

## Recommended Maintenance Schedule

Hydroheaters need little maintenance as compared to other industrial heating systems, however 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 training personnel to help you operate and maintain your steam heating valve. Our maintenance plans offer predictable spends 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: log-in to our Knowledge Center and email [info@hydro-thermal.com](mailto:info@hydro-thermal.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. Replace all seals
3. Replace stem packing
4. Replace worn components as needed

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



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 owners of our highly engineered steam injection systems keep them 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 the 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

If your Hydroheater is in a mission critical application, consider this:

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

Customers can also find help by contacting our help desk at (800)952-0121 or [info@hydro-thermal.com](mailto:info@hydro-thermal.com). Download your specified Hydroheater installation, operations and maintenance manual from online in our Knowledge Center.

*Note: Level 2 access is required to download the manuals.*