

SECTION 15052
BRAZING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including General and Supplementary Conditions apply to this Section.

1.2 SUMMARY

- A. This Section includes fabrication and installation requirements for piping systems.
- B. Related sections include the following:
 - 1. Division 15, Section 15112 "Compressed Air Piping (Plant Air) Systems"

1.3 REFERENCES

- A. American Society of Mechanical Engineers (ASME)
 - 1. ASME B31.3-96, Process Piping.
 - 2. ASME B31.5-92, Refrigeration Piping.
 - 3. ASME Boiler and Pressure Vessel Code, Section IX-99:
"Qualification Standard for Welding and Brazing Procedures, Welders, Brazers, and Welding and Brazing Operators".
- B. American Welding Society (AWS)
 - 1. AWS A5.8-92, "Specification for Brazing Filler Metal".

1.4 SUBMITTALS FOR APPROVAL

- A. Brazing Procedure Specifications and Procedure Qualification Records (PQRs) prior to brazing.
- B. Brazer Qualification Records (BQRs) prior to brazing.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Filler Material: Table 1 lists filler material for brazing applications.

Table 1		
Section	Service	Filler material
15112	Compressed Air (Plant Air) Piping	BCuP-5 per AWS A5.8
15125	Direct Expansion (DX) Refrigerant Piping	BCuP-5 per AWS A5.8

PART 3 - EXECUTION

3.1 QUALIFICATIONS

- A. Qualify brazing procedures and operators per ASME Boiler and Pressure Vessel Code, Sect. IX.

3.2 APPLICATION

- A. Perform brazing within limits of qualified and approved procedure.
- B. Assemble brazed joints in a sequence that allows visual examination of maximum number of joints on both sides of joint after brazing.
- C. After brazing, remove flux and flux residue from accessible surfaces.
- D. Visually inspect accessible surfaces of brazed joints to ensure that brazing metal has penetrated entire length of joint.

3.3 REPAIR/RESTORATION

- A. Repair and re-inspect rejected joints.

3.4 FIELD QUALITY CONTROL

- A. Inspection
 - 1. Joints are subject to inspection by Construction Manager representative.
 - 2. Facilities Manager representative reserves right to reject joints, which are (or are believed to be) in violation of these specifications.
- B. Identification
 - 1. Assign operators unique identification symbols.
 - 2. Use operator identification symbols to identify work by operator.
- C. Records
 - 1. Maintain records of operator and procedure qualifications.
 - 2. Make records available to Facilities Manager representative upon request.

END OF SECTION 15052