

## **Basic Steam Systems for Operators**

The proper operation of steam systems is essential to the sustained operation of critical facilities and mixed use buildings alike. Knowledge of components and applications of steam systems can increase the dependability and safe operation of a building's heating systems.

The purpose of this course is to provide instruction of basic steam system theory and principals as it applies to critical facilities and mixed use buildings. The instructor will use lectures, visual aids and example calculations to provide the optimum learning experience. Anyone who works on or around steam systems or boilers and safety personnel should attend this course.

Course Duration: 8 hours

### **BASIC STEAM SYSTEM UNDERSTANDING**

Fundamentals  
Definitions  
Nomenclature

### **STEAM BOILER CONTROLS**

Low water fuel cut-offs  
Feeders  
Pump controls  
Application  
Troubleshooting

### **STEAM REGULATING VALVES, PRESSURE REGULATORS AND TEMPERATURE REGULATORS**

Installation details  
Sizing pitfalls  
Troubleshooting

### **STEAM HEAT TRANSFER EQUIPMENT**

Types of equipment  
Applications  
Sizing  
Avoiding damage in steam heating equipment

### **STEAM TRAPS**

Types  
Operation  
Trap application pitfalls  
Trap sizing, selection details  
Troubleshooting

### **CONDENSATE HANDLING EQUIPMENT**

Condensate transfer equipment for low, medium, and high temperature  
Vacuum pumps  
Boiler feed pumps  
Installation details. troubleshooting