



BRAZING PROCEDURE SPECIFICATION

BPS: 6000-107-F103 **REV. NO.:** 1 **DATE:** 7/31/2006 ****APPLICABILITY****
BRAZING PROCESS: TB and TB **ASME:** X **AWS:** **OTHER:**
SUPPORTING PQR: 600-103 6000-107-F103

JOINT: This BPS shall be used in conjunction with the General Welding Standards (GWS) and Welding Fabrication Procedure (WFP) sections and criteria for joint details, repairs, NDE, inspection etc.

Joint Type: Socket/Lap **Class:** Torch Brazing
See GWS 1-06 and WFP's for joint details **Preparation:** Wire Brush/Abrasive Cloth
Clearance: .003 **Brazed Joint Overlap Min.:** 4T **Max.:** 1.00"

FILLER METALS:

AWS Specification: 5.8 and 5.8 **AWS Class:** BCuP-5 and BCuP-5
F No: 103 and 103 **A No:** N/A **Size:** 1/16 3/32 1/8
Filler Material Type: Solid **Insert:** N **Insert Type:** N/A
Filler Material Notes: Flat or round filler

BASE MATERIALS:

Spec. B-88 Cu- Tube **P/S No.** 107 **Gr No.** All **to:** P/S No. 107 **Gr No.** All
Grade: All **to:** **Spec.** B-88 Cu- Tube **Grade:** All
Qualified Thickness Range: **AWS:** 0.000 thru 0.000 **ASME:** 0.045 thru 0.190

FLOW POSITIONS:

Qualified Positions: **AWS:** VU, HF, FF **ASME:** FF, VU, HF **Flow Direction:** V-UP Flow

BRAZING FLUX, FUEL GAS, or ATMOSPHERE:

Flux: Type or Trade Name: N/A
Fuel Gas: Oxy./Fuel **Flame:** Neutral **Braze temp. °F** 1150 to 1600
Backing Gas: N/A **Composition:** 0 % **Backing Gas Flow cfh:** 0 to 0

POST BRAZE HEAT TREATMENT:

Heat Treatment Temperature: 0 °F **Max. Time at Temperature:** 0

BRAZING TECHNIQUE: For fabrication specific requirements such as fitup, cleaning, grinding, PWHT and inspection criteria refer to Volume 2, Welding Fabrication Procedures

Cleaning Method: Wire Brush/abr. Cloth **Tip Size:** #6

APPROVAL: Signatures on file at FME DES **DATE:** 8/10/2006

Comments: T = the thickness of the thinner member to be brazed.

Use of LANL Welding Procedures and Welder Qualifications for non-LANL work shall be at the sole risk and responsibility of the Subcontractor, and the Subcontractor shall indemnify and save LANL and the Government harmless from any and all claims, demands, actions or causes of action, and for any expense or loss by reason of Subcontractor's and their employees possession and use of LANL procedures and qualifications.