

EPC: Logo		Owner / Buyer: Logo		WPS-N°		Qualified Date: xx/xx/20xx		Fabricator: Logo		
						Field / Shop Welding				
(ASME-IX: QW-200.1) WELDING PROCEDURE SPECIFICATION (WPS)										
QW-Code		AWS-D1.1_Section 4: Part B (&) AWS-D1.8_Section 6								
Welds Application				Seismic Welding: (§4.10) CJP-Demand Critical Joints						
Ref.		Ref.		Process	GTAW + SMAW	(§4.4) Weld position	2G + 1G (CJP-Fillet)	Job: N°		
Fabricator address				Weldment -N°				Volumetric NDT		LPT + UT
PQR-N°		EOR		Compliance Spec.	AWS-D1.8_Section 2.1 + Client Spec:				MDMT: °C	
PQR-N°		EOR		Project Drawing/s	HSE - Welding Code			ANSI-Z 49.1_(2012)		

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Published By: Nileur Custom-made Procedures (NCP) <<<X-Form:WSX02 >>> NCP - Publication Ltd © UK_2010 < Contact: tech.inquiry@ncpfirst.com

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Joint Details		AWS-D1.1-Secton 2_Part-B_ §2.8 & §2.9		(§Table 4.2) Welding Variables + Qualification Ranges + Technical Notes/ EPC Comments									
				NCPfirst_X-Form_PDF example									
Remarks: (§3.7.2) Width/Depth Pass Limitation compliance													
WPS_QW-Test		AWS-D1.1 - § 3.5.2.1 & AWS-D1.8_Para 6.1.3 - Annex A - Heat-input Envelop Test. See Test Result attached											
Surface Condition		Rust Grade A		Mill Scale Removal		Clearance Near weld area = 20 mm (Welder's option)							
Weldment Service		Seismic Structure		API 1104: Clause 5.3.2.10: Lay Hot-pass immediately after root pass									
Weldment Manipulation: Static / Turn Table / Rollers / Lifting Gantry				Lifting Gantry		(§4.9) Visual Quality Level: Class 1							
(OB-422) Base Metal		Grade		Type									
R / Safety Factor (S _r) N°		1.5		Weld Reinforcement (mm) = Leg-length x S _r =		Weld Profile: Convex							
Groove Angle x° ±5°		Radius R ₁		Fillet Leg (mm): a = 0.707 x T _n =		(OW-403.2) Metal Thk. Range (mm) 2T =		T =					
Groove Angle y° ±5°		Radius R ₂		Fillet Throat (mm) = 0.7 x Leg =		(§5.15) Joint Preparation							
Misalignment Tolerance (mm)		(§4.10) & (§4.1) Welding Progression		Flat-forehand		(OW-410.6) Back Gouging Method		Grinder					
Metal Designator		ISO-15608: Group 1		EOR		Sub-group. 1.1		Welded to: Sub-group. 1.2					
(§4.8.3) Qualified-Metal/Plate Type		Unlisted -Carbon Steel											
§3.5: T-3.2 / §5.6 Preheat (For)		Start & Resume Welding		Heating Mode		Single		Heating Temp. °C (Mini. - Maxi)					
Soak-time (min)													
(§3.14) / (§5.8 / T-5.3) SR/PWHT		Heating Rate: °C/min		Hold: °C		Soak-time (min)		Cooling Rate: °C/min.					
Heat Pads Type		Thermocouple Brand & Type				Thermocouple Locations: 1T/C, 2T/C, 3T/C, 4T/C							
(§2.11) Tacking Method		(§5.14) Tack-length (mm)		Tack-spacing (mm)		(§3.7.1) Vertical-up_ Under-cut Repair: Vertical down							
(§5.10) & (§5.31) Root Backing - Insert/Retainer/Tabs/Ends				(§6.11.1) Weld Tabs		(§5.30) Inter-pass cleaning & Dressing							
(QW-404.23) Product Form (GTAW)		Batch-N°		(QW-404.12) Filler Type		Brand							
(QW-404.23) Product Form (FCAW)		Batch-N°		(QW-404.12) Filler Type		Brand							
(QW-404.23) Product Form (SMAW)		Batch-N°		(QW-404.12) Flux Type		Brand							
(§A5.32) Shielding Gas (GTAW)		(§3.7.4) Shielding Gas (FCAW)		Purging Gas									
(QW-256) GTAW		Manual		(QW-253) SMAW		Manual		(QW-255) FCAW / MCAW					
						Semi - Automatic		(QW-254) SAW					
								Fully - Automatic					
(QW-250 thru. 280) MULTI-PROCESS PROCEDURE (QW-200.4 & QW-451.1) «AND» RECORDED **WELDING PARAMETERS** (QW-409)													
QW-403 Bead N°	§ 3.2 & β C-A3 Process	QW-404 AWS-Filler Spec. & Class	QW-404 Filler Size mm	QW-409 Amps	QW-409 Volts	QW-409 Travel Speed mm/min	QW-409 Wire Feed inch/min	Cup Size mm	QW-408 Shield Gas Lt/min	QW-410.8 CTWD mm	QW-409 Heat Input kJ/mm	Joint Side A & B	(QW- 410.1) (462.12 /13) Weld Bead Technique
1 TO 3	GTAW									5		A	Short Weave
4 TO n	SMAW											A	Stringer Beads
1 TO .	SMAW											B	
. TO m	SMAW											B	
N°	E°	E°	N°	S° E°	S°	N°	S°	E°	E°	S°	N°	N°	S°+ (QW-409.1(b2))
(QW-409) Current & Polarity: GTAW		DCRP (+)		(QW-409) Current & Polarity: SAW / SMAW		DCSP (-)		(QW-409) Current & Polarity: FCAW/MCAW		DCSP (-)			
(QW-406.8) Max. Inter-pass Thk. Range (mm)		GTAW =		SMAW =		FCAW =		(QW-403.2) + (β C-A3) Max. Inter-pass °C					
FCAW / MCAW-Metal Transfer: Full or Semi Spray		GTAW_Tungsten Type		(QW-403.2) + (β C-A3) Min. Inter-pass °C									
MIG / STT-Metal Transfer: Globular, Short-Circuit, Semi Spray				(AWS-D1.1_ §5.27) Peening by: Hammer, Metal-shots, Peening-gun									
Filler Metal _F-N°		Base Metal _A-N°		(AWS-D1.1_ §C-8.4.1) Fatigue-dressing Method: TIG, UP Burr-grinding,									
(§5.3.2.4 + β1.2.2.3) Electrode Manufacturer Recommended Re-drying Temp: °C				Electrode Manufacturer Recommended Re-drying Soak time (min)									
Acceptance Criterion				AWS-D1.8_C-A7 & AWS-D1.1_Table 6.1 + (4.9.1.12) Inspection of CJP & Fillet Welds		Heat Input: → kJ/mm = (Amps x Volts x 60) ÷ TS (where: TS = Travel Speed x 1000)							
Project Specific Note													
Acronym: CHM =Continued Heat & Maintaining, S _r =Safety Factor, (* = Variables), UP =Ultrasonic Peening, CTWD =Contact-To-Work-Distance, β = D1.8-Clause, QW =ASME-IX, § = D1.1-Clause, SR =Stress Relief, B+F=Back & Forth,													

Declaration: We declare that this WPS qualification Test coupon was welded & mechanical tested in the presence of the nominated Third Party/s duly signed & stamped herein						
Rev	Prepared by: (Welding Engineer)	Approved by: (QA / Manager)	AWS Accreditation N°	Welding Engineer (Stamp)	Third Party Inspection Agency (Stamp)	Third Party Inspection Agency (Stamp)
			XXXXXXX			
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