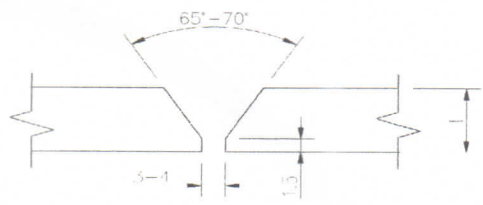
WELDING PROCEDURE SPECIFICATION

ASME SECTION IX-2019

Company Name	: JAI BALAJI ENTERPRISES				
WPS No	: JBE/WPS/SD/107	Rev :	0	Date:	31.08.2020
Supporting P.Q.R.No	: JBE/PQR/SD/107			Date:	31.08.2020
Welding Process(es)	: GTAW	Type(s)	: MANUAL		

JOINTS (QW-402)

Joint Design : Single Groove 65°-70°
Backing : Yes (for Fillet)
Backing Material: Base Metal (for Fillet)



Test coupon : 10 mm Thk Plate

BASE METAL (QW-403)

P No./Group No.	:	10H /1 To		
P No./Group No.	:	10H /1		
Specification	:	ASTM SA240 -UNS S32760 To ASTM SA240 -UNS S32760 OR EQUIVALENT		
Chemical Analysis And Mech.Property :	:	N/A		
Chemical Analysis And Mech.Property :	:	N/A		
Thickness Range	:	10 mm To 16 mm	Fillet :	All
Pipe Dia.Range	:	Any	Fillet :	All

FILLER METALS (QW-404)

F No :	:	6
A No :	:	8
Specification : (SFA) :	:	5.9
AWS No. : (Class)	:	ER 2594 (Kiswel)
Size of Filler Metal :	:	Ø1.6 mm / Ø2.4 mm
Electrode-Flux (Class) :	:	N/A
Flux Trade Name :	:	N/A
Consumable Insert :	:	N/A

Jai Balaji Enterprises	Reviewed By TPI	Approved By
Name: G. Venkatakrishnan	Name: R. Venkatakrishnan	Name:
Sign: G. Venkatakrishnan	Sign:	Sign:
Date: 31.08.2020	Date: 2020.08.31	Date:

SSS TECHNICAL SERVICES GV 001 WRI-252/99/255 CHENNAI-600 017

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WELDING PROCEDURE SPECIFICATION

ASME SECTION IX-2013

Welding Procedure specification No . JBE/WPS/SD/107 **Rev . 0** **Dated : 31.08.2020**

POSITION (QW-405)		POST WELD HEAT TREATMENT (QW-407)	
Position of Groove	: ALL	Temp.Range :	N/A
Welding Progression	: UP HILL	Time Range :	N/A
Position of Fillet	: All		

PREHEAT (QB-406)		GAS(QW-408)	
Preheat Temp. Min.	: 15°C /Ambient	Shielding Gas (s)	: Argon
Interpass Temp.Max.	: 175°C	Percent Composition (Mixtures)	: 99.99%
Preheat Maintenance	: N/A	Flow Rate	: 10 to 15 Ltr/Minute
		Gas Backing	: Argon 10-16 Ltr /Min
		Trailing Shielding Gas Composition	: None

ELECTRICAL CHARACTERISTICS (QW-409)

Current AC or DC :	**DC**	Polarity :	**EN**
Amps (Range) :	**See Below**	Volts (Range) :	**See Below**

Tungsten Electrode Size and Type	:	**2.4mm /2% Thoriated(EWTH-2)**
Mode of Transfer for GMAW	:	**N/A**
Electrode Wire Feed Range (MAX.)	:	**N/A**

TECHNIQUE (QW-410)

String or Weave Bead	:	String & Weave
Specific or Gas Cup Size	:	6 to 10 mm
Initial and Interpass Cleaning	:	Brushing /Grinding /Chipping (Refer Note : 1)
Method of Back Gouging	:	N/A
Oscillation	:	N/A
Contact Tube to Work Distance	:	N/A
Multiple or Single Pass(per Side)	:	Multiple
Multiple or Single Electrodes	:	Single
Travel Speed.	:	See Below
Peening	:	None

Note 1 : Grinding and cleaning use only stainless steel material

Weld Layers	Process	Filler Metal		Current		Volt Range	Travel Speed mm/min	Heat input Kj/mm
		Class	Dia.	Type/Pol	Amp/Range			
Root	GTAW	ER 2594	1.6 MM	DC EN	100 - 150	9 - 13	39	2.23
Hot Pass	GTAW	ER 2594	2.4 MM	DC EN	120 - 155	11 - 16	110.4	1.09
Fill-up	GTAW	ER 2594	2.4 MM	DC EN	125 - 180	11 - 16	137.4	1.04
Capping	GTAW	ER 2594	2.4 MM	DC EN	120 - 170	11 - 16	86.5	1.39

Jai Balaji Enterprises	Reviewed By TPI	Approved By
Name: G. Venkatesh	Name: R. Venkatakrishnan	Name:
Sign:	Sign:	Sign:
Date: 31.08.2020	Date: 2020.08.31	Date:

TECHNICAL SERVICES GV 001 WRI-252/99/255 CHENNAI-600

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