

TECHNICAL SPECIFICATIONS

Heraeus

Alloy Code: H-179B **Colour: Greenish Yellow**

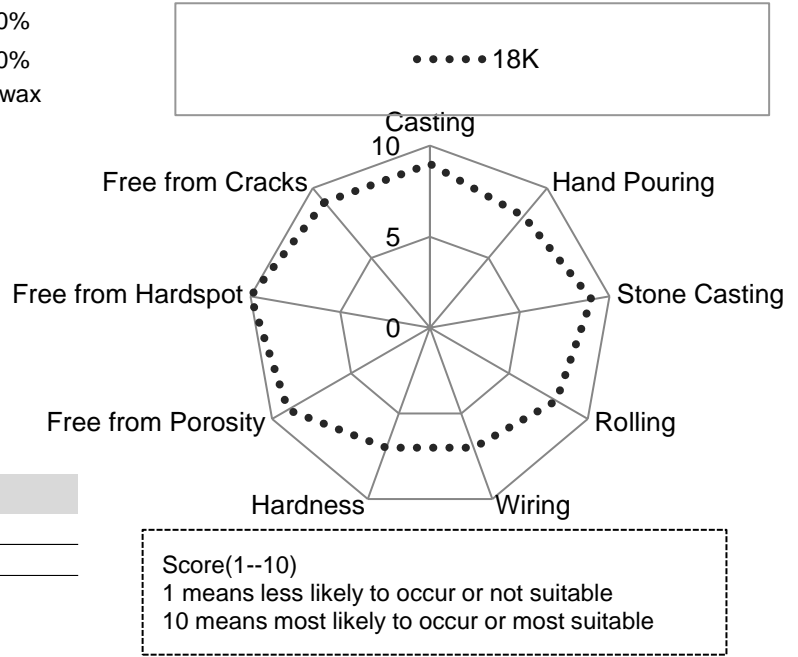
Suitable Karatage: 18K
Content : **Nickel:** 0.0% **Palladium:** 0.0%
 Silver: 60.0% **Platinum:** 0.0%
Applications: 2N yellow, Suitable for hand-making, loss wax casting, stone casting
Advantages: Less porosity, high fluidity

Melting Range (°C):

18K	895 - 901
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CIELAB Value :

Karat	YI:D1925	L*	a*	b*
18K	39.7	87.5	-0.9	21.6



Mechanical Properties :

Karat	Annealed Hardness (HV)	As Casted Hardness (HV)	Max. Strength (MPa)	Yield Strength (MPa)	Elongation (%)
18K	140	157	389	197	33

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 (<0.5)	Medium (0.5~1.1)	Thick (>1.1)
18K	990-1010	660-720	580-660	460-580

Recommended Mechanical Working Parameters:

Recommended Annealing Temperature (°C)	Annealing Time for thickness (min)	< 1 mm	1 - 5 mm	> 5 mm
H-179B	600 - 650	30	35	40

Process	Casting Temperature (°C)	Recommended Reductions
Ingot	980 - 1040	Sheet Thickness % 70
Continuous Casting	1000 - 1060	Wire Diameter % 45

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.