

# TECHNICAL SPECIFICATIONS

# Heraeus

**Alloy Code:** **H-6606S**      **Colour:** **White**

**Suitable Karatage:** 10/14/18K  
**Content :**    **Nickel:** 20.0%    **Palladium:** 0.0%  
                   **Silver:** 2.5%      **Platinum:** 0.0%

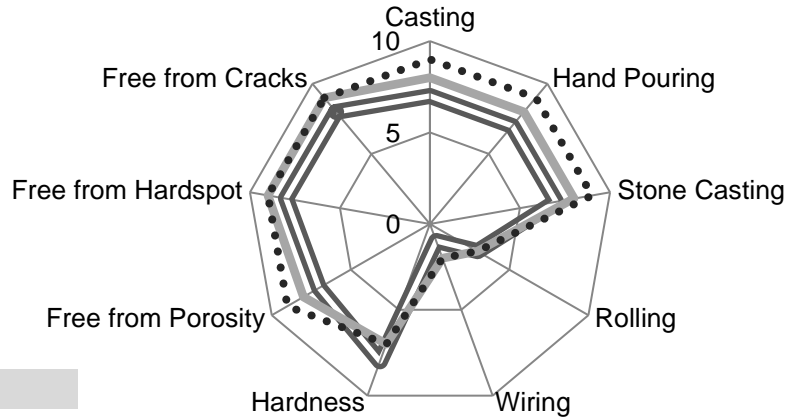


**Applications:** Suitable for loss wax casting

**Advantages:** Less porosity, high re-casting rate

**Melting Range (°C):**

10K	987 - 999
14K	946 - 949
18K	901 - 903



**CIELAB Value :**

Karat	YI:D1925	L*	a*	b*
10K	16.8	81.5	-0.3	7.8
14K	24.2	84.1	0.2	11.7
18K	31.5	80.3	1.1	14.8

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)
10K	1080-1100	680-720	600-680	550-600
14K	1040-1060	680-720	600-680	550-600
18K	1000-1020	680-720	600-680	550-600

**Tensile Properties :**

Karat	Annealed Hardness (HV)	As Casted Hardness (HV)	Max Strength (MPa)	Yield Strength (MPa)	Elongation (%)
10K	170	235	460	174	33
14K	169	199	488	213	31
18K	173	195	491	212	25

**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.