

TECHNICAL SPECIFICATIONS

Heraeus

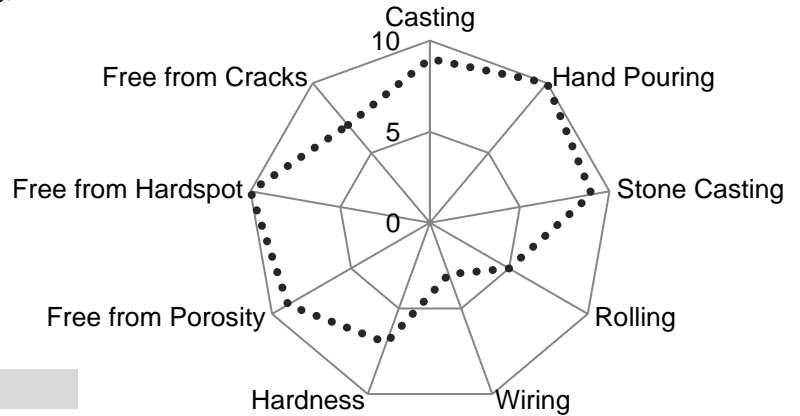
Alloy Code: H-177B **Colour: 3N Yellow**

Suitable Karatage: 18K
Content : **Nickel:** 0.0% **Palladium:** 0.0%
 Silver: 50.0% **Platinum:** 0.0%
Applications: Suitable for loss wax casting, torch melting, stone casting
Advantages: Less porosity, low melt-loss, high fluidity

..... 18K

Melting Range (°C):

18K	881 - 886
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CIELAB Value :

Karat	YI:D1925	L*	a*	b*
18K	40.0	88.9	0.7	21.2

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)
18K	970-990	660-720	580-660	460-580

Tensile Properties :

Karat	Annealed Hardness (HV)	As Casted Hardness (HV)	Max Strength (MPa)	Yield Strength (MPa)	Elongation (%)
18K	147	155	351	200	33

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.