

GB vs ASTM Copper Alloy Grade Cross-Reference

Reference for Sourcing & Specification Review Supplier: HSMetal | Mill-Direct Supply with Full Material Certifications

1. Beryllium Copper

GB/T Grade	ASTM / UNS	Properties	Typical Applications
QBe2	C17200	High strength, moderate electrical conductivity	Springs, mould inserts, precision mechanical components
QBe1.7	C17000	Ultra-high strength	Elastic elements, wear-resistant parts
QBe1.9	C17500 (CW103C)	High conductivity, excellent softening resistance	Resistance welding electrodes
QBe0.6-2.5	C17510 (CW110C)	High conductivity, elevated softening temperature	Welding electrodes, spot welding tips

2. Aluminum Bronze

GB/T Grade	ASTM / UNS	Properties	Typical Applications
QA19-4	C61900	High strength, good corrosion resistance	Gears, bushings, sleeves
QA10-4-4	C63000	Nickel aluminum bronze, seawater corrosion resistant	Marine equipment, propeller components, valve stems
QA10-5-5	C63200	High strength & superior anti-corrosion performance	Pump bodies, heavy-duty wear parts
QA11-6-6	C95500	High-strength cast aluminum bronze	Heavy load gears, bearing segments
—	C95800	Cast nickel aluminum bronze	Seawater pumps, valve castings

3.Silicon Bronze

GB/T Grade	ASTM / UNS	Properties	Typical Applications
QSi3-1	C65500	High tensile strength, corrosion & fatigue resistance	Springs, marine fasteners
QSi1-3	C64700	Balanced high conductivity & mechanical strength	Conductive elastic components

4.Brass

GB/T Grade	ASTM / UNS	Properties	Typical Applications
H62	C28000	Good machinability	Bars, tubes, standard fasteners
H65	C27000	Excellent ductility	Tubes, strips, heat dissipation parts
H59	C37700	Free-cutting property	Valve bodies, hardware fittings
HPb59-1	C36000	Lead brass, easy for CNC turning	Precision turned components
HSn70-1	C44300	Tin brass, anti-corrosion	Condenser tubes, heat exchangers

5.Tin Bronze

GB/T Grade	ASTM / UNS	Properties	Typical Applications
QSn6.5-0.1	C51900	Wear & corrosion resistance, good elasticity	Springs, bearings, bellows
QSn8-0.3	C52100	High strength and wear resistance	Heavy-duty bushings, wear liners