

EPC: Logo		Owner / Buyer: Logo		WPS-N°		Qualified Date: xx/xx/20xx		Fabricator: Logo	
						Field / Shop Welding			
<b>WELDING PROCEDURE SPECIFICATION (WPS)</b>									
QW-Code		ASME-IX: QW-200.1 (& AWS: D1.1-Clause 4_Part-B)							
Welds Application				Structural Pipe & Cyclic Pressure Pipe Welding					
Ref.		Ref.		Process		Weld position		Job: N°	
Fabricator address				Weldment -N°				Volumetric NDT: RT	
PQR-N°		EOR		Compliance Spec.				MDMT: °C: -10/80	
PQR-N°		EOR		Project Drawing/s				HSE - Welding Code	

**NCPFIRST**

Published By: Nilveur Custom-made Procedures (NCP) <<< X-Form:WPX01 >>> NCP - Publication Ltd © UK\_2010 < Contact: tech.inquiry@ncpfirst.com >

Page 1 of 1

Joint Details: QW-402.1 & 402.6 & 461.4 & 469.2		Article-5 Welding Data: (QW-400) Welding Variables + Qualification Ranges + Technical Notes/ EPC Comments													
		<p>NCP_Messege: Double click on the joint detail image to edit. Always use a copy of the originaly Template. Update Code references according to the latest issue</p>													
Remarks															
WPS_QW-Test															
Surface Condition		Mill Scale Removal													
Weldment Service		API 1104: Clause 5.3.2.10: Lay Hot-pass immediately after root pass													
Weldment Manipulation:		Static / Turn Table / Rollers / Lifting Gantry (\$4.9) Visual Quality Level													
(QB-422) Base Metal		Grade		Type											
Safety Factor (Sr) N°		Weld Reinforcement (mm) = Weld-cap t <sub>c</sub> x S <sub>r</sub> =								Weld Profile					
Groove Angle x° ±5°		Radius R <sub>1</sub>		Fillet Leg (mm): a = 0.707 x T <sub>n</sub> =		(QW-403.2) Metal Thk. Range (mm) 2T =				T = t <sub>n</sub> =					
Groove Angle y° ±5°		Radius R <sub>2</sub>		Fillet Throat (mm) = 0.7 x Leg =		(QW-402.1 + \$5.15) Joint Preparation									
Misalignments Tolerance (mm)		(QW-410.4) & (\$4.1) Welding Progression				(QW-410.6) Back Gouging Method									
Metal Designator		ASME_QW-XXX		EOR		P-No. X: Group. X		Welded to		P-No. X: Group. X		Qualified-Pipe Diameter Range (mm)			
(\$3.5: T-3.2 / \$5.6) Preheat (For)		Heating Mode		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) Weld-length (mm)		Weld-spacing (mm)		Tack Weld Dressing/Removal									
(QW-200.4b) Root Backing - Insert/Retainer		(Qw-410.5) 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 (SAW)		Batch-N°		(QW-404.34) Flux Type		Brand									
(QW-408.2) Shielding Gas (GTAW)		(QW-408.2) Shielding Gas (FCAW)				Purging Gas									
(QW-256) GTAW		Manual		(QW-253) SMAW		Manual		(QW-255) FCAW / MCAW		Semi - Automatic		(QW-254) SAW		Fully - Automatic	
<b>(QW-250 thru. 280) MULTI-PROCESS PROCEDURE (QW-200.4 &amp; QW-451.1) «AND» RECORDED **WELDING PARAMETERS** (QW-409)</b>															
QW-403 Bead N°	\$ 3.2 & 4.7.1 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	Purge Gas Lt/min	(QW-410.1) (462.12 /13) Weld Bead Technique		
1 TO 2															
3 TO n															
- TO -															
- TO -															
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 = 4.4		&		SMAW =		&		FCAW = 10.3		(403.2) Max. Inter-pass °C			
FCAW / MCAW-Metal Transfer: Full or Semi Spray						GTAW_Tungsten Type		(403.2) 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,											
(AWS-D1.1_§5.3.2.4) Electrode Manufacturer Recommended Re-drying Temp: °C				Electrode Manufacturer Recommended Re-drying Soak time (min)											
Acceptance Criterion		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 <sub>r</sub> =Safety Factor, (* = Variables), UP =Ultrasonic Peening, CTWD =Contact-To-Work-Distance, thk =Thickness, 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)	ASME Accreditation N°	Welding Engineer (Stamp)	Third Party Inspection Agency (Stamp)	Third Party Inspection Agency (Stamp)
			XXXXXXX			
			ASME			
(OG-106c) This document and its contents are the legal property of the company' (add Owner's Name) and must not be disclosed without permission. Republishing or file sharing in any manner is strictly prohibited by Law * NCP®*®						