



## Chemical Dosing & Monitoring System

An ISO 9001:2008 Certified Company



Steam Distribution | Steam Generation | Customized Package Solution | Steam Accessories | Steam Services

Volfram Systems Chemical Dosing system maintains the pH, TDS & Oxygen proportion of the Boiler leading to a healthy and longer life boiler. The dosing and monitoring of the chemical depending on the quality of the water collected in the feed tank. This dosing system will dose the most adequate amount of chemicals to maintain the best quality of feed water for better steam generation.

## Working Principle:

### OXYGEN SCAVENGER

- The presence of oxygen in Feed water depends on the Water Temperature. Higher the Feed Water temperature, lower the oxygen level in the water and Vice Versa. We need to maintain the low level of oxygen into the water to avoid corrosion of metals. Hence by monitoring the feed tank temperature we can control the proportion of Oxygen in the water and if found high can be controlled by dosing oxygen Scavenger.



### pH BOOSTER

- To ensure the non corrosiveness of the boiler sheet the pH of the Water feed to the must be maintain. pH booster circuit doses as well as monitor the pH of feed water with help of sample cooler ,3 way control Valve and the Controller.



### ANTI SCALANT

- To reduce the risk of scaling of the Boiler TDS auto blow down system is installed on the boiler and the blow down of the boiler water is done on the basis of TDS measured by the TDS sensor. The Anti Scalant circuit monitor the Quantity of the blow down done by the Auto blow down system and if found higher then doses the Anti Scalant in the Feed water to reduce the TDS proportion in the boiler.



**VOLFRAM** offers The pH Sensor provides reliable, flexible and powerful control for your water treatment program.



## Specifications:

- Range -2 to 16 pH units
- Resolution 0.01 pH units
- Accuracy  $\pm 0.01\%$  of reading

### Electrical: Input/Output

- Input Power 100 to 240 VAC, 50 or 60 Hz, 7 A maximum
- Fuse: 6.3 A

### Mechanical

- Display: 320 x 240 pixel monochrome backlit display with touch screen
- Operating Ambient Temp: -4 to 131 °F (-20 to 55 °C)
- Pressure: pH 0-100 psi (0-7 bar)\*
- Temperature: 50-158°F(10-70°C)\*
- Material: CPVC, Glass, FKM o-rings, HDPE,
- Process Connection: 1" NPTM, submersion

## Features:

- Single unit Skid mounted System
- Easy to install.
- Robust & low maintenance system
- Provided with sample cooler along with specially designed pH sensor for pH booster
- System is available with individual dosing and combined dosing as well
- System is available for chemical dosing of Boiler and Cooling tower as well

## Advantages

- Maintain the accurate proportion of the feed water parameter.
- Continuous monitoring and real time data collection.
- Optimize the chemical consumption and dosing.

# Volfram Boiler and Steam Accessories



**Steam Boilers**



**Condensate Recovery System**



**Rotating Plug Float Trap**



**Flow Meter**



**Pressure Gauge**



**SS Safety Valve**



**Non Return Valve**



**Steam Injector**



**Control Valve**