

## **Mechanical Equipment Serviceperson Training**

### **Steamfitters Local Union 420 Service Training Journeyworker Advancement Courses**

Conducted from September through April each year  
93 Hour Courses (31 nights @ 3 hours per night)

September Registration (taken on a first-come basis)

#### **JAT IA**

HVAC theory pertaining to the mechanical equipment servicing field. Includes review of Basic Electricity, Electric Motor Theory, Electric Motor Starters, Pressure Enthalpy Diagrams, Refrigeration Service Procedures, Lithium Bromide Absorption Cycle and Pneumatic Control Fundamentals.

#### **JAT IB**

Large Tonnage Centrifugal Chillers, Absorption Cooling Service and Troubleshooting Procedures, Reciprocating Compressors, Motor Alignment, Low Temperature Applications and Variable Frequency Drives. *(JAT IA Prerequisite)*

#### **JAT IIA**

Air Systems, VAV, VVT, Multizone, Economizers, Air Fans, Psychrometrics of Air and System Start, Test and Balance.

#### **JAT IIB**

Hydronic Heating and Cooling Systems, Back Flow Prevention, Centrifugal Pumps, Start, Test and Balance. *(JAT IIA Prerequisite)*

#### **Electronics I**

Introduction to DC and AC Electronics

#### **Electronics II**

Semiconductor Devices and HVAC System Applications *(Electronics I Prerequisite)*

#### **Electronics III**

Building Automation Computers, Operation and Service *(Electronics I & II Prerequisites)*

Topical mini-courses conducted at various times from September through April.

**Compressor Overhaul Courses conducted 2 nights per week (3 hours per night) for approximately six weeks depending upon the course. Limited to four (4) Journeyworkers per class. Appropriate work clothes required.**

*Sign up list at Service Training Office* (Classes are drawn from list)

### **Centrifugal Compressor Overhaul I**

Teardown, Overhaul and Alignment of York YT Centrifugal Compressor

### **Centrifugal Compressor Overhaul V**

Teardown and overhaul of Trane CVHE 3-stage Centrifugal Compressor

### **Centrifugal Compressor Overhaul VI**

Teardown and overhaul of Carrier 19XR Centrifugal Compressor

**Note: Centrifugal Teardown classes include seasonal service procedures such as, control calibration, purge overhaul, motor starter maintenance (including soft starters) and lubrication system maintenance.**

### **CFC Certification Training and Examination**

This eight (8) hour course, conducted evenings, on an as needed basis, is intended to prepare Journeyworkers to successfully pass the EPA approved Section 608 CFC Certification Examination provided via the United Association.

### **Residential HVAC Service and Installation**

This evening course, for members working in the Residential Field, is conducted one evening per week from September through May each year, covers all facets of residential heating & cooling service and installation.