WELDING PROCEDURE SPECIFICATION

SCOPE:

SUPPORTING PQR(s) _____

WELDING PROCEDURE NO.
WPS _____
REVISION _____
PAGE 1 OF _____

WELDING PROCESS(es) **1.** _____ **TYPE** _____
QW401 **2.** _____ **TYPE** _____

JOINT DESIGN – QW402
Joint Design _____
Backing _____
Backing Matl. _____
Retainers _____
Root Spacing _____

BASE METALS – QW403
P-No. ____ Gp. No. ____ to P-No. ____ Gp. No. ____
Thickness Range (Base Metal):
Groove _____ Fillet _____
Pipe Diameter Range:
Groove _____ Fillet _____
Maximum Pass Thickness _____
Other _____

FILLER METALS – QW404
F-No. 1. _____ 2. _____
A-No. 1. _____ 2. _____
SFA Spec. No. 1. _____ 2. _____
AWS Class No. 1. _____ 2. _____
Size of Filler Metal:
1. _____ 2. _____
Maximum Weld Deposit Thickness:
Groove 1. _____ 2. _____
Fillet 1. _____ 2. _____
Consumable Insert _____
Other _____

POSITION – QW405
Welding Position(s):
Groove _____ Fillet _____
Welding Progression _____

PREHEAT – QW406
Preheat Temp. Min. _____ ^{o}F
Interpass Temp. Max. _____ ^{o}F
Preheat Maintenance _____
Other _____

POSTWELD HEAT TREATMENT – QW407
Temp Range. _____ ^{o}F
Time Range _____
Other _____

GAS - QW408
Shielding Gas(es) _____
Percent Comp. (Mixtures) _____
Shielding Gas Flow Rate _____ CFH
Purge Gas _____ Flow Rate _____ CFH
Trailing Shielding Gas & Composition _____
Other _____

ELECTRICAL CHARACTERISTICS – QW409
Current & Polarity 1. _____ 2. _____
Amps Range 1. _____ 2. _____
Volts Range 1. _____ 2. _____
Tungsten Elect. Size _____ Type _____
Transfer Mode _____
Pulsing Current _____
Electrode Wire Feed Speed _____

TECHNIQUE – QW410
String or Weave Bead:
1. _____ 2. _____
Orifice or Gas Cup Size _____
Initial & Interpass Cleaning _____
Method of Back Gouging _____
Oscillation _____
Contact Tube to Work Distance _____
Multiple or Single Pass (per side):
1. _____ 2. _____
Multiple or Single Electrodes _____
Travel Speed Range:
1. _____ IPM 2. _____ IPM
Peening _____
Other _____

REMARKS:
(1)
(2)
(3)
(4)

PREPARED: _____ _____
REVIEWED: _____ _____
APPROVED: _____ _____

CODE(s) QUALIFIED TO _____

CODE USAGE _____

WELDING PROCEDURE SPECIFICATION

WELDING PROCEDURE NO.
WPS _____
REVISION _____
PAGE 2 OF _____

WELD LAYER(s)	WELDING PROCESS	FILLER METAL		GAS			ELECTRICAL DATA			TRAVEL SPEED (IPM)	MAX. BEAD WIDTH (in.)
		SIZE (in.)	AWS CLASS	TYPE	FLOW RATE (CFH)		TYPE/ POLAR.	AMPERAGE RANGE	VOLTS RANGE		
					SHIELD	PURGE					

INSTRUCTIONS