

High Conductivity Copper Alloy Castings

Standard		Chemical Composition(%)			T.S	E	HB	IACS	USES
KS, JIS		Cu	Sn	P	N/mm²	%	10/500	%	
CAC101	CuC1	99.5↑	0.4↓	0.07↓	175↑	35↑	35↑	50↑	Slag Launder, Tuyere Nozzle, Cooling Plate, Carbon Holder
CAC102	CuC2	99.7↑	0.2↓	0.07↓	155↑	35↑	33↑	60↑	Electric Terminal, Connectors, Bus-Ring
CAC103	CuC3	99.9↑	-	0.04↓	135↑	40↑	30↑	80↑	Lance Nozzle, Cu Mold, Electric-Parts

Bronze Castings

Standard		Chemical Composition(%)						Mechanical Property		USES
KS, JIS		ASTM	Cu	Sn	Zn	Pb	Others	T.S(N/mm²)	E(%)	
CAC 401	BC1	844	79.0~83.0	2.0~4.0	8.0~12.0	3.0~7.0	2.0↓	165↑	15↑	Building Parts, Valve, Connectors, Accessories
CAC 402	BC2	903	86.0~90.0	7.0~9.0	3.0~5.0	-	1.0↓	245↑	20↑	Machinery Parts, Valve, Bushing, Electric-Parts
CAC 403	BC3	905	86.5~89.5	9.0~11.0	1.0~3.0	-	1.0↓	245↑	15↑	Bushing, Bearing, Impeller, Piston-Ring Metal
CAC 406	BC6	836	83.0~87.0	4.0~6.0	4.0~6.0	4.0~6.0	2.0↓	195↑	15↑	Machinery Parts, Fire-Equipment, Gear, Valve
CAC 407	BC7	922	86.0~90.0	5.0~7.0	3.0~5.0	1.0~3.0	1.5↓	215↑	18↑	Valve, Flange, Bushing, Bearing

Phosphor Bronze Castings

Standard		Chemical Composition(%)												T.S	E	YS	HB	USES
KS, JIS			Cu	Sn	P	Others	Ni	Zn	Pb	Fe	Sb	Al	Si	N/mm²	%	N/mm²	10/1000	
CAC502A	PBC2	907	87.0~91.0	9.0~12.0	0.05~0.20	1.0↓	1.0↓	0.3↓	0.3↓	0.2↓	0.05	0.01	0.01	165↑	15↑	120↑	60↑	Gear Bushing SleevePumpparts Metal
CAC 502B	PBC2B		87.0~91.0	9.0~12.0	0.15~0.50	1.0↓	1.0↓	0.3↓	0.3↓	0.2↓	0.05	0.01	0.01	245↑	20↑	145↑	80↑	Pulley, Gear,Bushing, Sleeve, Bearing, Plate
CAC503A			87.0~91.0	12.0~15.0	0.05~0.20	1.0↓	1.0↓	0.3↓	0.3↓	0.2↓	0.05	0.01	0.01	245↑	15↑	135↑	60↑	
CAC503B	PBC3	908	84.0~88.0	12.0~15.0	0.15~0.50	1.0↓	1.0↓	0.3↓	0.3↓	0.2↓	0.05	0.01	0.01	195↑	15↑	145↑	90↑	Pulley, Gear, Sleeve, Paper-Part,Worm-Gear

Leaded Tin Bronze Castings

Standard		Chemical Composition(%)									T.S	E	YS	HB	USES
KS, JIS		ASTM	Cu	Sn	Pb	Ni	Zn	Fe	Others	N/mm²	%	N/mm²	10/500		
CAC602	LBC2	934	82.0~86.0	9.0~11.0	4.0~6.0	1.0 max	1.0 max	0.3 max	1.0 max	195↑	10↑	100↑	65↑		Pulley Cylinder-Parts valve
CAC603	LBC3	937	77.0~81.0	9.0~11.0	9.0~11.0	1.0 max	1.0 max	0.3 max	1.0 max	175↑	7↑	80↑	60↑		Pulley Cylinder Socketliner Hub Roller Bushing
CAC604	LBC4	938	74.0~78.0	7.0~9.0	14.0~16.0	1.0 max	1.0 max	0.3 max	1.0 max	165↑	5↑	80↑	55↑		Cone Crusher Bushing Taper-Bushing
CAC605	LBC5	943	70.0~76.0	6.0~8.0	16.0~22.0	1.0 max	1.0 max	0.3 max	1.0 max	145↑	5↑	60↑	45↑		Pulley Engine-Parts Metal

Aluminium Bronze Castings

Standard		Chemical Composition(%)							T.S	E	HB	HB	YS	USES
KS, JIS		ASTM	Cu	Al	Fe	Ni	Mn	Others	N/mm²	%	10/1000	10/3000	N/mm²	
CAC 701	AIBC1	952	85.0~90.0	8.0~10.0	1.0~3.0	0.1~1.0	0.1~1.0	0.5 max	440↑	25↑	80↑			Bearing, Bushing, Gear Valve, Flange
CAC 702	AIBC2	955	80.0~88.0	8.0~10.5	2.5~5.0	1.0~3.0	0.1~1.5	0.5 max	490↑	20↑	120↑			Bearing, Worm Gear, Valve-Seat
CAC 703	AIBC3	958	78.0~85.0	8.5~10.5	3.0~6.0	3.0~6.0	0.1~1.5	0.5 max	590↑	15↑		150↑	245↑	Gear, Bearing, Valve, Guide
CAC 704	AIBC4	957	71.0~84.0	6.0~9.0	2.0~5.0	1.0~4.0	7.0~15.0	0.5 max	590↑	15↑		160↑	270↑	Propeller, Sleeve, Marine-Parts

Brass Castings

Standard		Chemical Composition(%)						T.S	E	USES
KS, JIS		Cu	Zn	Pb	Sn	Al	Fe	N/mm²	%	
CAC 201	YBsC1	83.0~88.0	11.0~17.0	-	Fe Sn+Al+Fe=1.0 max			145↑	25↑	Flange, Electric-Parts,Trim-Parts
CAC 202	YBsC2	65.0~70.0	24.0~34.0	0.5~3.0	1.0 max	0.5 max	0.8 max	195↑	20↑	Electric-Parts, Accessories, Marine-Parts
CAC 203	YBsC3	58.0~64.0	30.0~41.0	0.5~3.0	1.0 max	0.5 max	0.8 max	245↑	20↑	Electric-Parts, Building-Parts, Spring, Bushing

High Strength Brass Castings

Standard		Chemical Composition(%)									T.S	E	HB	HB	YS	USES
KS, JIS		Cu	Zn	Mn	Fe	Al	Sn	Ni	Pb	Si	N/mm²	%	10/500	10/3000	N/mm²	
CAC 301	HBsC1	55.0~60.0	33.0~42.0	0.1~1.5	0.5~1.5	0.5~1.5	1.0 max	1.0 max	0.4 max	0.1 max	430↑	20↑	90↑		140↑	Machinery-Part, Propeller, Hub
CAC 302	HBsC2	55.0~60.0	30.0~42.0	0.1~3.5	0.5~2.0	0.5~2.0	1.0 max	1.0 max	0.4 max	0.1 max	490↑	18↑	100↑		175↑	Marine-Parts, Gear, Bush, Bearing
CAC 303	HBsC3	60.0~65.0	22.0~28.0	2.5~5.0	2.0~4.0	3.0~5.0	0.5 max	0.5	0.2 max	0.1 max	635↑	15↑		165↑	305↑	Cylinder-Parts, Worm-Gear, Cap
CAC 304	HBsC4	60.0~65.0	22.0~28.0	2.5~5.0	2.0~4.0	5.0~7.5	0.2 max	0.5	0.2 max	0.1 max	755↑	12↑		200↑	410↑	Slipper Metal, High-Strength, Valve Screw Nut