

TECHNICAL SPECIFICATIONS

Heraeus

Alloy Code: **H-JBST1** **Colour:** **Off White**

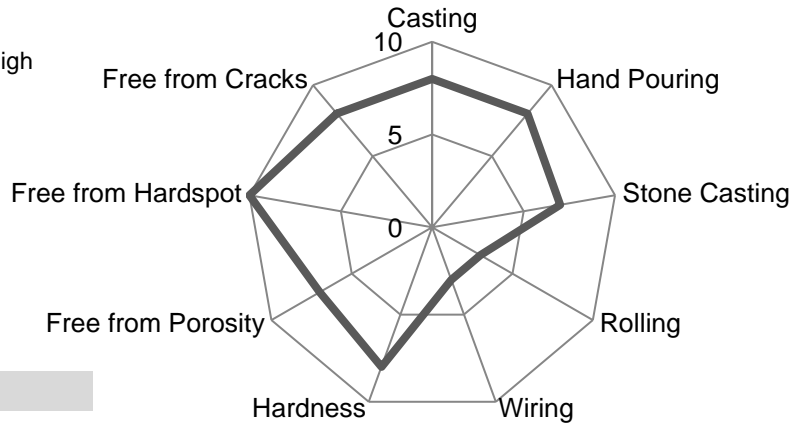
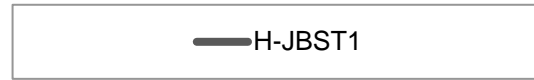
Alloy Type: Bronze
Content : **Nickel:** 0.0% **Palladium:** 0.0%
 Silver: 0.0% **Platinum:** 0.0%

Applications: Suitable for loss wax casting

Advantages: Nickel-Free, High fluidity, less porosity, high hardness

Melting Range (°C):

Bronze	939 - 944
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CIELAB Value :

Karat	YI:D1925	L*	a*	b*
Bronze	28.3	84.9	0.6	13.8

Score(1--10)
 1 means less likely to occur or not suitable
 10 means most likely to occur or most suitable

Recommended Casting Parameters : **(Quenching Time: 15 - 25 Minutes)**

Karat	Metal Casting Temperature (°C)	Vacuum-assisted Casting Investment Temperature (°C)		
		Thickness of work piece (mm)		
		Thin (0.2~0.5)	Medium (0.5~1.1)	Thick (>1.1)
Bronze	1040-1060	660-720	600-660	520-600

Tensile Properties :

Karat	Annealed Hardness (HV)	As Casted Hardness (HV)	Max Strength (MPa)	Yield Strength (MPa)	Elongation (%)
Bronze	150	155	NA	NA	NA

Technical Advice:

- To avoid oxidation, the alloys must be covered with inert gas or yellow flame during casting.
- Not more than 50 % of old material should be used for recasting.
- The old material must be tumbled to remove the investment powder residue and oxides.
The material is then pickled in dilute sulfuric acid (15 %) for 15 - 20 minutes to remove the rest of oxides.
- The sprue should be placed at the thickest position. Additional sprue must be applied if necessary.
Fluted sprue is preferred to avoid any turbulence.

Remarks: The information is for your reference only. The parameters should be adjusted according to the particular casting conditions.
 If you have any technical questions, please do not hesitate to contact us.