



Hydroheater®



## RECOMMENDED & PREVENTATIVE MAINTENANCE

By incorporating a recommended maintenance schedule for your Hydroheater®, processing and performance issues will be a thing of the past, helping ensure peak output results.

Hydroheaters require little maintenance as compared to other industrial heating systems, but proper maintenance and adjustment of their parts will extend the life of the heater, improve process efficiency and ensure your Hydroheater® performs to your precise heating needs. We have specialized field technicians, machinists, engineers and technical personnel to help you operate and maintain your steam heating valve. Our maintenance plans provide help at competitive prices.

### Weekly

1. Examine Hydroheater for any leaks of steam or water.

### Monthly

1. Ensure all external nuts and bolts are tight. Refer to the appropriate Hydroheater IOM manual (for a digital copy: login to our Knowledge Center or email [info@hydrothermal.com](mailto:info@hydrothermal.com) to be upgraded to customer access).
2. Verify the temperature control loop is working properly and maintaining temperature to within specified requirements.
3. Look for indirect signs of wear, i.e. - failure to shutoff or effectively control temperature.
4. Examine stem plug for unusual scale buildup.

### Yearly

Order repair and seal kits several weeks in advance of your annual maintenance shutdown to assure on-time delivery of all items.

1. Disassemble heater and check parts for wear
2. Examine discharge piping of heater for unusual scale build-up
3. Replace all seals
4. Replace stem packing
5. Replace worn components as needed

**Note:** Each Hydroheater is custom engineered - if new internals are needed, allow for manufacturing leadtime.



Varying levels of stem plug wear (depending on the application or how abrasive the fluids are, internals may wear faster).



Left to right: foreign objects may flow into the combining tube, cause damage and render the heater inefficient; disassembling the heater will show hidden build-up that hinders operation (pictured: starch build-up in the CTA has hardened and stopped rotation); internals may snap (pictured: retaining ring) and cause nozzle vibration which will result in damage to the body.

## Preventative Maintenance

These suggestions help keep Hydroheaters performing at 'like new' levels and provide a predictable maintenance schedule and budget.

### Basic

#### Properly maintain your Hydroheater system

1. Operation and maintenance training at start-up
2. Annually purchase recommended parts and seal kits
3. Keep the full written maintenance instructions
4. Purchase full maintenance kit every third year

### Intermediate

#### Best to prevent unscheduled stoppages and related costs

1. Operation and maintenance training at start-up
2. Yearly on-site maintenance technician visits and service
3. Annually purchase recommended parts and seal kits
4. Schedule a maintenance visit six months after yearly maintenance to fine-tune the heater
5. Purchase a full maintenance kit every third year

### Advanced

#### For mission-critical applications

1. Operation and maintenance training at your facility at start-up
2. Keep a spare heater in your inventory
3. Schedule yearly on-site visits to fine tune the heater set points
4. Consider rebuilding your unit - shot blast, actuator reconditioning stress test, safety inspection and bench set. Renewed performance warranty when unit is rebuilt.

