

Boiler Hydronic Presentation Outline

1. Objectives

- Provide basic information on water-related problems in boilers.
- Raise awareness about solutions to these problems.
- List the benefits of proper cleaning and treatment of systems.
- Offer technical assistance for water-related issues.

2. Water Basics

- Explanation of water as a solvent and its impurities.
- Types of water impurities: dissolved solids, suspended solids, and dissolved gases.

3. Measuring Water Impurities

- Units of measurement for water impurities (ppm, grains, conductivity, TDS, pH).
- Tools for measuring water impurities (conductivity meter, pH tester).

4. Hot Water Boilers

- Impact of heat exchanger metals on efficiency.
- Corrosion issues and their impact on boiler failure.
- Types of corrosion (oxygen, galvanic, MIC).

5. Scale and Deposits

- Causes and effects of scale in boilers.
- Impact of scale on efficiency.

6. Hydronic Chemical Products

- Overview of non-hazardous chemical products.
- Benefits of proper water treatment.

7. System Cleaning and Maintenance

- Importance of cleaning the system.
- Considerations for filling the system with water.

- Treatment of water/glycol systems.
- Benefits of adding treatment to water systems.

8. Glycol Systems

- Different types of glycols for various systems.
- Mixing and measuring glycol.
- Testing system fluid annually.

9. Conclusion

- Emphasis on the need for higher care in modern hydronic systems.