Balancing of Water & Air Systems

Are there cold and hot rooms in your office? Do people complain about the different temperatures or stagnant air in the office? If so, then your cooling system is out of balance. National averages indicate that most AC systems operate at a 50-60% of efficiency and are out of balance.

This training program builds on our basic and advanced AC courses and is all about how to move air / water to the proper place in a building; Air – for AC systems, Water – for Chiller Systems. This is a process of HOW to evaluate your system and adjust it for peak performance and efficiency. By doing so, you'll save money on energy use and prolong the life of your system's equipment. This course assumes a basic knowledge of HVAC principles.

WHAT THIS COURSE COVERS

- The Step-By-Step Procedure to Evaluate Current System Operating Conditions and Adjusting for System Balance
- Equipment and System Sizing Impact and How to Verify What You Have and What You Need.
- The Preliminary Procedures
- **Optional: Use Your Own Equipment and Balance Parts of Your Own Building (Third Day Add-On Option)**

WHO SHOULD TAKE THIS

- HVAC Maintenance and Repair Technicians
- Plant and Facility Maintenance Technicians and Managers
- Building Managers, Superintendents and Engineers
- Stationary Engineers
- Environmental Health & Safety Personnel
- Energy Management Personnel

COURSE OUTCOMES

- Learn the Concepts, Procedures, and Equipment for Air and Water System Balancing.
- Learn the Principles and Procedures for Kitchen Ventilation, Balancing Hydronic Systems, and Testing of Cooling Towers.
- **Optional: Performance of Air or Water Balancing Process. (Third Day Add-On Option)**

COURSE AGENDA

- Balancing of Water and Air Systems
- Preliminary Procedures
- Balancing Procedures
- Airflow Measurement
- Calculation of CFM for Heat Flow
- Kitchen Ventilation
- Principles and Procedures for Balancing Hydronic Systems
- Valves
- Water Balancing Procedures
- Expansion or Compression Tanks
- Series Loop
- Basic Testing of Chillers
- Field Performance Testing of Chillers
- Cooling Tower Testing

☑ Lecture ☐ Hands-on • ONSITE: 2-days (16 hours) • LIVE ONLINE: N/A