

ULTRA-PURE QUARTZ HEATING

The HCQ Quartz Inline Heater provides a minimal footprint, space-conscious design combined with ultra-pure, high-purity 100% quartz construction. The Isolated heating element virtually eliminates process contamination while multiple plumbing configurations ensure ease of operation.



FEATURES

Outstanding Cleanliness:

No ionic or bacterial contamination with 100% high purity quartz construction.

Easy Maintenance with Minimal Downtime:

Plug-in heater element is easily replaced in minutes. Fluid connections remain intact, eliminating the need for system re-qualification.

Reliable:

Patented purge cooling system significantly extends heater element life versus conventional designs.

Low Cost of Ownership:

Heating element can be field replaced without disturbing the plumbing connections or affecting the integrity of the chemistry.

Secondary Containment:

PTFE housing acts as a maintenance-free secondary containment vessel to help protect the environment from chemical spills.

Excellent Responsiveness:

Halogen lamps provide instantaneous start-up & rapid response with excellent temperature stability under varying flow rates.

No O-Rings:






Eliminates process contamination associated with o-rings. Leak-free operation assured.

No Dead Zones:

Tangential flow pattern eliminates stagnant zones in the heater. The heater is self-draining & self-venting (upon proper installation).

Low Pressure Drop:

Minimal pressure drop for high-circulation applications.

 <p>Temperature: Up to 185°C (365° F)</p>	 <p>Pressure: Up to 345 kPa (50 PSI)</p>
 <p>Watts: 0.75 to 12kw</p>	 <p>Certification: ETL certified to UL499 compliant, CE compliant, Conforms to SEMI S2 standards</p>
 <p>Volts: 208 to 480 volts, single or three phase</p>	

APPLICATIONS

- Semiconductor Wafer Cleaning

HCQ Quartz Inline Chemical Heater

SPECIFICATIONS

Wattages	750 to 12,000 watts .
Voltages	200 volts to 480 volts, single phase or 3 phase. Consult factory for specific wattage/voltage combinations available.
Temperature Limit	Up to 185°C (365° F)
Pressure Rating	Up to 345 kPa (50 PSI).
Inlet/Outlet	19mm (3/4") MNPT flare quartz connections.
Purge Gas	Patented system using 3.5 SCFM (min) clean dry air (CDA) or nitrogen (N ₂) 6.35mm (1/4") O.D. tube connector.
Flow Rate	Up to 100 lpm.
MTTR	10 minutes (with adequate access).
MTBF	In excess of 20,000 hours.
Temperature Accuracy	1° C, depending on operating conditions.
Heating Element	IR halogen lamps.
Housing	100% PTFE with viton o-rings (non-wetted). Conforms to FM material standards.
Safety Features*	Heater housing over-temperature shutoff & alarm ("J" type thermocouple and redundant bi-metallic snap switch). Purge gas verification & interlock. *Requires controller interface.

MODEL NUMBER BREAKDOWN

HCQ		1.5	-	208	1	1
HCQ Series	Wattage (kW)	Voltage	Phase	Configuration		
1.5 = 1,500	208	1 = Single Phase	001 = Standard			
2 = 2,000	240	3 = Three Phase				
2.25 = 2,500	380					
3 = 3,000	400					
4 = 4,000	415					
4.5 = 4,500	480					
5 = 5,000	440					
5.5 = 5,500	220					
6 = 6,000	200					
6.75 = 6,750						
7.5 = 7,500						
8 = 8,000						
8.3 = 8,300						
9 = 9,000						
10 = 10,000						
11.2 = 11,200						
12 = 12,000						

DIMENSIONS

