

Phase 5 Overview

Real Work. Real Thinking.

Congratulations on reaching Phase 5 of the Department of Real Work (DRW) training program. This phase is intended for certified technicians who are ready to take the next step in their development through a Refrigerated Dryer curriculum.

Most of this curriculum is self-paced, but there are instructor-led, hands-on sessions that will need to be scheduled in your local shop. These sessions should be led by an experienced technician who is skilled in refrigeration work, including brazing, soldering, refrigerant recovery, charging, and system troubleshooting.

In this phase, you'll build upon the knowledge gained in Phases 1-4 as you develop a deeper understanding of refrigerated dryers & refrigeration systems. You will learn how components function, how heat moves through a system, and how to apply that knowledge when troubleshooting equipment in the field.

In addition to technical knowledge, you will develop hands-on skills in brazing, soldering, leak testing, refrigerant recovery, evacuation, charging, and system repair. Success in this phase requires active participation in both the self-paced and instructor-led portions of the curriculum, with a focus on understanding not only what to do, but why it is done and how it affects overall system performance.

At the end of this program, you will be prepared to troubleshoot and repair basic refrigerated dryers, safely handle refrigerants and refrigeration equipment, successfully complete the Phase 5 Final Practical Examination, and obtain your EPA certification.

Learning Block Structure

There'll be 9 Learning Blocks, each following a consistent structure designed to build technical knowledge, critical thinking, and real-world troubleshooting skills.

Success in Phase 5 requires more than completing assignments. Focus on understanding system behavior, thinking through problems methodically & developing the confidence to evaluate + solve real-world issues.

Absorb *Part 1*

This is where you absorb the material. Learning resources may include LMS courses, training manuals, Tech Direct articles, videos, and other technical resources. During this stage, focus on understanding the concepts, taking notes, and identifying questions that arise as you work through the material.

Articulate *Part 2*

This is where you process and apply what you have learned. Each Learning Block contains technical questions designed to help you explain key concepts, system relationships, and troubleshooting considerations in your own words. Focus on demonstrating why the information is important and how it applies in the field.

Master *Part 3*

This is where knowledge becomes application. Mastery consists of scenario-based field evaluations designed to strengthen your troubleshooting process and technical judgment, or instructor-led hands-on skill development activities where you practice and apply the skills learned throughout the curriculum.

Block Progress Tracker

Block 1 <input type="checkbox"/>	Block 2 <input type="checkbox"/>	Block 3 <input type="checkbox"/>	Block 4 <input type="checkbox"/>	Block 5 <input type="checkbox"/>	Block 6 <input type="checkbox"/>	Block 7 <input type="checkbox"/>	Block 8 <input type="checkbox"/>	Block 9 <input type="checkbox"/>
Heat Transfer & System Fundamentals	Components & Control Devices	System Relation & Field Application	Intro to Brazing & Soldering	Dissimilar Metals	Refrigerant	EPA Certification	Final Hands-On Session	Final Phase Test

Block Tracker

Name: _____

Phase Start Date: _____



Refrigeration Fundamentals

- Heat Transfer
- Sensible & Latent Heat
- Refrigeration Cycle
- BTU Concepts
- Superheat
- Subcooling
- P-T Charts
- Saturated Temperature

Components & Controls

- Compressors
- TXVs
- Capillary Tubes
- HPCO / LPCO
- Fan Cycling Controls
- Liquid Line Solenoids
- Glycol Pumps
- Condensate Drains

Service & Field Application

- Troubleshooting Methodology
- Refrigerant Recovery
- Vacuum Procedures
- Refrigerant Charging
- Leak Testing
- Nitrogen Purging
- Brazing & Soldering
- EPA Requirements

Review Topics

Program Expectations:

Technicians are expected to complete all assigned Learning Blocks, participate in instructor-led training sessions, complete hands-on exercises, and demonstrate an understanding of both the technical concepts and practical skills presented throughout the curriculum.

EPA Certification Requirement:

Successful completion of Phase 5 requires obtaining **EPA 608 Certification**. Technicians are responsible for completing the required study materials, practice examinations, and certification testing associated with **Block 7**.

Final Practical Examination:

Upon completion of all Blocks, you'll participate in a practical evaluation covering refrigerant recovery, pressure testing, charging, brazing, soldering, and troubleshooting. You must demonstrate technical knowledge and hands-on competency to successfully complete Phase 5.

Phase 5 Completion Reqs.

Real Work, Real Thinking — **Real Competence.**

To successfully complete Phase 5, technicians must:

- Complete all 9 Learning Blocks
- Complete all Absorb, Articulate & Master assignments
- Participate in all req'd instructor-led training sessions
- Demonstrate proficiency in brazing & soldering
- Pass the EPA 608 Certification Examination
- Successfully complete Phase 5 Final Practical Exam

Requirements