

# ALLOY SELECTION CHART

## - Cast Bronze Alloys



Leaded Tin Bronze Alloys	Medium Loads - Medium Speeds	Cross Index			Chemical Composition				Minimum Requirements				Machinability	
		CDA	SAE	AMS	Cu	Sn	Pb	Zn	Tensile (PSI)	Yield (PSI)	% Elongation	BHN @ 500 kg		
			40	4855	85	5	5	5	36000	19000	15	60	84	
					81	3	7	9	30000	15000	16	55	90	
			660		83	7	7	3	35000	20000	10	65	70	
					84	8	8		34000	20000	8	60	70	
			66		85	5	9	2	30000	16000	12	60	70	
					80	7	12	1	33000	20000	10	60	80	
			64	4842	80	10	10		35000	20000	6	80	80	
Tin Bronze Alloys	High Loads - Low Speeds	Cross Index			Chemical Composition				Minimum Requirements				Machinability	
		CDA	SAE	AMS	Cu	Sn	Pb	Zn	Ni	Tensile (PSI)	Yield (PSI)	% Elongation	BHN @ 500 kg	
		C90300 *	620		88	8		4		44000	22000	18	70	30
		C90500 *	62	4845	88	10		2		44000	25000	10	75	30
		C90700 *	65		89	11				40000	25000	10	80	20
		C92200	622		88	6	1.5	4.5		38000	19000	18	65	42
		C92300	621		87	8	1	4		40000	19000	16	70	42
		C92500	640		87	11	1	0.5	1	40000	24000	10	80	30
		C92700	63		88	10	2			38000	20000	8	77	45
Manganese Bronze	Extreme Loads - Low Speeds	Cross Index			Chemical Composition				Minimum Requirements				Machinability	
		CDA	SAE	AMS	Cu	Zn	Al	Fe	Mn	Tensile (PSI)	Yield (PSI)	% Elongation	BHN @ 500 kg	
		C86200	430A	4862B	64	26	4	3	3	90000	45000	18	180	30
		C86300 *	430B		63	25	6	3	3	110000	62000	14	225	8
		C86500	43	4860A	58	40	1	1	1	70000	25000	25	130	26
Aluminum Bronze Alloys	Extreme Loads - Low Speeds (Corrosive Environments)	Cross Index			Chemical Composition				Minimum Requirements				Machinability	
		CDA	SAE	AMS	Cu	Al	Fe	Ni	Mn	Tensile (PSI)	Yield (PSI)	% Elongation	BHN @ 500 kg	
		C95200	68A		86	9	3			68000	26000	20	125	20
		C95300	68B		86	10	1			70000	26000	25	140	55
		C95300-HT								80000	40000	12	174	50
		C95400 *		4870	83	11	4			85000	32000	12	170	60
		C95400-HT								95000	45000	10	195	50
		C95500			78	11	4	4	3.5	95000	42000	10	195	50
		C95500-HT								110000	62000	8	230	40
		C95900 *			82	13	4		1	80000	40000	1	255	
		C95510-HT *		4880	78	10	3	5	1.5	105000	62500	9	225	50
		C63000 *		4640	78	10	3	5	1.5	90000	45000	6	225	30

\* Standard Stocked Alloy