Fundição: Centrífuga - Contínua - Areia - Shell Molding
Peças: Conforme Modelo ou Desenho
Estoque (pronta entrega)

Atuamos no segmento de fundição e comercialização de metais não ferrosos:
BRONZE, LATÃO, COBRE e ALUMÍNIO e seus derivados, cortados e fundidos.

Normas: ASTM, SAE, DIN, ABNT, UNS, BS, UNI, JIS

SAE - 40 - 41 - 43 - 660 - 62 - 63 - 64 - 65 - 66 - 67 - 602 - 621 - 622 - 640 - Bronze Fosforoso
SAE - 430 A-B-C - SAE - 68 A-B-C-D - Superliga 3-5-7
Bronze Grafitado em Buchas e Tarugos
Bronze Liga BZ2, BZ5, BZ8, BZ12, BZ14
Bronze AMP 18 - 21 - 25- 940

ENGELIGAS ISO 9001 EM FASE DE IMPLANTAÇÃO

Tipos de formato:
Redondos, Buchas, Retangulares, Chapas, Anéis, Quadrados, Discos, conforme modelo cortados sob medida.

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CATÁLOGO DE COMPOSIÇÃO QUÍMICA

LIGAS DE BRONZE

PROPRIEDADES FÍSICAS, MECÂNICAS, APROXIMADAS E TIPOS DE FUNDIÇÃO DE ALGUMAS LIGAS

CA	SAE	LIGA	COBRE		ESTANHO		CHUMBO		ZINCO		FERRO		NÍQUEL		MANGANÊS		ALUMÍNIO		OUTROS	CONTRAÇÃO LINEAR EM %	CONDUTIBILIDADE ELÉTRICA EM IACS	DENSIDADE GRS/cm³	RESISTÊNCIA À TRAÇÃO Kg/mm²	ESCOAMENTO Kg/mm²	ALONGAMENTO %	DUREZA BRINELL Kg/mm²	TEMPERATURA DE VAZAMENTO	USINABILIDADE RELATIVA %
			Min	Máx	Min	Máx	Min	Máx	Min	Máx	Min	Máx	Min	Máx	Min	Máx	Min	Máx										
84400	---	Bz 81-3-7-9	78	82	2,30	3,50	6,00	8,00	7,00	10,00	---	0,40	---	1,00	---	---	---	0,005	Sb<0,25 S<0,08 P<0,02	1,69	16,0	8,70	20,4	9,10	18	55	1090 à 1220	90
83600	40	Bz 85-5-5-5	84	86	4,00	6,00	4,00	6,00	4,00	6,00	---	0,30	---	1,00	---	---	---	0,005	Sb<0,25 S<0,08 P<0,05	1,69	15,0	8,83	21,0	9,80	20	60	1100 à 1250	84
93200	660	Bz 83-7-7-3	81	85	6,30	7,50	6,00	8,00	1,00	4,00	---	0,20	---	1,00	---	---	---	0,005	Sb<0,35 S<0,08 P<0,15	1,69	12,0	8,83	21,1	9,80	15	65	1075 à 1205	70
90500	62	Bz 88-10-0-2	86	89	9,00	11,00	---	0,30	1,00	3,00	---	0,20	---	1,00	---	---	---	0,005	Sb<0,20 S<0,05 P<0,05	1,81	11,0	8,73	28,1	12,70	20	75	1090 à 1240	30
92700	63	Bz 88-10-2-0	86	89	9,00	11,00	1,00	2,50	---	0,70	---	0,20	---	1,00	---	---	---	0,005	Sb<0,25 S<0,05 P<0,25	1,70	11,0	8,78	24,6	9,00	10	77	1090 à 1240	45
93700	64	Bz 80-10-10	78	82	9,00	11,00	8,00	11,00	---	0,80	---	0,15	---	0,50	---	---	---	0,005	Sb<0,50 S<0,08 P<0,03	1,55	10,00	8,95	21,1	8,50	15	60	1020 à 1150	80
90700	65	Bz 89-11	88	90	10,00	12,00	---	0,50	---	0,50	---	0,15	---	0,50	---	---	---	0,005	Sb<0,20 S<0,05 P<0,30	1,68	9,6	8,78	24,5	12,60	10	80	1090 à 1220	20
93800	67	Bz 78-7-15	75	79	6,30	7,50	13,00	16,00	---	0,80	---	0,15	---	1,00	---	---	---	0,005	Sb<0,80 S<0,08 P<0,05	1,74	11,5	9,25	15,0	9,80	12	55	1035 à 1160	80
92200	622	Bz 88-6-1,5-4,5	86	90	5,50	6,50	1,00	2,00	3,00	5,00	---	0,25	---	1,00	---	---	---	0,005	Sb<0,25 S<0,05 P<0,05	1,64	14,0	8,65	23,9	11,20	24	65	1095 à 1225	42
92500	640	Bz 87-11-1-0-1	85	88	10,00	12,00	1,00	1,50	---	0,50	---	0,30	0,80	1,50	---	---	---	0,005	Sb<0,25 S<0,05 P<0,03	1,69	10,9	8,85	27,5	13,40	10	80	1100 à 1235	30
84500	---	Bz 80-3-7-10	77	79	2,00	4,00	6,00	7,50	10,00	14,00	---	0,40	---	1,00	---	---	---	0,005	Sb<0,25 S<0,08 P<0,02	0	16,40	8,70	20,4	9,10	16	90	1070 à 1170	90
83300	---	Bz Alta Condut.	92	94	1,00	2,00	1,00	2,00	2,00	6,00	---	---	---	----	---	---	---	0,005	---	1,80	32,0	8,80	20,0	5,00	35	35	1130 à 1230	35
---	---	Bz Bucha	69	73	3,50	5,50	12,00	15,00	7,50	12,00	---	0,25	---	0,80	---	---	---	0,005	---	0,00	0,0	0,00	0,0	0,0	0	0	0 à 0	0
92400	---	Bz 86-10-2-2	86	89	9,00	11,00	1,00	2,50	1,00	3,00	---	0,25	---	1,00	---	---	---	---	Sb<0,25 S<0,05 P<0,05	0,00	0,0	0,00	0,0	0,0	0	0	0 à 0	0
83800	---	Bz 83-4-6-7	82	83,80	3,30	4,20	5,00	7,00	5,00	8,00	---	0,30	---	1,00	---	---	---	0,005	Sb<0,25 S<0,08 P<0,03	1,67	14,90	8,60	21,1	9,30	20	55	1100 à 1240	85
92300	621	Bz 87-8-1-4	85	89	7,50	9,90	0,30	1,00	2,50	5,00	---	0,25	---	1,00	---	---	---	0,005	Sb<0,25 S<0,05 P<0,05	1,69	12,00	8,80	25,3	11,20	18	70	1095 à 1230	42
93500	66	Bz 85-5-9-1	83	86	4,30	6,00	8,00	10,00	---	2,00	---	0,20	---	1,00	---	---	---	0,005	Sb<0,30 S<0,08 P<0,05	1,67	15,00	8,87	19,7	8,40	15	60	1100 à 1230	70
94300	---	Bz 70-5-25	67	72	4,50	6,00	23,00	27,00	---	0,80	---	0,15	---	1,00	---	---	---	0,005	Sb<0,80 S<0,08 P<0,08	1,78	9,10	9,29	16,9	11,80	10	48	1050 à 1180	90
90300	620	Bz 88-8-0-4	86	89	7,50	9,00	---	0,30	3,00	5,00	---	0,20	---	1,00	---	---	---	0,005	Sb<0,20 S<0,05 P<0,05	1,69	12,00	8,81	28,1	12,70	20	70	1090 à 1240	30
94700	---	Bz 88-5-0-2-5	85	90	4,50	6,00	---	0,09	1,00	2,50	---	0,25	4,50	6,00	---	0,20	---	0,005	Sb<0,15 S<0,05 P<0,05	1,91	12,10	8,82	31,6	14,00	25	76	1140 à 1240	35
94800	---	Bz 87-5-1-2-5	84	89	4,50	6,00	0,30	1,00	1,00	2,50	---	0,25	4,50	6,00	---	0,20	---	0,005	Sb<0,15 S<0,05 P<0,05	1,97	12,00	8,84	28,1	14,10	20	68	1135 à 1235	45
90800	88	Bz 88-12	85	89	11,00	13,00	---	0,25	---	0,25	---	0,15	---	0,50	---	0,25	---	0,005	Sb<0,20 S<0,05 P<0,30	1,68	9,70	8,74	29,2	16,30	17	95	1080 à 1210	30
52400	---	Bz 90-10	Dif.		9,00	11,00	---	0,05	---	0,20	---	0,10	---	---	---	---	---	---	Sb<0,02 S<0,09 P<0,03-0,35	1,70	10,50	8,77	25,0	12,00	15	68	1100 à 1230	45
90900	---	Bz 86-14	86	89	12,00	14,00	---	0,25	---	0,25	---	0,15	---	0,50	---	---	---	0,005	Sb<0,20 S<0,05 P<0,05	1,62	8,90	8,71	20,0	14,00	15	90	1050 à 1180	20
95200	68A	Bz/Al 9A	86	---	---	---	---	---	---	---	2,50	4,00	---	---	---	---	8,50	9,50	< 1,00	1,86	11,00	7,64	40,0	15,00	14	110	1120 à 1220	50
95300	68B	Bz/Al 9B	86	---	---	---	---	---	---	---	0,80	1,50	---	---	---	---	9,00	11,00	< 1,00	1,86	13,00	7,53	45,7	17,60	20	140	1120 à 1220	55
95400	68C	Bz/Al 9C/339	83	---	---	---	---	---	---	---	3,00	5,00	---	1,50	---	0,50	10,00	11,50	< 0,50	1,85	13,00	7,45	52,7	21,10	12	170	1120 à 1220	60
95500	68D	Bz/Al 9D	78	---	---	---	---	---	---	---	3,00	5,00	3,00	5,50	---	3,50	10,00	11,50	< 0,50	1,90	8,50	7,53	63,3	28,10	6	195	1120 à 1220	50
64200	---	Bz/Al Si	Dif.	Dif.	---	0,20	---	0,05	---	0,50	---	0,30	---	0,25	---	0,10	6,30	7,60	Si=1,50 a 2,20	1,92	8,30	7,69	53,0	22,00	38	142	1120 à 1230	80
95800	---	Bz/Al Ni alfa	79	Dif.	---	---	---	0,03	---	---	3,50	4,50	4,00	5,00	0,80	1,50	8,50	9,50	Si <0,10	1,90	7,10	7,64	59,8	24,60	15	160	1140 à 1240	50
65500	---	Bz/Si	Dif.	Dif	---	---	---	0,05	---	1,50	---	0,80	---	0,60	0,50	1,30	---	---	<0,50 Si = 2,80 a 3,80	1,88	7,00	8,53	39,3	14,80	63	78	1100 à 1180	30
87400	---	Bz/Si	79	Dif.	---	---	---	1,00	12,00	16,00	---	---	---	---	---	---	---	0,80	<0,80 Si = 2,50 a 4,00	1,77	6,80	8,39	35,2	14,80	18	100	1010 à 1100	55
87500	---	Bz/Si	79	Dif.	---	---	---	0,09	12,00	16,00	---	---	---	---	---	---	---	0,50	<0,50 Si = 3,00 a 5,00	1,70	6,70	8,27	42,2	16,80	16	130	1000 à 1110	35
95700	---	Bz/Al/Mn	71	Dif.	---	---	---	---	---	---	2,00	4,00	1,50	3,00	11,00	14,00	7,00	8,50	<0,50 Si = 0,10	1,90	3,10	7,53	63,3	28,10	20	180	1090 à 1190	50
52100	---	Bz 82-8	Diferença		7,00	9,00	---	0,05	---	0,20	---	0,10	---	---	---	---	---	---	P=0,03-0,35	0	0	0	0	0	0	0	0 à 0	0
---	---	Bz Sn	77	79	4,50	5,50	13,00	15,00	3,00	4,00	---	---	---	---	---	---	---	---	---	0	0	0	0	0	0	0	0 à 0	0
89520	---	Bz Especial	85	87	5,00	6,00	---	0,25	4,00	6,00	---	0,20	---	1,00	---	---	---	0,005	Bi=1,6 a 2,20	0	0	0	0	0	0	0	0 à 0	0
---	---	Bz/Ni	72	82	5,00	7,00	13,00	16,00	3,00	6,00	---	0,25	0,90	1,50	---	---	---	---	Sb<0,50 S<0,08 P<0,02	0	0	0	0	0	0	0	0 à 0	0
51000	---	Bz 95-5	Diferença		4,20	5,80	----	0,05	---	0,30	---	0,10	---	---	---	---	---	---	P=0,03-0,35	0	0	0	0	0	0	0	0 à 0	0

LIGAS DE LATÃO

CA	SAE	LIGA	COBRE		ESTANHO		CHUMBO		ZINCO		FERRO		NÍQUEL		MANGANÊS		ALUMÍNIO		OUTROS	CONTRAÇÃO LINEAR EM %	CONDUTIBILIDADE ELÉTRICA EM IACS	DENSIDADE GRS/cm³	RESISTÊNCIA À TRAÇÃO Kg/mm²	ESCOAMENTO Kg/mm²	ALONGAMENTO %	DUREZA BRINELL Kg/mm²	TEMPERATURA DE VAZAMENTO	USINABILIDADE RELATIVA %
			Min	Máx	Min	Máx	Min	Máx	Min	Máx	Min	Máx	Min	Máx	Min	Máx	Min	Máx										
---	---	Latão Coquilha	58	62	---	1,00	1,50	3,70	33	39	---	0,80	---	1,00	---	0,20	0,50	1,50	Si < 0,10	2,06	22,6	8,28	38,0	15,5	19	92	990 à 1130	70
---	---	Latão Terra	60	64	---	1,50	1,00	3,00	Dif.	Dif.	---	0,60	---	1,00	---	---	---	0,005	---	2,06	19,7	8,45	21,0	7,8	28	51	1040 à 1160	75
86400	---	Lt. Alta Resist.	56	62	0,50	1,50	0,50	1,50	34	42	0,40	2,00	---	1,00	0,10	1,50	0,50	1,50	---	2,01	19,0	8,30	42,0	14,0	15	90	1010 à 1100	65
86500	43	Lt. Alta Resist.	55	60	---	1,00	---	0,40	36	42	0,40	2,00	---	1,00	0,10	1,50	0,50	1,50	---	2,13	22,0	8,30	46,0	17,0	20	100	1045 à 1150	26
86200	430A	Lt. Alta Resist.	60	66	---	0,20	---	0,20	22	28	2,00	4,00	---	1,00	2,50	5,00	3,00	4,90	---	2,13	7,5	7,85	63,0	32,0	18	180	1040 à 1145	30
86300	430B	Lt. Alta Resist.	60	66	---	0,20	---	0,20	22	28	2,00	4,00	---	1,00	2,50	5,00	5,00	7,50	---	2,13	8,0	7,84	77,0	42,0	12	200	990 à 1120	8
86700	---	Lt. Mn. Alta Res.	55	60	---	1,50	0,50	1,50	30	38	1,00	3,00	---	1,00	1,00	3,50	1,00	3,00	< 1,00	1,95	14,2	8,30	58,0	26,0	18	130	1030 à 1135	55
86800	---	Lt. Naval Especial	53,5	57	---	1,00	---	0,20	Dif.	Dif.	1,00	2,50	2,50	4,00	2,50	4,00	---	2,00	---	1,98	9,0	8,20	55,0	26,7	20	80	980 à 1080	30
67400	---	Latão Silício	57	60	---	0,30	---	0,50	Dif.	Dif.	---	0,35	---	0,25	2,00	3,50	0,50	2,00	Si 0,30 à 1,00	0,00	0,0	0,00	0,0	0,0	0	0	0 à 0	0
21000	---	Tombac 95	94	96	---	---	---	0,05	Dif.	Dif.	---	0,05	---	---	---	---	---	---	---	0,00	0,0	0,00	0,0	0,0	0	0	0 à 0	0
22000	---	Tombac 90%	89	91	---	---	---	0,05	Dif.	Dif.	---	0,05	---	---	---	---	---	---	---	0,00	0,0	0,00	0,0	0,0	0	0	0 à 0	0
23000	---	Lt. Vermelho 85	84	86	---	---	---	0,05	Dif.	Dif.	---	0,05	---	----	---	---	---	---	---	0,00	0,0	0,00	0,0	0,0	0	0	0 à 0	0
24000	---	Latão 80	78,5	81,5	---	---	---	0,05	Dif.	Dif.	---	0,05	---	---	---	---	---	---	---	0,00	0,0	0,00	0,0	0,0	0	0	0 à 0	0
26000	---	Latão Cartucho	68,5	71,5	---	---	---	0,07	Dif.	Dif.	---	0,05	---	---	---	---	---	---	---	0,00	0,0	0,00	0,0	0,0	0	0	0 à 0	0
27000	---	Latão Amarelo	63,0	68,5	---	---	---	0,09	Dif.	Dif.	---	0,07	---	---	---	---	---	---	---	0,00	0,0	0,00	0,0	0,0	0	0	0 à 0	0
36000	---	Lt. Corte Livre	60	63	---	---	2,50	3,70	Dif.	Dif.	---	0,35	---	---	---	---	---	---	< 0,50	1,95	26,4	8,50	34,5	12,5	53	61	1000 à 1090	100
37700	---	Latão Forja	58	61	---	---	1,50	2,50	Dif.	Dif.	---	0,30	---	---	---	---	---	---	< 0,50	2,01	26,2	8,40	41	17	38	87	990 à 1120	35
46400	---	Lt. Naval (60/40)	59	62	0,50	1,00	---	0,20	Dif.	Dif.	---	0,10	---	---	---	---	---	---	< 0,10	2,01	20,0	8,30	43	15,5	19	90	1000 à 1100	70
85700	---	Lt. Coq. Alemão	58	64	0,50	1,50	0,80	1,50	32	40	---	0,70	---	1,00	---	---	---	0,80	< 0,30	1,95	22,0	8,40	28	9,8	15	75	990 à 1120	80
85200	---	Latão ao Chumbo	70	74	0,70	2,00	1,50	3,80	20	27	---	0,60	---	1,00	---	---	---	0,005	Si < 0,05	2,11	18,0	8,50	26	8,5	25	59	1040 à 1160	65
85400	41	Latão Terra	65	70	0,50	1,50	1,50	3,80	24	32	---	0,70	---	1,00	---	---	---	0,35	---	1,96	19,5	8,45	21,1	7,7	20	50	0 à 0	80
85800	---	Latão Injeção	57	---	---	1,50	---	1,50	31	41	---	0,50	---	0,50	---	0,25	---	0,55	< 0,30	2,00	20,0	8,40	30,0	15,0	13	90	980 à 1080	80