-8.5	2-5	2		1	0.3 Min					0.5
Ph. Bz (Grade -4)	Rem.	9-11	0.25	0.05		0.25	0.15					0.8
Ph. Bz (Grade - 5)	Rem.	11-13.1	0.5	0.3	0.15	0.5	0.15 Min	0.01		0.02		2
Gun Metal IS:1458-1965												
Gunmetal Class - 2	Rem.	5-7	1-3	2-3	0.3		0.05	0.01			0.1	0.6
IS:318-1981												
LTB - 1	Rem.	6-8	2.5-3.5	1.5-3	0.3	2		0.01		0.01	0.3	0.7
LTB - 2	Rem.	4-6	4-6	4-6	0.35	2		0.01		0.02	0.4	0.8
Leaded Bronze IS:1458-1965												
Leaded Bz. Class - 3	Rem.	6-8	14-16	0.5	0.3		0.05	0.01			0.4	0.7
Leaded Bz. Class - 4	Rem.	6-8	9-11	0.5	0.3		0.05	0.01			0.4	0.7
Leaded GM. Class - 5	Rem.	4-6	4-6	4-6	0.3		0.05	0.01			0.3	0.6
IS:318-1981												
LTB - 3	Rem.	6-8	9-11	0.75	0.35	2		0.01		0.02	0.5	0.8
LTB - 4	Rem.	6-8	14-16	0.75	0.35	2				0.02	0.5	0.8
LTB - 5	Rem.	9-11	8.5-11	1	0.35	2		0.01		0.02	0.5	0.8
LTB - 6	Rem.	4-6	18-23	1	0.35	2				0.01	0.5	0.8
Silicon Bronze IS:1028-1987												
Silicon Bronze	89 Min	1	0.5	5	2.5			1.5	1.5	1-5		
Brass IS:8631-1977												
Grade - 2	55 Min	1	0.5	Rem.	0.7-2	1		0.5-2.5	3	0.1		
IS:292-1983												
LCB - 1	70-77	1-3	2-5	Rem.	0.5			0.01				
LCB - 2	63-67	1.5	1-3	Rem.	0.5			0.01				
High Tensile Brass IS:304-1981												
HTB - 1	55 Min	1	0.5	Rem.	0.7-2			0.5-2.5	3	0.1		0.2
HTB - 2	55 Min	0.2	0.2	Rem.	1.5-3.25			3.6	4	0.1		0.2
Silicon Brass IS:11109-1984												
Silicon Brass (Grade - 1)	79 Min		0.5	12.5-16	0.3			0.5		3.2-5		0.5
Silicon Brass (Grade - 2)	88 Min		0.5	4.5-7	0.3					3.7-5.5		0.5
Silicon Brass (Grade - 3)	80-83		0.4	Rem.	0.3			0.05		4.1-4.7		0.5



British - Std UK. (BS : 1400)

Copper Alloys	Cu	Sn	Pb	Zn	Fe	Ni	P	Al	Mn	Si	Sb	S	Bi	Cr	Impurities
Aluminium Bronze															
AB-1	Rem.	0.1	0.05	0.5	1.5-3.5	1		8.5-10.5	1	0.25					0.3
AB-2	Rem.	0.1	0.05	0.5	4-5.5	4-5.5		8.8-10	1.5	0.1					0.3
AB-3	Rem.	0.1	0.03	0.4	0.5-0.7	0.1		6-6.4	0.5	2-2.4					0.8
Tin Bronze and Ni Tin Bronze															
CT-1	Rem.	9-11	0.25	0.05		0.25	0.15								0.8
CT-2	85-87.3	11.2-13	0.2	0.4	0.15	1.5-2	0.05	0.01	0.2	0.01	0.1	0.05			0.8
G1 (88/10/2)	Rem.	9.5-10.5	1.5	1.75-2.75	0.15	1		0.01		0.02	0.2		0.03		0.5
G3	Rem.	6.5-7.5	0.1-0.5	1.5-3		5.25-5.75	0.02	0.01	0.2	0.01	0.2		0.02		0.5
G3WP	Rem.	6.5-7.5	0.1-0.5	1.5-3		5.25-5.75	0.02	0.01	0.2	0.01	0.2		0.02		0.5
PB 1	Rem.	10 Min	0.25	0.05	0.1	0.1	0.5 Min	0.01		0.02					0.6
PB 2	Rem.	11-13	0.5	0.3	0.15	0.5	0.15 Min	0.01		0.02					0.2
PB-4	Rem.	9.5 Min	0.75	0.5		0.5	0.4 Min								0.5
Gun Metal															
LG -1	Rem.	2-3.5	4-6	7-9.5	0.5	2	0.03	0.01		0.02	0.25	0.1	0.1		1
LG-2	Rem.	4-6	4-6	4-6	0.5	2		0.01		0.02			0.05		0.8
LG-4	Rem.	6-8.05	2.5-3.5	1.5-3	0.2	2		0.01		0.01	0.25		0.05		0.7
Leaded Bronze															
LB-1	Rem.	8-10	13-17	1		2	0.1			0.02					0.3
LB-2	Rem.	9-11	8.5-11	1	0.15	2	0.1	0.01		0.02	0.5				0.5
LB-4	Rem.	4-6	8-10	2		2	0.1			0.02	0.5				0.5
LB-5	Rem.	4-6	18-23	1		2	0.1			0.01	0.5				0.3
LPB-1	Rem.	6.5-8.5	2-5	2		1	0.3-0.6								0.5
Brass															
DCB 1	59-63		0.25	Rem.				0.5							0.75
DCB 3	58-63	1	0.5-2.5	Rem.	0.8	1		0.2-0.8	0.5	0.05					2
PCB 1	57-60	0.5	0.5-2.5	Rem.	0.3			0.5							0.5
SCB 1	70-80	1-3	2-5	Rem.	0.75	1		0.01							1
SCB 3	63-70	1.5	1-3	Rem.	0.75	1		0.1							1
Brass															
SCB 4	60-63	1-1.5	0.5	Rem.				0.01							0.75
SCB 6	83-88		0.5	Rem.											1
High Tensile Brass															
HTB -1	55 Min	1	0.5	Rem.	0.7-2	1		0.5-2.5	0.1-3	0.1					0.2
HTB -3	55 Min	0.2	0.2	Rem.	1.5-3.25	1		3-6	1.5-4	0.1					0.2
Cu Chromium															
CC 1 - WP	Rem.													0.6-1.2	
Cu Mn Aluminum															
CMA 1	Rem.	1	0.05	0.5	2-4	1.5-4.5	0.05	7.5-8.5	11-15	0.15					0.3
CMB 2	Rem.	1	0.05	0.5	2-4	1.5-4.5	0.05	8.5-9	11-15	0.15					0.3



Copper Alloys	Cu	Sn	Pb	Zn	Fe	Ni	P	Al	Mn	Si	Sb
Aluminium Bronze H2206											
ALBC1	85-90	0.1	0.1	0.5	1-3	0.1-1		8-10	0.1-1		
ALBC2	80-88	0.1	0.1	0.5	2.5-5	1-3		8-10.5	0.1-1.5		
ALBC3	78-85	0.1	0.1	0.5	3-6	3-6		8.5-10.5	0.1-1.5		
ALBC4	71-84	0.1	0.1	0.5	2-5	1-4		6-9	7-15		
Tin Bronze H2203											
BC-2	89-90	7-9	1	3-5	0.2	1	0.05	0.01		0.01	0.2
BC-3	86.5-89.5	9-11	1	1-3	0.2	1	0.05	0.01		0.01	0.2
H2204											
PBC2	87-91	9-12	0.3	0.3	0.2	1	0.05-0.02	0.01		0.01	0.05
PBC3	84-88	12-15	0.3	0.3	0.2	1	0.15-0.5	0.01		0.01	0.05
Gun Metal H2203											
BC-1	79-83	2-4	3-7	8-12	0.35	1	0.05	0.01		0.01	0.2
BC-6	83-87	4-6	4-6	4-6	0.3	1	0.05	0.01		0.01	0.2
BC-7	86-90	5-7	1-3	3-5	0.2	1	0.05	0.01		0.01	0.2
Leaded Bronze H2207											
LBC2	82-86	9-11	4-6	1	0.3	1	0.1	0.01		0.01	0.3
LBC3	77-81	9-11	9-11	1	0.3	1	0.1	0.01		0.01	0.5
LBC4	74-78	7-9	14-46	1	0.3	1	0.1	0.01		0.01	0.5
LBC5	70-76	6-8	16-22	1	0.3	1	0.1	0.01		0.01	0.5
High Tensile Brass H2205											
HBsC1	55-60	1	0.4	33-42	0.5-1.5	1		0.5-1.5	0.1-1.5	0.1	
HBsC2	55-60	1	0.4	30-42	0.5-2	1		0.5-2	0.1-3.5	0.1	
HBsC3	60-65	0.5	0.2	22-28	2-4	0.5		3-5	2.5-5	0.1	
HBsC4	60-65	0.2	0.2	22-28	2-4	0.5		5-7.5	2.5-5	0.1	
Copper											
CuC1	99.5 Min	0.4	0.07								
CuC2	99.7 Min	0.2	0.07								
CuC3	99.9 Min		0.04								
Brass											
SzBC1	84-88	0.1		9-11				0.5		3.5-4.5	
SzBC2	78.5-82.5	0.3		14-16				0.3		4-5	
SzBC3	80-84	0.2		13-15	0.3			0.3	0.2	3.2-4.2	
H2202											
YBsC1	83-88	0.1	0.5	11-17	0.2	0.2		0.2			
YbsC2	65-70	1	0.5-3	25-34	0.8	1		0.5			
YBsC3	58-64	1	0.5-3	30-41	0.8	1		0.5			



Copper Alloys	Cu	Sn	Pb	Zn	Fe	Ni	P	Al	Mn	Si	Sb	S	Bi	Cr
Aluminium Bronze														
CuAl10Fe2(CB331G)	83-89	0.2	0.03	0.5	1.5-3.3	1.5		8.7-10.5	1	0.15				
CuAl10Fe5Ni5(CB333G)	76-82.5	0.1	0.03	0.4	4-5.5	4-5.5		8.8-10	2.5	0.1			0.01	0.05
CuAl10Ni3Fe2(CB332G)	80-85.5	0.2	0.03	0.5	1-2.8	1.5-4		8.7-10.5	2	0.15				
CuAl11Fe6Ni6(CB334G)	72-77	0.2	0.04	0.4	4.2-7	4.3-7.5		10.3-12	0-2.5	0.1				
CuAl9(CB330G)	88-91.5	0.25	0.25	0.4	1	1		8.2-10.5	0.5	0.15				
Tin Bronze														
CuSn10(CB480K)	88.5-90.5	9.3-11	0.8	0.5	0.15	1.8	0.05	0.01	0.1	0.01	0.15	0.04		
CuSn11P(CB481K)	87-89.3	10.2-11.5	0.25	0.05	0.1	0.1	0.6-1	0.01	0.05	0.01	0.05	0.05		
CuSn12(CB483K)	85.5-88.5	11.2-13	0.6	0.4	0.15	2	0.2	0.01	0.2	0.01	0.15	0.05		
CuSn12Ni2(CB484K)	84-87	11.3-13	0.2	0.3	0.15	1.5-2.4	0.05	0.01	0.1	0.01	0.05	0.04		
Gun Metal														
CuSn5Zn5Pb5(CB491K)	83-86.5	4.2-6	4.2-5.8	4.5-6.5	0.25	2	0.03	0.01		0.01	0.25	0.08		
CuSn6Zn4Pb2(CB498K)	86-89.5	5.7-6.5	1.2-2	3.2-5	0.25	1	0.03	0.01		0.01	0.25	0.08		
CuSn7Zn2Pb3(CB492K)	85-88.5	6.2-8.0	2.7-3.5	1.7-3.2	0.2	2	0.03	0.01		0.01	0.25	0.08		
CuSn7Zn4Pb7(CB493K)	81-84.5	6.2-8	5.2-8	2.3-5	0.2	2	0.03	0.01		0.01	0.3	0.08		
Leaded Tin Bronze														
CuSn10Pb10(CB495K)	78-81.5	9.2-11	8.2-10.5	2	0.2	2	0.1	0.01	0.2	0.01	0.5	0.08		
CuSn11Pb2(CB482K)	83.5-86.5	10.7-12.5	0.7-2.5	2	0.15	2	0.05	0.01	0.2	0.01	0.2	0.08		
CuSn3Zn8Pb5(CB490K)	81-85.5	2.2-3.5	3.5-5.8	7.5-10	0.5	2	0.03	0.01		0.01	0.25	0.08		
CuSn5Pb20(CB497K)	70-77.5	4.2-6	19-23	2	0.2	0.5-2.5	0.1	0.01	0.2	0.01	0.75	0.08		
CuSn5Pb9(CB494K)	80-86.5	4.2-6	8.2-10	2	0.2	2	0.1	0.01	0.2	0.01	0.5	0.08		
CuSn7Pb15(CB496K)	74-79.5	6.2-8	13.2-17	2	0.2	0.5-2	0.1	0.01	0.2	0.01	0.5	0.08		
Brass														
CuZn16Si4(CB761S)	78.5-82	0.25	0.6	Rem.	0.5	1	0.02	0.1	0.2	3.5	0.05			
CuZn33Pb2(CB750S)	63-66	1.5	1-2.8	Rem.	0.7	1	0.02	0.1	0.2	0.04				
CuZn33Pb2Si(CB751S)	63.5-65.5	0.8	0.8-2	Rem.	0.25-0.5	0.8		0.1	0.1	0.70-1	0.05			
CuZn35Pb2Al(CB752S)	61.5-65	0.4	1.5-2.4	Rem.	0.3	0.25		0.3-0.7	0.15	0.02	0.04-0.12			
CuZn37Al1(CB766S)	60-63	0.4	0.4	Rem.	0.4	1.8	0.02	0.6-1.8	0.4	0.5	0.05			
CuZn37Pb2Ni1AlFe(CB753S)	58-60	0.8	1.8-2.5	Rem.	0.5-0.8	0.5-1.2	0.02	0.4-0.8	0.2	0.05	0.05			
CuZn38Al(CB767S)	59-64	0.1	0.1	Rem.	0.4	0.8	0.05	0.1-0.8	0.4	0.05				
CuZn39Pb1Al(CB754S)	58-62	0.1	0.5-2.4	Rem.	0.7	1	0.02	0.1-0.8	0.5	0.05				
CuZn39Pb1AlB(CB755S)	59-60.5	0.3	1.2-1.7	Rem.	0.05-0.2	0.2		0.4-0.65	0.05	0.03				
High Tensile Brass														
CuZn25Al5Mn4Fe3(CB762S)	60-66	0.2	0.2	Rem.	1.5-3.5	2.7	0.02	4-7	3-5	0.08	0.03			
CuZn32Al2Mn2Fe1(CB763S)	59-67	1	1	Rem.	0.5-2	2.5		1-2.5	1-3.5	1	0.08			
CuZn34Mn3Al2Fe1(CB764S)	55-65	0.3	0.2	Rem.	0.8-2	2.7	0.02	1.5-3	1-3.5	0.08	0.05			
CuZn35Mn2Al1Fe1(CB765S)	56-64	0.8	0.5	Rem.	0.5-1.8	6	0.02	0.7-2.2	0.5-2.5	0.1	0.08			



Physical Properties & Typical Uses

Grade BS 1400 : 1985	Nominal Composition	2% PS N/mm Min	Tensile Strength N/mm Min	Elongation % Min	Brinell Hardness Min	Physical Properties & Typical Uses
Gun Metal						
G1/BC3	88/10/2		245	15		Pressure tight bearings, Bushes, Pumps And Pump Fitting, Valves, Valve Bodies And Valve Guides Under Corrosive Marine Conditions. Cast Components Such as actuating nuts, valve, pump and similar components at normal temperatures under corrosive conditions. Hardware Fittings, Plumbing Fixtures Valves Bodies, Pump Bodies, Elbow, Pipe Taps, Cocks And other hydraulic fittings where pressure tight properties are important. Pump And Valve Parts, Steam Valves, Oilpumps, Bushes of Medium Strength. Railway Bearings, engine Component, Tractor Parts And pressure Components.
G2/BC2	88/8/4		245	20		
LG1	88/3/9/5	85	180	15	60	
LG2	85/5/5/5	90	200	13	60	
LG3	86/7/5/2					
LG4	88/7/2/3	130	230	14	65	
BC1	82/3/10/5		165	15		
BC6	85/5/5/5		215	18		
Phosphor Bronze						
Pb1	89/10/0/1	130	250	5	60	Bearing for aero-engines, diesel engine, electrical generators and rolling mills. Gear and Worm Wheels, pressure vessels, pump bodies, constings and impellers for chemical plants similar to PBI-C Bearing and bushes for lighter duties.
Pb2	88/12	140	260	7	80	
Pb3	90/10	130	250	5	60	
Pb4	90.5/9.5	130	240	5	80	
LPB-1	87/8/2/3	80	175	7	60	
Pbc2	88/12	120	195	5	60	
Pbc2B	88/12	145	295	5	80	
Lead Bronze						
LPB1	76/9/0/15					Bearings in mining machinery in corrosive water conditions, and for unlined bearings under poor lubrication conditions. Mill Bearings, railway bearings and bearings for the oil industry. Bushers Chill Cast, Centrifugally cast and continuously cast. Similar applications to LBS-C Linings for steel backed motor and aero engineer bearings for use at higher temperatures than white metal linings.
LB2	80/10/0/10	80	180	8	60	
LB3/LBC3	85/10/0/5	100	195	10	65	
LB4	85/5/0/10	60	160	7	55	
LB5	75/5/0/20	70	150	5	45	
LBC3	79/10/1/10	80	180	8	60	
LBC4	78/7/0/15	80	170	8	60	
Aluminium Bronze						
AB1	89/9/2	180	500	18	100	Propellers, Pump Impellers, pump and valves parts, bearings, wear rings, marine hardware, pickling hooks and baskets and in the petroleum, oil and chemical industries.
AB2	85/4/5	250	600	13	140	
ALNC2	84/9/4/5		490	20	120	
ALBC3	82/10/4/4	245	590	15	150	
High Tensile Brass						
HTB1	58/1/1/1/39	170	450	20	110	Components highly stressed at normal temperatures. Marine casting and fittings, hydraulic equipment. Locomotive axle boxes, pump casting, heavy rolling mill housing nuts spur and gear, wheels which are heavily loaded and slow moving.
HTB2	58/1/2/3/36					
HTB3	58/2/2/4/34	450	750	8	180	
HSBC4		410	755	12	200	
HSBC3		305	635	15	165	
Brass						
SCB1	75/25					Valves, cocks, plumbing fittings, hardware & ornamental castings, marined fittings, castings for the electrical trade, brush holders, pipe fittings, gas fittings, door & furniture fittings, switchgear bushholder. Pump bodies, bolts, nuts & plates for heat exchange equipments & small machine parts. Flanges end plates & fittings for marine applications. Similar applications to SCB5-C & for imitation jewellery.
SCB2	70/30					
SCB3	65/35	70	180	12	45	
SCB4/YBSC3	60/40	70	250	20	45	
SCB5	90/10					
SCB6	85/15	70	160	20	45	

Suitability for Casting Pressure Tight Sand Casting



Laxmi Alloys & Casting Co.

An ISO 9001 : 2008 Certified Co.

Alloy		Thin Sections	Thick Section
Group A			
Phosphor Bronze	PB4	3	3
Leaded Phosphor Bronze	LPB1	2	2
Leaded Bronzes	LB2	2	2
	LB4	2	2
Leaded Gun Metals	LG2	1	2
Sand Casting Brasses	SCB1	1	1
	SCB3	1	1
	SCB6	1	1
Group B			
High Conductivity Copper	HCC1	1	1
Copper Chromium	CC1	2	2
Phosphor Bronzes	PB1	3	3
	PB2	3	3
Copper Tin	CT1	2	3
Leaded Bronze	LB5	2	3
Leaded Gun Metals	LG1	1	
Aluminium Bronze	AB1	1	
	AB2	1	
CMA Alloys	CMA1	1	1
	CMA2	1	1
High Tensile Brasses	HTB1	1	1
	HTB3	1	1
Group C			
Leaded Bronze	LB1	2	3
Gun Metal	G1	2	2
	G3	1	1
Sand Cast Brass	SCB4	1	1
90/10 Cupro-Nickel	-	1	1
70/30 Cupro-Nickel	-	1	1
Beryllium Copper	-	1	1



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Manufactures of : NON FERROUS METAL ALLOYS, INGOTS & GRADED CASTINGS

Specialised in : GUN METAL, LEAD BRONZE & TIN BRONZE INGOTS



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