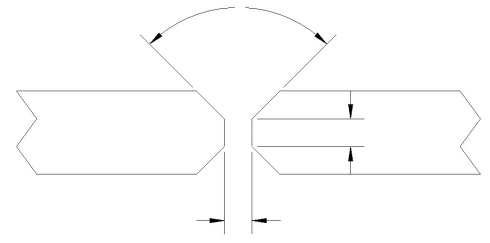


FORM QW-483 SUGGESTED FORMAT FOR PROCEDURE QUALIFICATION RECORDS (PQR)
(See QW-200.2, Section IX, ASME Boiler and Pressure Vessel Code)
Record Actual Variables Used to Weld Test Coupon

Organization Name Codeware, Inc.
 Procedure Qualification Record No. GTAW-304Stainless Date September 3, 2018
 WPS No. GTAW_1203_1
 Welding Process(es) [1]GTAW
 Types (Manual, Automatic, Semi-Automatic) [1]Manual

JOINTS (QW-402)

Joint Type Double V-Groove
 Backing Without Backing
 Retainers _____
 Root Opening (in) .0625
 Root Face (in) .0625
 Groove Angle (°) 60



Double V

Groove Design of Test Coupon
 (For combination qualifications, the deposited weld metal thickness shall be recorded for each filler metal and process used.)

BASE METALS (QW-403)

Material Spec. SA-240
 Type or Grade, or UNS Number 304L
 P-No. 8 Group No. 1 to P-No. 8 Group No. 1
 Thickness of Test Coupon (in) .0125 to 1
 Diameter of Test Coupon (in) _____
 Maximum Pass Thickness (in) 0.125

FILLER METALS (QW-404)

SFA Specification [1]5.1
 AWS Classification [1]E6012
 Filler Metal F-No. [1]2
 Weld Metal Analysis A-No. [1]1
 Size of Filler Metal (in) None
 Filler Metal Product Form [1]Bare
 Supplemental Filler Metal None
 Electrode Flux Classification None
 Flux Type None
 Flux Trade Name None
 Weld Metal Thickness (in) [1].125

POSITION (QW-405)

Position(s) 1G - Flat
 Weld Progression (Uphill, Downhill) N/A

PREHEAT (QW-406)

Preheat Temperature (°F) [1]150
 Interpass Temperature (°F) [1]80

POSTWELD HEAT TREATMENT (QW-407)

Temperature (°F) No PWHT
 Time (Hours) _____

GAS (QW-408)

	Composition	Flow (ft³/hr)
Shielding	<u>[1]Ar=100%</u>	<u>None</u>
Trailing	<u>None</u>	<u>None</u>
Backing	<u>None</u>	<u>None</u>

ELECTRICAL CHARACTERISTICS (QW-409)

Current/Polarity [1]DCEN
 Amps [1]24
 Volts [1]12
 Waveform Control None
 Power or Energy None
 Arc Time None
 Weld Bead Length (in) None
 Tungsten Electrode Size (in) None
 Heat Input (J/in) None

TECHNIQUE (QW-410)

Travel Speed [1]8
 String or Weave Bead [1]String/Weave
 Multipass or Single Pass (Per Side) [1]Single
 Single or Multiple Electrodes [1]Single

NOTE: Bracketed [] numbers indicate process

FORM QW-483 (Back)
Tensile Tests (QW-150)

Specimen No.	Width (in)	Thickness (in)	Area (in ²)	Ultimate Total Load (lbf)	Ultimate Unit Stress (psi)	Failure Type	Failure Location
1	1	2	2	20000	10000		
2	1	2	2	20000	10000		

Guided-Bend Tests (QW-160)

Type and Figure No.	Result
Face Bend - Longitudinal	Acceptable
Face Bend - Longitudinal	Acceptable
Root Bend - Longitudinal	Acceptable
Root Bend - Longitudinal	Acceptable

Comments _____

Other Testing Notes _____

Fillet-Weld Test (QW-180)

Result -- Satisfactory: Yes No Penetration into Parent Metal: Yes No

Macro -- Results _____

Welder's Name Bill Bowen Clock No. 01 Stamp No. 01

Tests Conducted By _____ Laboratory Test No. 55112

We certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code

Organization Codeware, Inc.

Date December 4, 2018 Certified by *Bill Bowen*

(Detail of record of tests are illustrative only and may be modified to conform to the type and number of tests required by the Code.)