

# TECHNICAL SPECIFICATIONS

# Heraeus

**Alloy Code:** **H-889H**      **Colour:** **White**

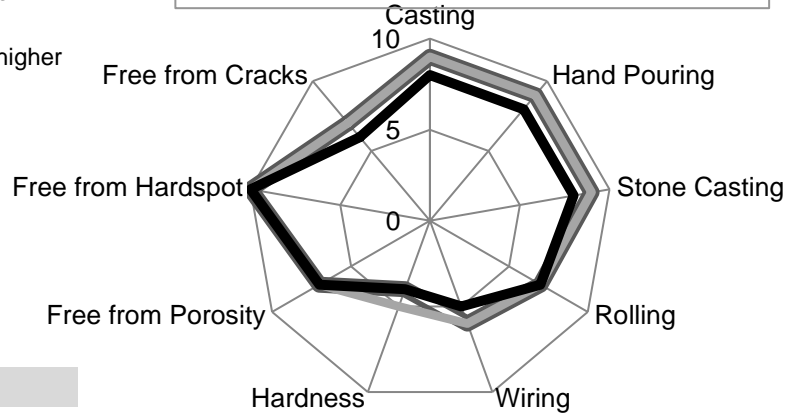
**Suitable Karatage:** 8/10K  
**Content :**      **Nickel:** 0.0%      **Palladium:** 0.0%  
                   **Silver:** 83.5%      **Platinum:** 0.0%

**Applications:** Suitable for loss wax casting, stone casting, hand-making

**Advantages:** No Palladium & Nickel, low melting point, higher hardness

**Melting Range (°C):**

8K	835 - 839
10K	853 - 859
14K	894 - 897



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

**CIELAB Value :**

Karat	YI:D1925	L*	a*	b*
8K	11.5	90.6	-1.9	6.5
10K	13.0	91.5	-2.3	7.6
14K	19.6	91.9	-3.8	11.8

**Mechanical Properties :**

Karat	Annealed Hardness (HV)	As Casted Hardness (HV)	Max. Strength (MPa)	Yield Strength (MPa)	Elongation (%)
8K	100	104	282	135	43
10K	101	102	245	128	36
14K	96	105	272	125	40

**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)
8K	930-950	660-720	580-660	460-580
10K	950-970	660-720	580-660	460-580
14K	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-889H	550 - 600	30	35	40

Process	Casting Temperature (°C)	Recommended Reductions
Ingot	960 - 980	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.