



Welding Procedure Specification



WPS No: 283 R2

WPQR No: 283

Date: 06/06/2026

Fabricator: SRG Global

Project: ALL

Job No: ALL

Essentials

Standard: AS3992:2020 /ASME IX:2023
Process: GTAW / MMAW
Position: All
Progression: Up
Joint Type: Butt, Welded Single Side

Material Details

Material Group: P1-P1
Thickness Range: 1.5 to 17mm
Diameter Range: All

Consumable Details

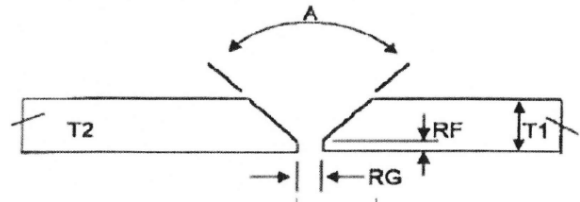
Consumable Class: AWS A5.18:ER70S-6
Consumable Class: AWS A5.1/5.5: E7016
Shielding Gas Type: Argon 99.9 %*
Purging Gas Type: N/A

Joint Parameters

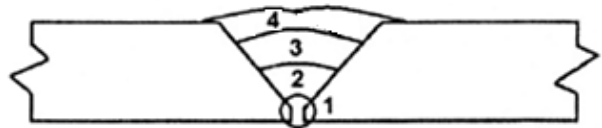
Root Gap(g): 0-4mm
Root Face (f): 0mm
Groove Angle (α): $55^\circ \leq$

Welding Technique & Preparation

Preparation Method: Machined / Ground
Interpass Cleaning: Grind/Wire Brush
Max Bead Width: 14mm
Stringer/Weave: Stringer
Arc Transfer: Not applicable
Electrical Stickout: Not applicable
Gas Lens/Nozzle Size: 10mm
Tungsten: 2.4mm Thoriated

Joint Preparation**Thermal Treatment**

Preheat Minimum: See note 3 & 4
Preheat Method: Flame
Temperature Check: Crayon/Laser
Interpass Maximum: 290°C
Post Weld Treatment: N/A

Welding Sequence

Pass No	Side	Position	Process	Polarity	Electrode/Wire		Gas/Flux		Amperage Range	Voltage Range	Travel Speed mm/min	Heat Input Kj/mm
					Class	Size mm	Type	L/min				
1	1	6G	GTAW	DCb	ER70S-6	2.4	Argon	12	93-113	9.9-11.1	44-56	1.40-1.75
2	1	6G	DC! 2	DC-	ER70S-6	2.4	Argon	12	98-118	10.2-11.8	48-61	1.52-1.88
3	1	6G	DC! 2	DC-	ER70S-6	2.4	Argon	12	108-128	11.1-12.7	56-67	1.58-1.94
4	1	6G	MMAW	DC+	E 7016	3.2	-	-	78-93	21.6-24.4	62-82	1.76-2.20

Notes:

- This procedure was produced by Asset Reliability Inspections. The fabricator named above has approval for full usage of this procedure
- A2 to A2 material is acceptable as per AS3992 Table 5.2 Note 2 A.
- Preheat A1 Material COMBINED THICKNESS $\leq 12\text{mm } 0^\circ$; $>12 \leq 25\text{mm } 20^\circ$; $>20 \leq 50\text{mm } 40^\circ$
- Preheat A2 Material COMBINED THICKNESS $\leq 12\text{mm } 20^\circ$; $>12 \leq 25\text{mm } 50^\circ$; $>20 \leq 50\text{mm } 80^\circ$

Written/Approved By:

Francois Engelbrecht

AS1796 Certificate 10 & 11

AS2214 Welding Supervisor

IIW Welding Diploma (S)

Fabricator:

Accepted By: Paul Berry

Signature: *PBerry*

Date: 06/06/2026

Client/Third Party:

Approved By:

Signature:

Date: