SHANGHAI LANDA INTERNATIONAL TRADING CO., LTD
上海朗大国际贸易有限公司
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Bronze and Brass Chemical Composition

		ASTM								Ingot	Chemical Compositions % Max unless shown as range or min											
Family	CDA	B148	B271	B369	B427	B505	B584	B763	B806	Alloy ID	CU%	SN%	PB%	ZN%	NI%	FE%	AL%	SI%	Mn%	Sb%	S%	P%	Others
Red Brass	C83300									131	92.0-94.0	1.0-2.0	1.0-2.0	2.0-6.0									
	C83450						X	X			87.0-89.0	2.0-3.5	1.5-3.0	5.5-7.5	.8-2.0	0.3	0.005	0.005		0.25	0.08	0.03	
	C83600		X			X	X			115	84.0-86.0	3.3-4.2	5.0-7.0	5.0-8.0	1	0.3	0.005	0.005		0.25	0.08	0.05	
	C83800		X			X	X	X		120	82.0-83.8	3.3-4.2	5.0-7.0	5.0-8.0	1	0.3	0.005	0.005		0.25	0.08	0.03	
Semi Red Brass	C84400		X			X	X	X		123	78.0-82.0	2.3-3.5	6.0-8.0	7.0-10.0	1	0.4	0.005	0.005		0.25	0.08	0.02	
	C84500									125	77.0-79.0	2.0-4.0	6.0-7.5	10.0-14.0	1	0.4	0.005	0.005		0.25	0.08	0.02	
	C84800		X			X	X	X		130	75.0-77.0	2.0-3.0	5.5-7.0	13.0-17.0	1	0.4	0.005	0.005		0.25	0.08	0.02	
Yellow Brass	C85200		X				X	X		400	70.0-74.0	.7-2.0	1.5-3.8	20.0-27.0	10	0.6	0.005	0.05		0.2	0.05	0.02	
	C85400		X				X	X		403	65.0-70.0	.50-1.5	1.5-3.8	24.0-32.0	1	0.7	0.35	0.05					
	C85700		X			X	X	X		405.2	58.0-64.0	.50-1.5	.80-1.5	32.0-40.0	1	0.7	0.8	0.05					
	C85800									405.1	57.0min	1.5	1.5	31.0-41.0	0.5	0.5	0.55	0.25	0.25	0.05	0.05	0.01	As 0.05
Manganese Bronze	C86200		X			X	X	X		423	60.0-66.0	0.2	0.2	22.0-28.0	1	2.0-4.0	3.0-4.9		2.5-5.0				
	C86300		X			X	X	X		424	60.0-66.0	0.2	0.2	22.0-28.0	1	2.0-4.0	5.0-7.5		2.5-5.0				
	C86400		X				X	X		420	56.0-62.0	.50-1.5	.50-1.5	34.0-42.0	1	.40-2.0	.50-1.5		0.10-1.5				
	C86500		X			X	X	X		421	55.0-60.0	1	0.4	36.0-42.0	1	.40-2.0	.50-1.5		0.10-1.5				
	C86700		X				X	X			55.0-60.0	1.5	.50-1.5	30.0-38.0	1	1.0-3.0	1.0-3.0		0.10-3.5				
Copper-Silicon	C87500		X				X	X	X	500C	79.0min.		0.5	12.0-16.0			0.5	3.0-5.0					
	C87610		X				X	X		500E	90.0min.		0.2	3.0-5.0		0.2		3.0-5.0	0.25				
Copper-Bismuth	C89320					X					87.0-91.0	5.0-7.0	0.09	1	1	0.2	0.005	0.005		0.35	0.08	0.3	Bi 4.0-6.0
	C89325										84.0-88.0	9.0-11.0	0.1	1	1	0.15	0.005	0.005		0.5	0.08	0.1	Bi 2.7-3.7
	C89831										87.0-91.0	2.7-3.7	0.1	2.0-4.0	1	1	0.3	0.005		0.25	0.08	0.05	Bi 2.7-3.7
	C89833										87.0-91.0	4.0-6.0	0.1	2.0-4.0	1	0.3	0.005	0.005		0.25	0.08	0.05	Bi 1.7-2.7
	C89835										85.0-89.0	6.0-7.5	0.1	2.0-4.0	1	0.2	0.005	0.005		0.35	0.08	0.1	Bi 1.7-2.7
	C89837										84.0-88.0	3.0-4.0	0.1	6.0-10.0	1	0.3	0.005	0.005		0.25	0.08	0.05	Bi 0.7-1.2
Copper-Bismuth Selenium	C89510										86.0-88.0	4.0-6.0	0.25	4.0-6.0	1	0.3	0.005	0.005		0.25	0.08	0.05	Bi 1.5, Se 0.7
	C89520						X				85.0-87.0	4.0-6.0	0.25	4.0-6.0	1	0.3	0.005	0.005		0.25	0.08	0.05	Bi 2.5, Se 1.2
Tin Bronze	C90300		X			X	X	X		225	86.0-89.0	7.5-9.0	0.3	3.0-5.0	1	0.2	0.005	0.005		0.2	0.05	0.05	
	C90500		X			X	X	X		210	86.0-89.0	9.0-11.0	0.3	1.0-3.0	1	0.2	0.005	0.005		0.2	0.05	0.05	
	C90700				X	X				205	88.0-90.0	10.0-12.0	0.5	0.5	0.5	0.15	0.005	0.005		0.2	0.05	0.3	
	C91600				X					205N	86.0-89.0	9.7-10.8	0.25	0.25	1.2-2.0	0.2	0.005	0.005		0.2	0.05	0.3	
Leaded Tin Bronze	C92200		X			X	X			245	86.0-89.0	5.5-6.5	1.0-2.0	3.0-5.0	1	0.25	0.005	0.005		0.25	0.05	0.05	
	C92300		X			X	X	X		230	85.0-89.0	7.5-9.0	.30-1.0	2.5-5.0	1	0.25	0.005	0.005		0.25	0.05	0.05	
	C92600						X	X		215	86.0-88.5	9.3-10.5	.80-1.5	1.3-2.5	0.7	0.2	0.005	0.005		0.25	0.05	0.03	
	C92700					X				206	86.0-89.0	9.0-11.0	1.0-2.5	0.7	1	0.2	0.005	0.005		0.25	0.05	0.25	
High Leaded Tin Bronze	C93200		X			X	X	X		315	81.0-85.0	6.3-7.5	6.0-8.0	1.0-4.0	1	0.2	0.005	0.005		0.35	0.08	0.15	
	C93400					X				310	82.0-85.0	7.0-9.0	7.0-9.0	0.8	1	0.2	0.005	0.005		0.5	0.08	0.5	
	C93500		X			X	X	X		326	83.0-86.0	4.3-6.0	8.0-10.0	2	1	0.2	0.005	0.005		0.3	0.08	0.05	
	C93600		X			X					79.0-83.0	6.0-8.0	11.0-13.0	1	1	0.2	0.005	0.005		0.55	0.08	0.15	
	C93700		X			X	X	X		305	78.0-82.0	9.0-11.0	8.0-11.0	0.8	0.5	0.7	0.005	0.005		0.5	0.08	0.1	
	C93800		X			X	X	X		319	75.0-79.0	6.3-7.5	13.0-16.0	0.8	1	0.15	0.005	0.005		0.8	0.08	0.05	
	C94300		X			X	X	X		322	67.0-72.0	4.5-6.0	23.0-27.0	0.8	1	0.15	0.005	0.005		0.8	0.08	0.08	
Aluminum Bronze	C95200	X	X			X		X		415A	86.0min					2.5-4.0	8.5-9.5						
	C95300	X	X			X		X	X	415B	86.0min.					.8-1.5	9.0-11.0						
	C95400	X	X			X		X	X	415B	86.0min.					.8-1.5	9.0-11.0						
	C95400	X	X			X		X	X	415C	78.0min.				1.5	3.0-5.0	10.0-11.5		0.5				
	C95500	X	X			X		X	X	415D	78.0min.				3.0-5.0	10.0-11.5		3.5					
	C95600	X						X		415E	88.0min.				0.25		6.0-8.0	1.8-3.2					
	C95600	X						X		415E	88.0min.				0.25		6.0-8.0	1.8-3.2					
	C95800	X	X			X		X	X	415G	79.0min.		0.3		4.0-5.0	3.5-4.5	8.5-9.5	0.1	.80-1.5				
Copper Nickel	C96200			X							Rem.		0.01		9.0-11.0	1.0-1.8		0.5	1.5		0.02	NB 1.0	45
	C96400			X		X					Rem.		0.01		28.0-32.0	.25-1.5		0.5	1.5		0.02	0.02	NB 0.50-1.5
Nickel Silver	C97300		X			X	X	x		410	53.0-58.0	1.5-3.0	8.0-11.0	17.0-25.0	11.0-14.0	1.5	0.005	0.15	0.5	0.35	0.08	0.05	
	C97600		X			X	X	X		412	63.0-67.0	3.5-4.5	3.0-5.0	3.0-9.0	19.0-21.5	1.5	0.005	0.15	1	0.25	0.08	0.05	
	C97800		X			X	X	X		413B	64.0-67.0	4.0-5.5	1.0-2.5	1.0-4.0	24.0-27.0	1.5	0.005	0.15	1	0.2	0.08	0.05	

Reported Uses

Low-Pressure Valve Bodies, Water Pump Parts, Electrical Hardware, Boat Hardware, Plumbing Fittings, General Misc., Low-Pressure Valves and Fittings, Pumps, General Free Machining Alloy, Low Pressure Fittings, Hardware, Plumbing Fittings, Faucets, Hardware and Ornamental Castings, Hardware Fittings, Air and Gas Fittings, Cocks, Faucets, Plumbing Fixtures, Low-Pressure Valves, Plumbing Fittings, Faucets, Stops and Wastes, Hardware, Plumbing Fixtures and Fittings, Andirons and Ornamental Castings, Plumbing Furniture, Hardware and Ornamental Fittings, Plumbers Flanges, Fittings, Ornamental, Hardware and Ship Trim,General Purpose Die Casting of Moderate Strength,Brackets, Shafts, Gear and Structural Parts,Screw Down Nuts, Slow-Speed Heavy Load Bearings, Gears, Gibs and Cams,Brackets, Free Machine Parts, Lever Arms, Light Duty Gears, Marine Fittings, Valve Stems,Strength Appl., Propellers for Salt and Fresh Water, Machinery Parts substituting for Steel and Malleable Iron,High Strength Free Machining Valve Stems, Marine Fittings, Marine Propellers,Corrosion Brazing and Welding Applications substitute for Tin Zinc Bronze,Valve Stems, Pump Components, Statuary, Decorative Pieces,Lead-Free Alloy for Bearings, Bushings and Washers,Bearings, Pumps, Impellers, Corrosion Resistant and Pressure Tight Castings,Low-Pressure Valve Fittings, Plumbing Fixtures, Faucets, Stops, Waste, Air and Gas Fittings,Valves, Flanges, Pipe Fittings, Plumbing Castings, Water Pump Impellors, Ornamental, Small Gears,General Utility Bearing and Bushings,General Hardware, Ornamental Castings, Low-Pressure Valves and Fittings,Plumbing Casting,Bearings and Bushings, Pump Impellers, Piston Rings, Pump Bodies, Valves, Steam Fittings, Gears,Worm Wheels and Gears, Bearings for Heavy Loads and Relatively Low Speeds,Gears,Medium-Pressure Hydraulic and Steam to 550 F, Marine and Ornamental Castings,High-Pressure Hydraulic and Steam Equipment, Structural Castings,Lead Screw Nuts, heavy Duty Bearings, Pump Pistons,General Purpose Bushings, Washers, Non-Pressure Applications,Bearings and Bushings,High Speed, Light Load Bushings, Mild Acid Applications,Bearings and Bushings, Machinability and Anti-Seizing Properties,High Speed, Heavy-Pressure Bushings, Acid-Resisting to Sulphite Fluids, Bridge Parts, Bearing Plates,Low Friction, Moderate Pressure Bushings, Railroad Applications, Acid Resisting,High Speed, Light to Medium Pressure Bushings, Railroad and Soft Metal Applications,Gun Mounting and Slides, Landing Gear Parts, Pickling Tank and Mild Alkali Appl., Marine Engine and Propellers,Gears, Cams, Stripper Nuts, Slippers, High Temperature Applications, Mining Machine Parts,Spur and Low-Speed, Heavily Loaded Worm Gears, Nuts, Pumps and Landing Gear Parts,Bushings, Landing Gear Parts, Tank Gun Recoil Mechanisms, Valve Guides and Seats in Aircraft Engines,Cable Connectors, Pole-line Hardware, Terminals, Gears, Worms, Marine Hardware, Valve Stems,Propeller Hub, Blades and Other Parts – Including Valves, in Contact With Sea Water,Component Parts of Items Being Used For Sea Water Corrosion Resistance, Valves, Pump bodies, Flanges, Elbows Being Used for Sea Water Corrosion Resistance,Hardware, Valves and Fittings, Statuary and Ornamental Castings,Marine Furniture, Hardware and Ornamental Castings,Dairy and Food Processing Fittings, White Ornamental and Hardware, Musical Instruments Components