QW-482 SUGGESTED FORMAT FOR WELDING PROCEDURE SPECIFICATION (WPS)

(See QW-200.1, Section IX, ASME Boiler and Pressure Vessel Code

Company Name	EXAMPLE FAB CO.	By	J. SAMPLE
Welding Procedure Specification No.	WPS-001	Date	10/06/2026
Supporting PQR No.(s)	PQR-001	Revision No.	0
Date	10/06/2026		
Welding Process (first)	GTAW (ROOT)	Type	Manual
Welding Process (second)	SMAW (FILL & CAP)	Type	Manual

(Automatic, Manual, Machine, or Semi-Auto.)

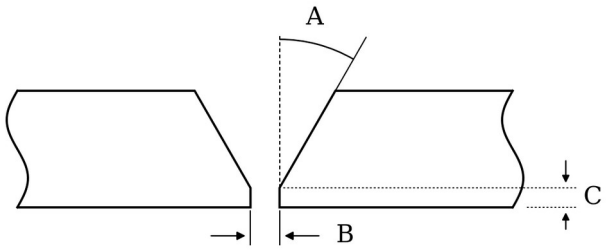
JOINTS (QW-402)

JOINT DESIGN	Single-V Groove, 60° Included	Backing	YES	X	NO

Backing Material – Type (Refer to both backing and retainers)

Metal		Nonmetallic		Non-fusing Metal		Other	WELD METAL (SMAW)

JOINT DETAILS		See Attachments	N.A.		
Bevel Angle (A)	30°	Root Opening (B)	3/32” to 1/8”	Land (C)	1/16” to 3/32”



BASE METALS (QW-403)

P-No.	1	Group No.	1 or 2	To P-No.	1	Group No.	1 or 2

OR

Specification type and grade	SA-516 GR 70 (AND OTHER P-NO. 1)
to Specification type and grade	SA-516 GR 70

OR

Chem. Analysis and Mech. Prop.	NONE
to Chem. Analysis and Mech. Prop.	NONE

Thickness Range:

Base Metal:	Groove	1/16” - 3/4”	Fillet	ALL
Pipe Diameter Range:	Groove	ALL	Fillet	ALL

FILLER METALS (QW-404)

Spec. No. (SFA)	5.18 (GTAW)	5.1 (SMAW)
AWS No. (Class)	ER70S-2	E7018
F-No.	6	4
A-No.	1	1
Size of Filler Metals	3/32”	1/8”
Weld Metal Thickness Range: Groove	1/4” MAX	1/2” MAX
Fillet	ALL	ALL
Electrode-Flux (Class)	NONE	NONE
Flux Trade Name	NONE	NONE
Consumable Insert	NONE	NONE
Other	SOLID WIRE	COVERED ELECTRODE

TQT LAB NO. TQT-EX-0001

SAMPLE ONLY. Example data for a fictional company. Not a real qualification.

QW-482 (Back)

	WPS No.	WPS-001	Rev. No.	0

POSITIONS (QW-405)

Position(s) of Groove	ALL	Position(s) of Fillet	ALL	Progression	UP	X	DOWN	

PREHEAT (QW-406)

Preheat Temp. Min.	50°F	Interpass Temp. Max.	500°F	Preheat Maintenance	NONE
Continuous or special heating	NONE				

POSTWELD HEAT TREATMENT (QW-407)

Temperature Range	NONE	Time Range	NONE

GAS (QW-408)

Type	Gas(es)	Percent Composition (Mixture)	Flow Rate
Shielding	Argon (GTAW)	100%	15 – 25 CFH
Trailing	None	None	None
Backing	None	None	None

ELECTRICAL CHARACTERISTICS (QW-409)

Current	AC		DC	X	Polarity	EN(Straight)	X	EP (Reverse)	X	

Amps (Range)	90 – 140	Voltage (Range)	10 to 25
Tungsten Electrode Size and Type	3/32”, EWCe-2		
Mode of Metal Transfer for GMAW	None	Wire Feed Speed Range	None

TECHNIQUE (401)

String or Weave Bead	String or Weave (≤ 3× dia.)
Orifice or Gas Cup Size	#6 – #8
Initial & Interpass Cleaning	Grind & Wire Brush
Method of Back Gouging	None
Oscillation	None
Contact Tube to Work Distance	None
Multiple or Single Pass (per side)	Multiple
Travel Speed Range	2 – 8 IPM
Multiple or Single Electrodes	Single
Peening	None
Other:	None

Weld Layer(s)	Process	Filler Metal Class	Filler Metal Dia.	Current Type/Polar.	Current Amp. Range	Volt Range	Travel Speed Range	Other Information
Root	GTAW	ER70S-2	3/32”	DC EN	90 – 130	10–14	2–5 IPM	EWCe-2
Fill	SMAW	E7018	1/8”	DC EP	100 – 140	20–25	3–8 IPM	

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