

2011 Spring Training Catalog



WholeServer™



Why Train at RSC?

- Award winning & nationally recognized instructors
- Instructors are NATE or AHRI Certified
- **New!** Three week Steam Heat Program in Akron
- **New!** Eight week Commercial Refrigeration Program in Columbus
- **New!** Twelve week Sheet Metal Program in Cleveland
- **Three** labs in Cleveland: HVAC, Refrigeration & Sheet Metal
- **Two** labs in Columbus: HVAC & Refrigeration (Under Construction)
- All classes State license & NATE approved
- 3 hour classes vs. competitors' 2 hours (earns quicker state license credit)
- Extensive curriculum –
 - 1) Weekly classes with individual topics
 - 2) 2-8 week mini-series courses
 - 3) 12-18 week semester long programs.
- EPA Refrigerant Certification & NATE training / test sessions.
- NATE tests available online 5 days a week; 8am & 5pm.
- Visit us online at www.rsc2go.com

For Class Information & Registration Call:

Diane Carlin at 216-525-8236 or Jack Tobik at 216-525-8232

RSC Training Instructors

Robert Chervin

A 30 year, NATE certified industry veteran and graduate of Columbus State. Bob has owned his own HVAC company since 1979.

David Cirino

An 18-year NATE certified veteran of the HVAC industry and graduate of the West Side Institute of Technology. He currently works as a senior service technician.

James Filliez

Associated with the industry for over 55 years, specializing in steam and hydronic systems. He is an RSES Certificate Member Specialist (CMS) and currently owns his own company.

John Hillery

He is the former Service Manager for RSC's Tech Support Department, and prior to that had his own business. He is NATE certified and is presently retired, training part time.

James Price

Jim spent 18 years in the field as a service tech. He has two college degrees, is NATE certified, and now works for RSC as a Technical Service Advisor

Vince Rich

He is RSC's Commercial Service Manager. He has a degree from the University of Akron, spent 18 years as a commercial field technician and is AHRI certified. He has twice been selected as Trainer of The Year by Carrier Corporation.

Rick Rogers

Rick has 20 years of field experience, graduated from Columbus State, and is RSC's Service Manager for Central Ohio. He is NATE certified in multiple specialties.

Shawn Stapinski

Shawn is the Residential Service Manager for RSC with 15 years of prior field experience. He is a graduate of McKim Institute, NATE certified, and has twice been selected as Trainer of The Year by Carrier Corporation.

Richard Wirtz

Richard is a former professor at Columbus State, who has extensive field experience in HVAC, and holds four RSES Certificate Member Specialist designations, as well as being NATE certified.

Kenneth Shvorob

Ken is a 26 year, NATE certified industry veteran, with a degree from West Side Institute. After 15 years in the field, he worked for an HVAC wholesaler and is presently employed at a local mechanical contractor.

Steve Wagner

Steve has 37 plus years in HVAC, first as a tech, then a business owner, a Technical Service Advisor, and now the training manager for a major manufacturer. He is both RSES and NATE certified.



RSC was awarded distributor trainer of the year by Carrier Corporation for 2008 and 2009.

RSC Online HVACR Training

We have partnered with HVACREducation, an industry leader in providing quality online education. Over 50 courses to choose from; all NATE approved. A mentor is assigned to each student to assist in the learning process.

Advance your career in the comfort and convenience of your own home, and minimize time away from family. This is also an excellent resource to business owners who have newer techs, needing immediate training to become productive.

Great flexibility... take just one course, or take a whole sequence. In fact, you can take an entire 4-year Apprenticeship Program!

How To Access? Go to www.rsc2go.com and find the Training Tab; then look down the menu and locate HVACREducation, your total online training option.



HVACREducation.net
Online Learning for the HVAC/R Industry

3

NATE Online Testing

Need to take A NATE Test?

RSC now offers NATE testing online 5 days a week from 8am to 5pm. Get the results immediately. Call for additional details.

Contact Jack Tobik at
216-525-8232 or TobikJ@RefrigerationSales.net



Air Conditioning Technology Program

Spring Semester: Valley View & Columbus Locations

Investment: \$1795; plus \$169 book & materials fee.

ProTecs dealers: ask about your discount!

An intensive 18 week, one-night-a-week course designed for the entry or intermediate level service / install technician who wants to advance his air conditioning skills. Includes classroom and hands-on lab activities with NATE certified instructors.

Students take the AHRI Industry Competency Exam (I.C.E.) at the end of the program to obtain certification.

State-of-the-Art HVAC Labs

Our spacious lab includes 10 operational furnaces and air conditioners, with both newer and older models, providing a real world, hands-on understanding.



Topics Covered:

- Electrical for A/C
- Refrigerant cycles
- A/C Components
- Compressors
- Controls
- Standard operating conditions
- Safety
- Heat Pumps
- Evacuation and charging
- Refrigerant handling
- A/C troubleshooting

Class Schedule

Cleveland:

January 26th to June 1st, 2011

Wednesday evenings,

6:00 PM to 9:30 PM

Instructor: Shawn Stapinski

9450 Allen Drive - Suite A,
Valley View, Ohio 44125

Columbus:

January 25th to May 31st, 2011

Tuesday evenings,

6:00 PM to 9:30 PM

Instructor: Rick Rogers

2571 Silver Drive,
Columbus, Ohio 43211

Contact Diane Carlin @ 216-525-8236 or CarlinD@RefrigerationSales.net

Commercial Technology Program

Spring Semester: Valley View Location.

Investment: \$1795, plus \$169 books and materials fee.

ProTecs dealers: ask about your discount!

An intensive 18 week, one-night-a-week course designed for the HVAC Technician who wants to move into light commercial service, or for an existing tech who wants to advance his commercial skills. Includes classroom and hands-on lab activities.

Students take the AHRI Light Commercial Exam at the end of the program to obtain certification.

State-of-the-Art HVAC Lab

5

Our HVAC lab includes heating and cooling systems, a ducted rooftop unit, semi-hermetic compressors, and a commercial air handling unit which provides a real world, hands-on understanding of commercial HVAC.

Topics Covered:

- Commercial fundamentals
- Rooftop installations
- Rooftop operating cycles
- Economizers
- Compressors
- Wiring
- Controls
- Troubleshooting
- Commercial splits
- Refrigerant piping
- Maintenance
- Ducting & air flow
- Chiller operation

Class Schedule

January 25th to May 31st 2011

Tuesday evenings:

6:00 PM to 9:30 PM

Instructor: Vince Rich

9450 Allen Drive, Suite A,
Valley View, Ohio 44125



Sheet Metal Survival Skills

Spring Semester: Valley View Location.

Investment: \$1395; includes tuition, books, tools, & materials.

ProTecs dealers: ask about your discount!

**Highly
Acclaimed!**

RSC is pleased to announce **our 2nd** sheet metal training program beginning February, 7th in Valley View and running for 12 consecutive Mondays through April 25th, 2011, from 6:00pm to 9:30pm. This course is geared for the service tech or installer who needs basic sheet metal installation skills, enabling them to be more productive in the field.

Topics Covered:

- Types of fittings & uses
- Safety
- Hand tools
- Machines
- Fasteners & patterns
- Cutting Sheet Metal – take offs, dove tails, & start collars
- Folding edges & making seams
- Duct fabrication I - elbows, plenums, flanges
- Duct fabrication II – transitions, offsets



6

Complete Lab w/: layout tables, hand tools, 8' brake, 4' brake, shear, Pittsburgh, rollers, and Easy edger.

Class Schedule

February 7th to April 25th, 2011

Monday evenings, 6:00 PM to 9:30 PM

Instructor: Shawn Stapinski

9450 Allen Drive, Suite A, Valley View, Ohio 44125



Bonus – \$269 Value!

Each student receives 11 sheet metal tools and tool bag.

Contact Diane Carlin @

216-525-8236 or

CarlinD@RefrigerationSales.net



Commercial Refrigeration

Spring Semester: Columbus Location.
Investment: \$795 + \$169 book and material fee



Don't miss this 8-week program aimed at the residential/light commercial tech who wants to acquire commercial refrigeration skills. You'll get the classroom knowledge, plus valuable hands-on lab experiences you'll need to succeed.

Topics Covered:

- Refrigeration cycle
- Metering Devices
- Controls & Accessories
- Evacuation/charging
- Supermarket refrigeration
- Walk-in freezers & coolers
- Ice machines
- Troubleshooting

Class Schedule

March 3, 2011 to April 21, 2011

Thursday evenings, 5:30pm to 8:30pm

Instructor: Richard Wirtz

Contact Diane Carlin @ 216-525-8236 or CarlinD@RefrigerationSales.net

Steam Heat

Spring Semester: Akron Location.
Investment: \$295



The successor to our highly rated Hydronics Series, Steam Heat is aimed at intermediate and advanced techs who want to improve their knowledge and troubleshooting skills. This 3-part series is one of its kind; good training on this subject is hard to find.

Topics Covered:

- Hydronic & steam heat differentiation
- System components
- Piping practices
- Troubleshooting

Class Schedule

March 2nd, 9th, & 16th

Wednesday evenings, 5:30pm to 8:30pm, 175 East South Street, Akron

Instructor: Jim Filliez

Contact Diane Carlin @ 216-525-8236 or CarlinD@RefrigerationSales.net

Valley View – Spring 2011 Skills Training Schedule

RSC | 9450 Allen Drive | Valley View, OH 44125

Investment: \$109 RSC customers, \$89 ProTecs, unless noted otherwise.

Date	Class Title	Instructor	Times
1/3	Heat Exchanger Inspection Methods	Jim Price	5:30p – 8:30p
1/10	Air Flow Management	Jim Price	5:30p – 8:30p
1/17	Diagnosing Compressor Failure	Jim Price	5:30p – 8:30p
1/24	NATE A/C & Heat Pump Test Prep Class	Dave Cirino	5:30p – 8:30p
1/27	Rooftops w/410a	Vince Rich	8:30a – 12:30p
2/9	Understanding Wiring Diagrams	John Hillery	8:30a – 12:30p
2/10	Geothermal Install, Service & Troubleshooting	Ken Shvorob	5:30p – 8:30p
2/17	NATE Core Test Prep Class	Dave Cirino	5:30p – 8:30p
2/24	Economizers	Vince Rich	8:30a – 12:30p
3/1	NATE Testing - All Levels Offered	Jim Price	8:30a – 12:30p
3/2	It's in The Can - Compressors	John Hillery	8:30a – 12:30p
3/10	Commercial Splits	Vince Rich	8:30a – 12:30p
3/17	Venting & Combustion Air	Ken Shvorob	5:30p – 8:30p
3/24	EPA Refrigerant Test & Class Fee: \$195 includes class, book & test	Dave Cirino	5:30p – 8:30p
3/31	Proper Evacuation & Charging	Ken Shvorob	5:30p – 8:30p
4/7	Air Conditioning Troubleshooting	Jim Price	5:30p – 8:30p
4/13	R-410a Refrigerant	John Hillery	8:30a – 12:30p
4/21	48PG Rooftop Class	Vince Rich	8:30a – 12:30p
4/28	TXV Service & Troubleshooting	Gregg Melzer	5:30p – 8:30p
5/5	Understanding Heat Pumps	Ken Shvorob	5:30p – 8:30p
5/11	Brazing & Coil Repair	John Hillery	8:30a – 12:30p

8



Classes Are State License & NATE Certified*

Akron – Spring 2011 Skills Training Schedule

RSC | 175 East South St. | Akron, OH 44311

Investment: \$109 RSC customers, \$89 ProTecs, unless noted otherwise.

Date	Class Title	Instructor	Times
2/16	Electrical Troubleshooting	Ken Shvorob	5:30p – 8:30p
2/17	Rooftops w/R-410a	Vince Rich	8:30a – 12:30p
3/2	Steam Heat #1	Jim Filliez	5:30p – 8:30p
3/9	Understanding Wiring Diagrams	John Hillery	8:30a – 12:30p
3/9	Steam Heat #2	Jim Filliez	5:30p – 8:30p
3/16	Steam Heat #3	Jim Filliez	5:30p – 8:30p
3/23	It's In The Can - Compressors	John Hillery	8:30a – 12:30p
4/7	Commercial Splits	Vince Rich	8:30a – 12:30p
4/11	EPA Refrigerant Class & Test Fee: \$195 includes class, book & test	Dave Cirino	5:30p – 8:30p
4/14	Proper Evacuation & Charging	Ken Shvorob	5:30p – 8:30p
5/12	48PG Rooftops	Vince Rich	8:30a – 12:30p
5/12	A/C & Heat Pump Troubleshooting	Ken Shvorob	5:30p – 8:30p

9

Chillicothe – Spring 2011 Skills Training Schedule

Scioto Township Hall | 164 South Watt St. | Chillicothe, OH 45601-3573

Investment: \$109 RSC customers, \$89 ProTecs, unless noted otherwise.

Date	Class Title	Instructor	Times
2/24	Air Flow Management	Rick Rogers	5:30p – 8:30p
3/24	A/C & Heat Pump Troubleshooting	Rick Rogers	5:30p – 8:30p
4/14	Electrical Troubleshooting	Rick Rogers	5:30p – 8:30p



Classes Are State License & NATE Certified*

Columbus – Spring 2011 Skills Training Schedule

RSC | 2571 Silver Dr. | Columbus, OH 43211

Investment: \$109 RSC customers, \$89 ProTecs, unless noted otherwise.

Date	Class Title	Instructor	Times
1/6	Furnace Troubleshooting	Rick Rogers	5:30p – 8:30p
1/20	TXV Service & Troubleshooting	Larry Hammond	5:30p – 8:30p
2/3	R-410a Refrigerant	Rick Rogers	5:30p – 8:30p
2/16	NATE - A/C & Heat Pump Test Preparation	Bob Chervin	5:30p – 8:30p
2/23	NATE Core Test Preparation	Bob Chervin	5:30p – 8:30p
2/25	NATE Test - All Levels Offered	Rick Rogers	8:30a – 12:30p
3/9	EPA Refrigerant Class & Test	Bob Chervin	5:30p – 8:30p
3/21	Electrical Troubleshooting	Steve Wagner	5:30p – 8:30p
4/11	Air Flow Management	Steve Wagner	5:30p – 8:30p
4/28	A/C & Heat Pump Troubleshooting	Rick Rogers	5:30p – 8:30p
5/12	Diagnosing Compressor Failures	Rick Rogers	5:30p – 8:30p
5/19	ECM Motor Technology	Rick Rogers	5:30p – 8:30p

10

Toledo – Spring 2011 Skills Training Schedule

RSC | address | Toledo, OH

Investment: \$109 RSC customers, \$89 ProTecs, unless noted otherwise.

Date	Class Title	Instructor	Times
2/14	Air Flow Management	Jim Price	5:30p – 8:30p
2/28	Electrical Troubleshooting	Jim Price	5:30p – 8:30p
3/7	R-410a Refrigerant	Jim Price	5:30p – 8:30p
4/4	A/C & Heat Pump Troubleshooting	Jim Price	5:30p – 8:30p
5/2	Diagnosing Compressor Failures	Jim Price	5:30p – 8:30p
5/16	The 6 Minute Evacuation Challenge	Jim Price	5:30p – 8:30p



Classes Are State License & NATE Certified*

YES! Register Me For Skills Training Classes!

Contact Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

Email: _____

Employer: _____

Class(es) you are registering for:

Name: _____ Class: _____

11 Name: _____ Class: _____

Name: _____ Class: _____

Name: _____ Class: _____

Method of Payment:

Charge my account Cash, check or credit card

Investment: \$109 RSC customers, \$89 ProTecs

Please Mail or Fax Registration Form

Cleveland:

Fax: 216-525-8180,
Attn: Diane Carlin

Mail: Refrigeration Sales Corp.
9450 Allen Drive - Suite A,
Valley View, Ohio 44125

Questions? Contact Diane
Carlin at 216-525-8236 or
CarlinD@RefrigerationSales.net

Columbus:

Fax: 614-299-7800
Attn: Jana Luft

Mail: Refrigeration Sales Corp.
2571 Silver Drive
Columbus, Ohio 43211

Questions? Contact Jana Luft at
614-299-2500 or
LuftJ@RefrigerationSales.net



**Classes Are State License &
NATE Certified***

YES! Register Me For The Technology Training Programs!

Student Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

Email: _____

Employer: _____

Programs you are registering for:

- A/C, Northeast Ohio - \$1795 + \$169
- A/C, Central Ohio - \$1795 + \$169
- Commercial Skills, Northeast Ohio - \$1795 + \$169
- Sheet Metal Survival Skills, Northeast Ohio - \$1395
- Commercial Refrigeration, Central Ohio - \$795 + \$169
- Steam Heat, Northeast Ohio - \$295

12

Method of Payment*:

- Charge my account Cash, check or credit card

Please Mail or Fax Registration Form

Cleveland:

Fax: 216-525-8180,
Attn: Diane Carlin

Mail: Refrigeration Sales Corp.
9450 Allen Drive - Suite A,
Valley View, Ohio 44125

Questions? Contact Diane
Carlin at 216-525-8236 or
CarlinD@RefrigerationSales.net

Columbus:

Fax: 614-299-7800
Attn: Jana Luft

Mail: Refrigeration Sales Corp.
2571 Silver Drive
Columbus, Ohio 43211

Questions? Contact Jana Luft at
614-299-2500 or
LuftJ@RefrigerationSales.net

* Financing option for 8 to 18 week classes: Contractors with an account in good standing may choose 60 day terms.

Skills Training Class Descriptions

R-410A – This class addresses the many myths about the replacement of R-22 with R-410-A. Topics include the Montreal Protocol, proper refrigerant handling, piping, oils, service techniques, and safety requirements. Class is state license and NATE certified for 3 hours.

ECM Motor Technology - Learn how to accurately, and efficiently troubleshoot ECM-driven motors. Become familiar with ECM versions 2.1, 2.5, 3.0, and x-13. Topics include motor identification, module replacement, identifying failures, and tech tips. Course is state license and NATE certified for 3 hours.

EPA Refrigerant Certification – Course prepares attendees to take the EPA Section 608 Refrigerant Certification Test. Subject material includes core, small appliances, high pressure appliances, and low pressure machines, such as chillers. EPA test concludes second half of session. Course is state license and NATE certified for 3 hours.

Brazing & Coil Repair – This class enables students to repair copper coils without destroying them. Covers oxy/acetylene, acetylene-only, nitrogen propane, soft solder, and silver solder techniques. Hands-on practice for maximum effectiveness. Course is state license and NATE certified for 3 hours.

Wiring Diagrams – The ability to read and interpret wiring diagrams is essential for a technician. This course covers types of diagrams and familiarization, wiring diagram reading, and troubleshooting. Course is state license and NATE certified for 3 hours.

Rooftops – Covers the installation, operation, and troubleshooting of Carrier/Bryant rooftop package units from 3 to 25 tons with R-410a refrigerant. Subjects include the IGC board, compressor lockout, accutrol metering device, and economizer logic controls. State license and NATE certified for 3 hours.

NATE Training: Core & A/C, Heat Pumps – Prep for both the NATE Core and A/C or Heat Pump Exams. Core covers soft skills, tools, safety, math, comfort fundamentals, and electrical. A/C & Heat Pumps reviews refrigeration principles, heat properties, and measurement. NATE & state approved for 3 hours.

Furnace Troubleshooting – Addresses troubleshooting techniques for standing pilot, natural draft, draft-induced, and condensing furnaces. Topics are: sequence of operation, combustion air and venting, gas & ignition controls, electrical, and troubleshooting. State and NATE approved for 3 hours.

Heat Exchanger Inspection Methods – There just isn't one way to test all heat exchangers. Using the proper equipment will increase testing proficiency. Class covers: heat exchanger ID, designs, problem areas, failures, and different testing methods. State license and NATE approved for 3 hours.

Economizers – This class will cover the initial set-up, controls, operation, and troubleshooting of Carrier factory installed and Micrometal economizers. Also addresses the operation and troubleshooting of Johnson and Honeywell logic controls. State license and NATE approved for 3 hours.

Commercial Split Systems – Reviews the installation, operation, and troubleshooting of Carrier commercial split system equipment. Subjects are: system plus-/ minuses, piping, oil return, TXV's, capacity control, low ambient, and hot gas bypass. State license and NATE approved for 3 hours.

Oil Heating – This class will guide participants through a proper set-up for clean, efficient operation. Topics addressed are component familiarization, oil delivery system, venting & combustion air, start-up and check-out, and troubleshooting techniques. State license and NATE approved for 3 hours.

It's In The Can – Do you know what's going on inside a compressor? What should be happening? What are the operating characteristics, safety considerations, and effective troubleshooting techniques? All of these will be covered, plus how to condemn a compressor. State license and NATE approved for 3 hours.

Air Conditioning and/or Heat Pump Troubleshooting - This timely topic will discuss how to troubleshoot refrigeration circuits, fixed and non-fixed metering devices, compressors, and electrical failures. It will also include diagnosing system charge problems, non-condensables, and calculating airflow. Heat pumps include reversing valves and the defrost process. State and NATE certified for 3 hours.

Airflow & Duct Troubleshooting – Topics will include determining proper static pressure, poor duct practices, using a duct calculator, calculating actual airflow, assessing system adequacy, return & supply grille locations, installation & troubleshooting tips. State license and NATE approved for 3 hours.

14

The 6 Minute Evacuation Challenge – Learn how to evacuate a refrigeration system quickly, properly accurately down to 500 or less microns and hold it...with all refrigerants. We've demonstrated it numerous times on a 50lb cylinder in 6 minutes or less. State and NATE license certified for 3 hours.

Diagnosing & Preventing Compressor Failures – Compressors don't die of old age...they're murdered! Discover how to diagnose and prevent hermetic compressor failures by understanding compressor operation, troubleshooting to the root cause, and test procedures. State & NATE approved for 3 hours.

TXV Installation, Service, & Troubleshooting – Manufacturers are using TXV's to achieve higher SEER's. How well can you troubleshoot them? Get up to speed on the refrigeration cycle and components, theory of TXV's, installation tips, troubleshooting, & servicing. State license/ NATE approved for 3 hours.

Geothermal Install, Service & Troubleshooting – This class will equip you to: understand equipment installation, operation, and maintenance, pressure drop calculations, heat of extraction/exhaustion, desuperheaters, controls, and troubleshooting. State license/NATE approved for 3 hours.

