EPC: Logo	Owner / Buyer: Logo	WPS-Nº		Qualified Date	xx/xx/20xx	Fabricator: Logo
				Field / Shop Welding		

PIPE WELDING PROCEDURE SPECIFICATION (WPS)

QW-Code	ASME-IX_QW-200.1 (&) B31.3_Chapter V_§328.2.2
Welds Application	Process Pipe Welding: Weldolets / Welding-Boss

Ref.		Ref.		Process	GTAW + SMAW	Weld position	1G (CJP - Fillet)	Job: Nº	
Fabricator address				Weldment -Nº				Volumetric NDT	LPT + UT
PQR-Nº		FOR		Compliance Spec.				MDMT: ºC	
PQR-Nº		FOR		Project Drawing/s			HSE - Welding Code		

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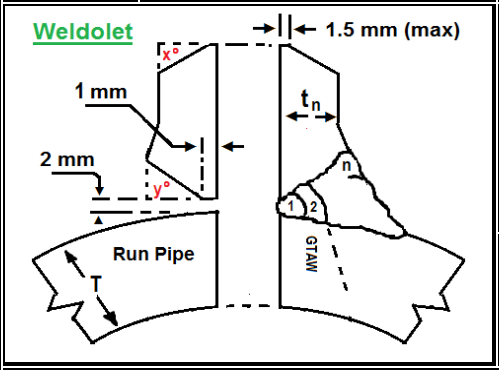
Joint Details	QW-402.1 & 402.6 & 461.4 & 469.2)	Article-5 Welding Data: (QW-400) Welding Variables + Qualification Ranges + Technical Notes/ EPC Comments



NCPfirst_ X-Form_PDF example

Remarks							
WPS_QW-Test	ASME-B31.3_Chapter-V: 328.2.1 + Additional Client requirement.						
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*				(§328.5.6) Visual Quality Level	Class 1		
(QB-422) Base Metal	Carbon Steel	Grade		§330.1.2: Unlisted	No		
Safety Factor (S_F) Nº		Weld Reinforcement (mm) = Weld-cap t_c x S_F =		Weld Profile			

Groove Angle x^0 ±5º	30	Radius R_1		Fillet Leg (mm): a = 0.707 x T_n =		(QW-403.2) Metal Thk. Range (mm) 2T =		T =		t_n =	
Groove Angle y^0 ±5º	20	Radius R_2		Fillet Throat (mm) = 0.7 x Leg =		(QW-402.1 + §328.4.2) Joint Preparation	Joint details as per WPS (§328.1)				
(§328.4.3) Misalignments Tolerance (mm)	1.5	(QW-410.4) Welding Progression				(QW-410.6) Back Gouging Method	None				
Metal Designator	ASME_ QW-XXX	FOR	P-No. X: Group. X	Welded to	P-No. X: Group. X	Qualified-Pipe Diameter Range (mm)					

(§330 + Table 330.1.1) Preheat (For)	Start & Resume Welding	Heating Mode	Open Flame	Heating Temp. ºC (Mini. – Maxi)		Soak-time (min)	
(§331 + Table 331.1.1) SR/PWHT		Heating Rate: ºC /min		Hold: ºC		Soak-time (min)	Cooling Rate: ºC/ min.
Heat Pads Type		Thermocouple Brand & Type		Thermocouple Locations: 1T/C, 2T/C, 3T/C, 4T/C)			
(§328.5.1c) Tacking Method	Bridge Tack	Tack Weld-length (mm)		Tack Weld-spacing (mm)		Tack Weld Dressing/Removal	Removal

(QW-200.4b) Root Backing - Insert/Retainer	None	(Qw-410.5) Inter-pass cleaning & Dressing	
(QW-404.23) Product Form (GTAW)		Batch-Nº	(QW-404.12) Filler Type	Brand
(QW-404.23) Product Form (FCAW)		Batch-Nº	(QW-404.12) Filler Type	Brand
(QW-404.23) Product Form (SAW)		Batch-Nº	(QW-404.34) Flux Type	Brand
(QW-408.2) Shielding Gas (GTAW)	99.99% Argon (Pure)	(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

(QW-250 thru. 280) MULTI-PROCESS PROCEDURE (QW-200.4 & QW-451.1) «AND» RECORDED **WELDING PARAMETERS** (QW-409)

QW-403 Bead Nº	§ 328.2.2(f) 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	GTAW												
3 TO n	SMAW												
- 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 =	&	SMAW =	&	FCAW =	(403.2) Max. Inter-pass ºC	
FCAW / MCAW-Metal Transfer: Full or Semi Spray		GTAW_Tungsten Type		(403.2) Min. Inter-pass ºC	
MIG / 'STT-Metal Transfer: Globular, Short-Circuit, Semi Spray		(AWS-D1.1_Para. 5.27) Peening by: Hammer, Metal-shots, Peening-gun	
Filler Metal _F-Nº		Base Metal _A-Nº		(AWS-D1.1_Para. C-8.4.1) Fatigue-dressing Method: TIG, UP Burr-grinding	
(AWS-D1.1_Para.5.3.2.4) Electrode Manufacturer Recommended Re-drying Temp: ºC		Electrode Manufacturer Recommended Re-drying Soak time (min)	
Acceptance Criterion	ASME B31.3: §.311.2.2-Table 341.3.2. Criterion "A"	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_F =Safety Factor, {* = Variables}, UP =Ultrasonic Peening, CTWD =Contact-To-Work-Distance, thk =Thickness, QW =ASME-IX, § = ASME-B31.3, 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 Nº XXXXXXX	Welding Engineer (Stamp)	Third Party Inspection Agency (Stamp)	Third Party Inspection Agency (Stamp)
			ASME			

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