

ACCUHEAT®
MINI

QUARTZ IN-LINE HEATERS



IMTEC™

High Purity Quartz In-Line Heaters

ACCUHEAT MINI

The ACCUHEAT MINI series is designed to reduce space requirements while maintaining functionality and reliability. IMTEC was able to achieve this footprint reduction by developing a unique high purity flow path and utilizing resistive heating technology.

IMTEC has once again taken heating of high purity liquids to a new level of performance and reliability. Heating liquids using high purity materials in a harsh environment requires special skills and knowledge that can only be gained from experience.

For over 40 years, IMTEC's Engineers have been refining and improving the heated quartz bath and understand the critical needs of the Semiconductor and related industries.

The sum of that knowledge has been incorporated into the ACCUHEAT MINI In-line heater to create a product that not only performs, but simplifies installation and maintenance.

Exemplified by our long-standing ISO 9001 registration, our dedication to manufacturing process control assures that our customers receive uniformly high-quality products in a timely manner.

IMTEC offers a wide range of standard models to allow for easy integration into almost any application.

Key Product-Line Features

Uniform Conductive Heating

Unlike Infrared lamps, IMTEC's low mass Inconel heater provides even conductive heat over the entire quartz tube.

Since many common chemistries do not readily absorb IR heat, conductive heaters allow for more uniform heating regardless of the application.

IMTEC's conductive heaters also do not require any type of purge or cooling, making them easier to install and less expensive to operate.

High Efficiency

IMTEC's proprietary Power Modulator assures that the maximum amount of heat that can be absorbed by the liquid is applied. This allows for minimal heat-up times in varying conditions without wasting energy.

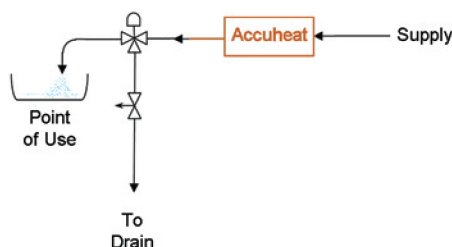
ACCUHEAT MINI Features

- PTFE sealed housing
- High purity quartz fluid path
- Zero maintenance required
- Horizontal or Vertical installation
- High temperature capability 200°C+
- Multiple over-temperature detection devices
- Quick process temperature ramp-up within seconds
- Unique compact design (*Typical Dimensions 5"W x 6.5"H x 9.5"L*)
- Tube-N-Tube design enables highly efficient heat transfer

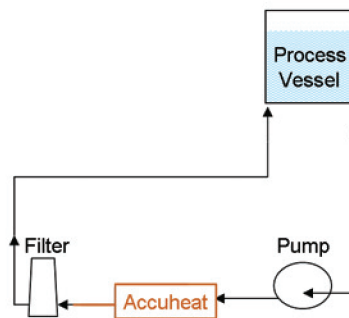


Applications

Single Wafer Point-Of-Use (POU)



Small Re-Circulating Loops



Zero Maintenance

- ◆ No Lamp replacement
- ◆ No Calibration
- ◆ No reflectors to clean
- ◆ Self Draining

Key Safety Features

Operating heaters in a harsh environment requires special safeguards.

All ACCUHEAT[®] models include these standard safety features:

- ◆ RTD provided for monitoring fluid temperature
- ◆ Power modulator monitors element temp to reduce excess heat inside housing
- ◆ Overtemp Thermocouple attached to heater element provided for redundant protection
- ◆ Overtemperature snap switch trips if heater is run dry
- ◆ Internal leak detect strip (requires external monitor)

Unsurpassed Reliability

- ◆ Heavy gauge pre-formed Inconel element can stand up to high stress conditions without breaking down
- ◆ Power modulator monitors heater element temp and prevents heat buildup inside the housing
- ◆ Sealed PTFE housing prevents chemical fumes from attacking internal components
- ◆ Internal leak detect strip (requires external monitor) gives early detection of chemical leaks
- ◆ All wiring is run in PFA conduit to prevent chemical attack

ACCUHEAT MINI Sizes & Specifications

Voltage: 200-240VAC
 Phase: single phase
 Wattages: 0.5 - 2.5 KW
 Max. Operating Temperature 200°C
 Max. Continuous Pressure 40PSI
 Max. Surge Pressure 60PSI