

System Relationships & Field Application

Phase 5 **BLOCK 3**

Phase 5 — Block 3 Overview

Learning Block 3 focuses on the relationships between pressure, temperature, phase change, and overall refrigeration system performance. Technicians will learn how to interpret P-T charts, evaluate saturated temperature conditions, and understand how refrigeration system readings relate to real-world operation.

Building upon the concepts introduced in Blocks 1 and 2, this Learning Block emphasizes diagnostic thinking and the ability to connect system measurements, component behavior, and field symptoms to accurately troubleshoot refrigerated dryer performance issues.

Block Completion Requirements

For Block 3, complete all requirements listed below. Assigned *Absorb* resources can be accessed through the learning platform. Contact your mentor or supervisor if you need assistance with any topic or requirement.

1. Review all *Absorb* resources
2. Complete all Articulate questions
3. Complete the Mastery Evaluation

Absorb Resources

Refer to the DRW Learning Block online for the complete list of assigned resources for this block. Topics to review include:

AST580 TRAINING MATLS.

- Dryers at a Glance
- Alarm Lists
- DPC Controller Operation
- Refr. Troubleshooting

SUPPLEMENTAL

- Refr. Dryer Alarm Interpretation
- Controller Operation References
- Manufacturer Resources
- Real-World Troubleshooting

SYSTEM PERFORMANCE

- Pressure-Temp. Relationships
- Saturated Temperature Concepts
- Refrigeration System Diagnostics

Resources

Key Competencies

By completion of this Learning Block, technicians should demonstrate competency in:

- | | | |
|--|--|--|
| <input type="checkbox"/> Saturated Temperature Fundamentals | <input type="checkbox"/> DPC Controller Operation | <input type="checkbox"/> Field Symptom Analysis |
| <input type="checkbox"/> Pressure-Temperature Relationships | <input type="checkbox"/> Suction Pressure Evaluation | <input type="checkbox"/> Root Cause Identification |
| <input type="checkbox"/> P-T Chart Interpretation | <input type="checkbox"/> Discharge Pressure Evaluation | <input type="checkbox"/> High Pressure Condition Diagnostics |
| <input type="checkbox"/> Refrigerant Phase Change Analysis | <input type="checkbox"/> Superheat Interpretation | <input type="checkbox"/> Refr. Dryer Troubleshooting Methodology |
| <input type="checkbox"/> Refr. System Performance Evaluation | <input type="checkbox"/> Subcooling Interpretation | <input type="checkbox"/> Real-World System Evaluation |
| <input type="checkbox"/> Refrigeration System Diagnostics | <input type="checkbox"/> Refrigeration Component Interaction | |
| <input type="checkbox"/> Alarm Recognition & Interpretation | | |

Competencies

Name: _____

Phase Start Date: _____