

Brazing and Soldering of Dissimilar Metals

Phase 5

BLOCK 5

Phase 5 — Block 5 Overview

Block 5 builds upon brazing + soldering fundamentals by focusing on dissimilar metal connections commonly found in refrigeration systems. You'll develop an understanding of proper material selection, component protection, overheating

prevention, and nitrogen purging techniques. The concepts and skills presented in this block support safe refrigeration piping repairs, component replacement, and field service procedures throughout Phase 5.

Block Completion Requirements

Access *Absorb* resources through DRW platform & contact a mentor/supervisor for topic assistance. This Mastery is instructor-led + must be completed with a Senior/Master Technician with extensive refrigeration systems experience.



1. Review all *Absorb* resources



2. Complete all *Articulate* questions



3. Complete the **Instructor-led Mastery**

Absorb Resources

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

ASSIGNED VIDEOS

- Brazing with Dissimilar Metals

TECH DIRECT ARTICLES

- Brazing Techniques w/Copper Tube
- Proper Brazing Procedure

REFR. SERVICE SKILLS

- Dissimilar Metal Brazing

Resources

Key Competencies

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

- | | | |
|---|--|--|
| <input type="checkbox"/> Dissimilar Metal Brazing | <input type="checkbox"/> Copper-to-Copper Connections | <input type="checkbox"/> Overheating Prevention |
| <input type="checkbox"/> Material Selection & Compatibility | <input type="checkbox"/> Dissimilar Metal Connections | <input type="checkbox"/> Joint Inspection & Quality Verification |
| <input type="checkbox"/> Brazing Rod Selection | <input type="checkbox"/> Nitrogen Purging Practices | <input type="checkbox"/> Brazing vs. Soldering Applications |
| <input type="checkbox"/> Flux Selection & Application | <input type="checkbox"/> Component Protection Techniques | <input type="checkbox"/> Safe Refrigeration Piping Practices |

Competencies

Mastery

Instructor-Led Skills Session
Brazing and Soldering of Dissimilar Metals

Complete **Assessment Tasks** with an instructor, then return to DRW platform to document:

- **Safety** — Review flame safety, PPE, firewatch duties + safe handling of brazing equip.
- **Preparation** — Clean + prep tubing + fittings for soldering + brazing applications.
- **Materials** — Identify proper solder, brazing rods, fluxes + fillers for copper-to-copper & dissimilar metal joints.
- **Nitrogen Purging** — Demonstrate proper nitrogen purge setup + explain its purpose during brazing.
- **Practice** — Complete (3) soldering and brazing exercises involving dissimilar metal connections.
- **Development** — Discuss overheating prevention, component protection & skill development.

Name: _____

Phase Start Date: _____

DRW