



Heating Element For Hot Water Heater

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Model:G8080TG

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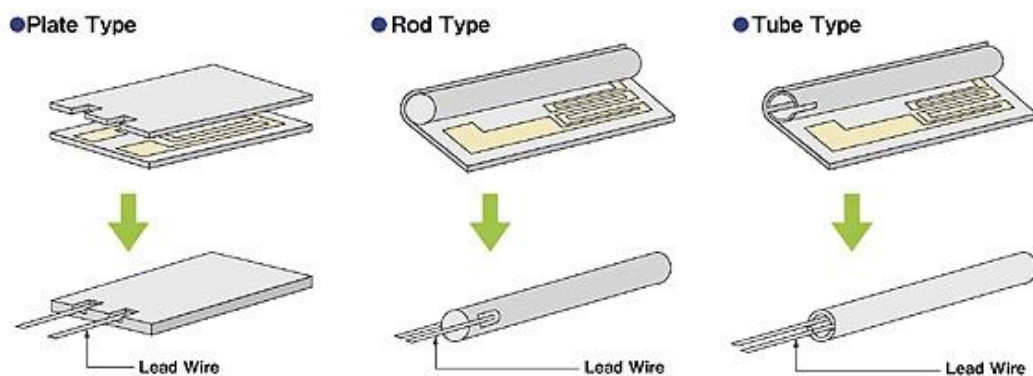
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Process of aluminum Ceramic Heater

First, painting the high melting point metal (tungsten or molybdenum manganese) paste on to the Al₂O₃ casting briquette in coordinate to the circuit design, then another layer of sintering additives. After that, repeating the process to build multiple layers. Then, they are sintered together under 1600°C hydrogen gas environment. Finally, nickel leads are brazed at 800°C onto the metal end and put on with Teflon sleeve, which make it a MCH heating element.

Heating Element for Hot Water Heater is Internal Heating elements are protected from oxidation due to sintering into one-piece ceramic body structure.



Material Properties of 95% Al₂O₃ Alumina ceramic

Thermal Properties

Item	Unit	Alumina Heater
Max Working Temperature	°C	1050
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Thermal Conductivity	W/ (m.k)	21
Specific Heat	J/(kg.k)	0.78*10 ³
Expansion	/°C(40~800°C)	0.78*10 ⁻⁶
Hardness (load 500g)	Gpa	13.5
Flexural	Mpa	320

Parameter limitation of Ceramic Heating Core

Configuration and Dimension							
Shape	Dimension	Tolerance		Tolerance		Tolerance	Resistance Tolerance
Plate	Length (mm)		Width(mm)		Thickness(mm)		
	10~120	① ≤20+/-0.3 ② ≥20+/-1	2~60	① ≤20+/-0.3 ② ≥20+/-1	0.55~2.0	① ≤1+/-0.1 ② ≥1+/-0.15	+/-10%
	length		Diameter				
Rod	8~121	① ≥30mm:+/-0.5 ② 30~100mm:+/-1.0	2.5~8	① ≥5mm:+/-0.1 ② 5~9mm:+/-0.2			+/-10%
Tube	8~121	③ ≤100mm:+/-1.5	2.5~20	③ ≤9mm:+/-0.3			+/-10%

Our Advantages

- a. Extensive production experience: We are specialized in ceramic heating production technology more than 10 years.
- b. Complete production facilities: Owning precision centerless grinding machine, Injection machine, fine polishing machine, sintering boiler, circuit printing and test machines, power-on testers, laser and other advanced equipment. Our technicians will do regular scheduled maintenance on these machines to guarantee them work well.
- c. High quality raw material.
- d. Strictly on-line control to assurance quality.