# Residential scroll

## Be proficient—and successful with scroll technology in air conditioning applications!

Scroll technology has revolutionized the HVAC/R industry with energy efficient systems. This course will provide you with the knowledge you need to be proficient—and successful—with this advanced technology. Proper scroll service techniques and practices are presented clearly and with valuable insights into how to apply them efficiently in the real-world service environment. Copeland scroll compressor training also covers new refrigerant technologies, proven troubleshooting techniques and practices, and today's advanced systems technology which enables communication and coordination among various system components.



Every seminar offered from Copeland educational services is led by a Copeland certified instructor. The curriculum is carefully developed to provide a thorough and comprehensive educational experience.





#### Benefits for your business

- Improved customer service leads to greater customer satisfaction and retention
- · More accurate diagnosis and troubleshooting
- More effective repairs—with fewer costly callbacks
- Increased technician productivity—more calls per day mean more capacity for growing your business

#### Topics covered include

- System fundamentals
- · Refrigerants and oils
- · Applicable environmental regulations
- · Scroll technology principles and history
- Scroll components
- Scroll vs. reciprocating design
- Compressor failure modes
- Internal scroll safety controls
- Scroll compressor change out
- AC scroll applications
- · Digital technologies
- Copeland scroll UltraTech applications
- · Variable speed scroll
- Online tools and mobile applications



## **Program Details**

#### Who should attend this 4-hour program?

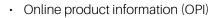
HVAC/R service and installation technicians and managers who troubleshoot air conditioning/heat pump systems that use scroll compressors.

#### Continuing education credits

- 4 hours of NATE-recognized continuing education credit towards recertification in air conditioning, air distribution and heat pump installation and service.
- Educational services is authorized by IACET to offer 0.4 CEUs for each program.

#### Training materials provided

- · Participant manual
- · Technical data sheets



#### Fee

• \$100 per course

#### Location

 Various locations throughout North America





More specialized technology days. For course schedules and registration information, visit copeland.com

#### Compressor applications & technologies

- · Compressor protection
- Compressor modulation
- · Retrofit refrigerants
- · Introduction to E2 system controllers

## Compressor & system troubleshooting

- Compressor troubleshooting
- · Refrigeration and compressor fundamentals
- Refrigeration system troubleshooting
- Electrical component troubleshooting

## Hands-on AC/refrigeration simulator

- Hands-on system training tailored to meet your needs
- Programmable to trigger specific installation, operations, and maintenance issues
- Complete working system includes critical components such as compressor, motor, valves, sensors, and controls

Authorized by IACET to offer 0.4 CEUs for this program



# Copeland educational services—we have the resources to deliver

Technical training is more important than ever. Copeland's educational services group delivers comprehensive training programs that not only cover essential service skills, they also keep you up-to-date on emerging technology. From handson seminars to online tools, Copeland provides the training you need, at a time and place that fits your schedule. Copeland is also a proud supporter of industry associations and certification programs.

# Copeland instructors—recognized industry leaders

Every Copeland course is led by a Copeland certified instructor. With exceptionally broad knowledge and understanding of refrigeration principles, technology and the industry as a whole, each of our instructors has extensive hands-on experience, and an innate understanding of the contractor's business needs and concerns



