



## Protecting School Systems and Equipment



US Case Study

**Customer:** Fort Bend ISD, Texas

**Category:** Commercial

**Application:** Complete System Protection including water heaters, dishwashers etc.



**Hobart Dishwashing Equipment**



**70 Days After Installation**

**The Challenge:** Even though properly maintained a conventional salt based water softener at Fort Bend ISD (Independent School District) had proven to be ineffective at preventing scale. This resulted in scaling throughout the system particularly in the kitchen / cafeteria area. The main Hobart dishwashing equipment had to be opened up and descaled every week taking up staff time and consuming chemicals. Trays and dinnerware showed noticeable signs of scale.

The conventional salt based water softener was due for replacement and a \$53,000 unit had been proposed. However, Fort Bend's mechanical contracting firm suggested using a Fluid Dynamics product as an alternative solution.

**The Solution:** At less than a tenth of the cost of the proposed conventional salt based softener, a 2" Scaleton unit was specified to prevent scale in the buildings water system that included the cafeteria and its dishwashing equipment.

**Results:** After 70 days the dishwashing equipment was inspected and was found to be spotlessly clean. The delighted cafeteria supervisor made a point of being present to let us and senior staff members know that the dishwashing equipment, trays and dinnerware had been free of scale for several weeks. She requested "whatever you starting doing...please don't stop".

*Fort Bend's official testimonial follows...*



Gary,

In August 2011 a salt water softener in one of our high schools quit working and was beyond repair. We called TD Industries, our mechanical contracting provider, to replace it and they suggested that we consider using the products offered by Fluid Dynamics for the treatment of our hard water conditions. Following a presentation by Fluid Dynamics, we decided to test their equipment in this high school. We have significant problems in all of our campuses of scaling caused by hard water conditions.

We were skeptical as we have seen many options over the years with broad claims; however, we had faith in the advice of TD Industries and opted to give your equipment a try. Among the considerations for this was that the acquisition cost was a mere fraction of that of a salt water softener. Additionally, unlike a salt conditioner, your equipment has zero ongoing costs requiring no maintenance, power, space requirements or chemical usage in our school. We treated several problem areas in the school including the water heaters and kitchen. After approximately 70 days we had a meeting with TD Industries, Fluid Dynamics and members of our staff to view the results of the treatment. A particular problem we have had, even while using the salt conditioner, was our dishwasher in the cafeteria. It required full maintenance once a week in order to remove the built up scaling inside the dishwasher. Chemicals and manpower were required to clean this problem weekly. This group met at the dishwasher, which had not been serviced for several weeks to enable a proper test. Upon inspection, we were delighted to discover that there was no evidence of scaling in the dishwasher whatsoever. The scaling that had been present when the test began was also gone. The cafeteria supervisor also reported to us that the dishes, silverware, glasses and trays had cleared up and had no scaling on them for the "past several weeks". She stated that "whatever you started doing several weeks ago, please don't stop".

We are delighted to report that the equipment offered by Fluid Dynamics has been completely effective at treating the scaling problem that we have had at this school. And again, the cost of this equipment was also a fraction of the initial cost of the salt water softener and has eliminated the ongoing cost of the salt and maintenance of using the salt softener. This bears repeating as our district and all other districts are under significant budget pressure and this equipment is certainly effective in helping us with this difficult task. This equipment will also create a significant reduction in our maintenance budget for years to come. We further plan to begin installing this equipment in our new facilities and replacing other salt conditioners in our existing campuses in the district in addition to immediately install Fluid Dynamics equipment for treatment on our cooling towers. In summary, this equipment performed exactly as represented and we're delighted with the results, both from a performance and financial perspective.

Yours Truly,

Fort Bend ISD