

Most water-fed cooking equipment uses steam for cooking, proofing, or glazing food products. All have one thing in common, they evaporate water by heating it to produce steam and this process leads to mineral scale formation. Poor water quality may cause the following:

- * Mineral scale build up on heat transfer surfaces from hard water.
- * Mineral scale build up on level sensing probes.
- * Chlorine/Chloramine induced corrosion in boiler / cooking cavity.

all leading to costly equipment repairs and reduced equipment life.

Evaporation - Where do the minerals go?

When water is heated and evaporated, the dissolved minerals must go somewhere. In boiler-based equipment, the dissolved minerals stay behind in the boiler. As steam is produced, the mineral content in the boiler will increase along with mineral scale formation. This is why it is very important to periodically blow down (drain) the boiler after 4-6 hours of operation.

Rule of thumb is that for every hour of a steam boiler operation, the amount of dissolved minerals including hardness in the boiler increases by the amount present in the incoming water. So if there is 200 mg/l of dissolved solids in the make up water, that will increase to 800 mg/l in the boiler after 3 hours of operation. The increase in dissolved minerals in the boiler also increase the rate at which scale will be produced. **This is why it is essential that the boiler is drained after 4-6 hours of operation. This one step will decrease water related issues alone by 50% even without any water filtration.**

BOILER BASED SOLUTIONS

SFES PRO Water Treatment Systems for use in boiler based equipment rely on the proven HydroBlend™ scale control technology.

HydroBlend™ controls mineral scale deposits by:

- * **Sequestering scale-causing minerals keeping them in solution.**
- * **Changing the shape of the precipitated scale-causing mineral so it does not have the ability to build up on itself.**
- * **Softening existing scale allowing it to be flushed from the system.**

SFES PRO Water Treatment Systems also provide chlorine removal for the prevention of chlorine induced corrosion in the boiler.

Most steamers and combination ovens have two water connections - treated water (boiler) and non-treated water (condensate/quench). Ensure that the filter systems are properly connected to only the treated water connection port.



SFES PRO Model:	Item #:	Service Flow Rate:	Rated Chlorine Capacity:	Connection Sizes:	Dimensions: H"xW"xD"	Min / Max Pressure PSI	Min / Max Temp. °F
TO/SSQD-10 Twin	310402	1.75 GPM	10,000 Gal.	1/2" MPT	15.25 x 9.25 x 4	20 / 125	35 / 100
TO/SSQD-16 Twin	310412	2.00 GPM	14,000 Gal.	1/2" MPT	20.85 x 9.25 x 4	20 / 125	35 / 100

The SFES PRO Combo Systems provide excellent protection from mineral scale deposits in boiler based steamers and combination ovens.

The SFES PRO Combo Systems also provide excellent mineral scale control on bakery equipment including proofers, deck ovens, and rack ovens.

For boilerless combination ovens, it is best to use the SFES CookSpec Reverse Osmosis systems.

Recommended filter replacement is 6 months in order to properly protect water-fed equipment. **Failure to replace filters on a timely basis will result in higher equipment maintenance and repair costs.**

Replacement Filters:

- TO-10 #310360 - 10" Sediment & Chlorine Removal Cartridge
- TO-16 #310364 - 16" Sediment & Chlorine Removal Cartridge
- SS-QD #310390 - 10" Scale Control Module for Series / Combo Systems



TOSSQD-10 TWIN



TOSSQD-16 TWIN