

LEADED BRONZE

RG7 - CC493K



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RG7 bronze, also known as CC493K, is a tin bronze alloy that is widely used due to its excellent all-around capabilities. It is known for its excellent machinability, good wear resistance, and moderate corrosion resistance and this combination of properties makes it suitable for a wide range of applications. The presence of lead enhances its machinability, making it a preferred choice for components that require extensive machining and detailed manufacturing.

KEY FEATURES

- Good Dry Running Qualities
- Good Corrosion Resistance
- Good Pressure Tightness
- Easy to Machine
- Excellent All-Round Product

CHEMICAL PROPERTIES

Copper (Cu)	Tin (Sn)	Lead (Pb)	Zinc (Zn)	Nickel (Ni)	Phosphorus (P)	Iron (Fe)
81-85%	6-8%	6-8%	3-4%	2%	0.25%	0.15%

MECHANICAL PROPERTIES

Tensile strength (N/mm ²)	240-370
Yield strength (N/mm ²)	150-230
Elongation (%)	8-25
Hardness - Brinell (HB)	65-90
Impact strength (J)	17-28

PHYSICAL PROPERTIES

Density (kg/m ³)	8800	
Modulus of elasticity (Gpa)	100	
Mean coefficient of thermal expansion	0-100°C (µm/m/°C)	18.0
	0-350°C (µm/m/°C)	20.5
	0-538°C (µm/m/°C)	22.4
Thermal conductivity	at 100°C (W/m.K)	50
	at 500°C (W/m.K)	42
Specific Heat 0-100°C (J/kg.K)	380	
Electrical conductivity (IACS %)	10-15	
Melting point (°C)	1000	

MARKET SECTORS



Marine Equipment

Marine propeller shafts, fittings, hardware, bushings



Automotive Industry

Bushings, bearings, wear-resistant components



Engineering Components

Gears in machinery, worm wheels, bearings, bushings



Electrical Industry

Electrical connectors, terminals, switch components



Heating & Plumbing

Valve bodies, seats, stems, fluid control valves



Construction & Architecture

Door handles, architectural trim, decorative hardware