TRANSFORMATIONAL
PERFORMANCE SOLUTIONS

Water treatment for boilers, chillers & cooling towers

This development course is available in both virtual and in-person, instructor-led formats, it is a one-day course about Water treatment for boilers, chillers & cooling towers introducing what it takes to maintain the water quality in these systems and keep them operating efficiently.

Description:

While much planning goes into designing, installing and maintaining your facility's HVAC/R system, often little thought goes into water treatment of that system. This course is designed to help your employees overcome that. Precise planning can prevent serious operational problems and ensure system longevity.

Course Outline:

Discussion Topics

Boiler and Steam Waterside Problems

1. Scale
2. Corrosion and Pitting

Cooling Tower Problems

1. Scale
2. Corrosion
3. Biological Fouling

Properties of Water

1. Dissolved Gases and Minerals
2. Dissolved and Suspended Solids
3. Stability Index

Dr. Nathan C. Wright DM, CMRP, PMP, MLE, SMIEEE
Cel: (520) 254-9706 | Email: nwright@tps-solutions.com

Water Chemistry

1. pH
2. Alkalinity
3. Hardness
4. Chlorides
5. Conductivity
6. Cycles of Concentration

Pre-treatment Methods

1. Sodium-zeoldite water
2. Dealkalization
3. Deaeration
4. Filtration

Post-Treatment Methods

1. Chemicals for boiler water
2. Chemicals for cool water

Freeze Protection for Closed-Loop Systems

1. Ethylene Glycol
2. Propylene Glycol

Water Treatment Equipment

1. Selection
2. Installation
3. Maintenance

Controlling Water Treatment Program Costs

1. New Technologies for Old Systems

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