

BRAZING PROCEDURE QUALIFICATION RECORD

BPQR No. _____

LANL WELDING PROGRAM

Brazing Process: _____ Manual Automatic Semi-automatic
BPQR No. _____ Revision: _____
BPS No. _____ Revision: _____
Date Brazed: _____

Joint Sketch

Joints:
Joint Design Used: _____
Joint Tolerances:
Insertion depth: _____
Lap face: _____
Root spacing: _____
Retainers: _____

Base Metals:
Material Spec & Type: _____
to Spec & Type: _____
ASME P or S No. & Group: _____
to P or S No. & Group: _____
Thickness of Test Coupon: _____
Diameter of Test Coupon: _____

Brazing:
Temperature range: ~ _____ °F

Post-braze Treatment:
Quench Air-cool Other
Hrs./min. @ Temp. _____ °F

Filler Metals:
ASME Specification: _____
ASME Filler Metal Group No. F: _____
AWS Classification: _____
Filler Form/Size: _____
Manufacturer: _____
Heat/Lot No. _____

Gas:
Gas Backing Used: Yes No
Composition: _____ %
Pressure/flow (psi – cfh) _____
Atmosphere or Internal Medium: _____

Flux used: Yes No
AWS Type: _____
Manufacturer: _____
Stock No. _____

Technique:
Filler Placement Technique:
Face-fed: Pre-placed:
Torch Tip Size: _____
Over-lap: Min. _____ Max. _____
Clearance: Min. _____ Max. _____
Cleaning Method: _____

Orientation:
Positions: _____
Braze Progression:
V - Up-flow V - Down-flow
Horizontal-flow Flat-flow

Flame:
Type: _____
Fuel Gas Type: _____
Mixture: _____

Notes: _____

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TENSILE TESTS :

Specimen No.	Dimensions		Area (sq. in.)	Applied Total Load (lbs.)	Ultimate Tensile Strength (ksi)	Location and Type of Failure
	Width	Thickness				
T1						
T2						
T3						
T4						

PEEL/SECTION TESTS:

Type and Figure No.	Results
P1	
P2	
P3	
P4	

ROOT BEND-BACK TESTS:

Specimen No.	Specimen Location	Specimen Size	Test Results
R1			
R2			
R3			
R4			

HYDRO or PNEUMATIC LEAK TESTS:

MACRO-ETCH/VISUAL TESTS:

Type and Time @ Pressure.	Type & Results

Code Edition and Addenda: _____ Brazer's Name: _____ Z# _____

Test(s) Conducted By: _____

Testing Laboratory Name and Location: _____ LANL WELD TEST FACILITY _____

Laboratory Test Report No./Date: _____

We the undersigned, certify that this record is correct/accurate, and that the specimens were prepared, brazed, and tested in accordance with the requirements of ASME Section IX.

Organization: Los Alamos National Laboratory Welding Eng Program

Date: _____ Certified By: _____