

# Protect Your Steam Equipment

Why water quality, treatment, descaling, deliming, and maintenance matter.

RELIABLE STEAM STARTS WITH BETTER WATER.

FOOD FUELS  
POSSIBILITIES.™



*Built for  
what's next.®*

## 1 Why Water Matters



Water is the working ingredient in steam equipment.



Poor water quality leads to scale, corrosion, reduced steam output, and down time.



Mineral build-up acts like insulation and hurts heat transfer.



Even water that is safe to drink may still damage equipment.

CLEAN WATER KEEPS  
YOUR OPERATION COOKING.

## 2 Common Water Problems



**Hardness** (calcium & magnesium)  
— scale build-up on hot surfaces.



**Low pH / acidic water**  
— corrosion of metal components.



**Iron**  
— clogging, staining, and rust.



**Silica**  
— insulating deposits.



**High TDS / alkalinity**  
— scaling, spotting, and corrosive line issues.



**Low TDS / Hardness**  
— removing or destabilizing the protective layer, accelerating corrosion.



As little as 1/8" of scale can add  
**166%+ to fuel costs.**

## 3 Typical Water Quality Targets

| Parameter        | Other products (Steel) |
|------------------|------------------------|
| Hardness         | —                      |
| TDS              | < 60 ppm               |
| Total Alkalinity | < 20 ppm               |
| pH               | 6.8 – 7.3              |
| Silica           | < 1.3 ppm              |
| Chlorine         | < 1.3 ppm              |
| Chloramine       | —                      |
| Chloride         | < 25 ppm               |

For steel units, very soft water can remove or destabilize the protective surface layer and accelerate corrosion, especially at high temperatures.



Always follow the manual for your exact model.



If the incoming water is outside these limits, install proper water treatment.



LONGER EQUIPMENT LIFE



HIGHER EFFICIENCY



LESS DOWNTIME



GREATER PROFITABILITY



# Simple Steps. Big Results.

The right water treatment and maintenance program keeps your steam equipment performing at its best.

RELIABLE STEAM. GREAT FOOD. LONGER LIFE.

## 4 Water Treatment Game Plan



- 1 Have the test water analyzed before installation.
- 2 Match treatment to the local water and equipment volume.
- 3 Filter systems remove solids.
- 4 Softening / treatment systems reduce hardness minerals.
- 5 Reverse osmosis systems use fine membrane filtration for difficult water conditions.
- 6 Replace cartridges and maintain the treatment system on schedule.
- 7 Keep records of installation and maintenance.

## 5 Descaling vs. Deliming

### Descaling



Removing mineral scale from the boiler or steam generator, probes, and internal surfaces.

### Deliming



A chemical cleaning process that dissolves lime deposits. Think of it as targeted descaling for lime build-up.



**Do it before heavy build-up, causes slow heat-up, overflow, fill issues, or poor steam production.**

## 6 Routine Maintenance Schedule



### Daily

- Drain or blow down the unit. Brush soot from interior. Sediment, lime, and scale.
- Check line/strainer/compartment, clean strainer and drop gasket.
- Leave the door slightly open when not in use.



### Weekly

- Flush the water level control on boilers.
- Trip the safety valve once during operation.
- Clean the exterior and inspect drains.



### Monthly

- Delime the steamer, or more often if water conditions require it.



### Every 50-200 Days

- Inspect the boiler for scale build-up and descale if needed.



### Twice Per Year

- Have an authorized service technician inspect, clean, and adjust the unit.



## Important Reminders

PROTECT TODAY. PERFORM TOMORROW.

- Poor water quality related failures may not be covered under warranty.
- Avoid corrosive cleaners containing chloride, acids, or salts.
- Never spray water into electric controls.
- Following routine maintenance improves efficiency, reliability, and equipment life.