WELDER PERFORMANCE QUALIFICATION (WPQ)
Guild Moore & Hilder cc - Dynamic Options Engineering & Fabrications

GMHcc Pressurized Systems Reg. No. CK99 22907/23

Designation ASME IX:2023 GTAW P-No.8 to P-No.8 3 DN 6G

Name	*ARTHUR GUVAKUVA*	WPQ Record #	*DN3 WPQ 304l*	
Welder ID		Qualified to	*ASME IX:2023*	
Stamp Number	*DYNO 001*	WPS Number	*WPS SA304L*	
Employer	*Dynamic Options*	Job Knowledge	*Not Tested*	
Test Date	*06-Oct-2023*	Test/Production	*Test*	

Base Metals (QW-403)

Base Metals	Form	Specification, Alloy	P #	Gr. #	UNS #	NPS/DN, mm	Dia, mm	Sch.	Thickness, mm
Steel & Steel Alloys	*Pipe*	*SA312-TP304L*	*8*	*1*	*S30403*	*80*	*88.9*	*80S*	*7.62*
Steel 7 Steel Alloys	*Pipe*	*SA312-TP304L*	*8*	*1*	*S30403*	*80*	*88.9*	*80S*	*7.62*

Joint Details (QW-350)

Welding Variables	Actual Values	Range Qualified
Joint Type	*Pipe - Pipe - Groove*	*Groove and Fillet welds*
Base metals P-No. to P-No.	*P-No.8 to P-No.8*	*P-No. 1 - 15F; 34 & 41 - 49*
Diameter, mm	*88.9 O/D*	*73 - Unlimited (groove); No limit (fillet)*
Thickness, mm	*5.62*	*Please refer the deposit thickness values for groove welds. No limit for fillet welds*

Variables	Actual Values	Range Qualified
Welding Process	*GTAW*	*GTAW*
Type	*Manual*	*Manual, Semi-automatic*
Backing (Metal, Weld Metal)	*Without*	*Without*
Spec. No. (SFA)	*5.9*	
AWS No. (Class)	*A5.9*	
Filler Metal F-Number	*6*	*F6*
Filler Metal A-Number	*8*	
Consumable Insert	*Without*	*Without*
Filler Metal Product Form	*Solid*	*Solid or metal cored*
Weld Deposit Thickness, mm	*7.621*	*1.5 - 15.24*
Number of Layers Deposited	*3*	
Type of Fuel Gas		
Gas Backing	*With*	*With*
Transfer Mode		
Current, Polarity	*DCEN*	*DCEN*
Position	*6G*	*All*
Groove - Plate		*All*
Groove - Pipe > 610 mm O.D.		*All*
Groove - Pipe 73 - 610 mm O.D.		*All*
Fillet - Plate		*All*
Fillet - Pipe > 610 mm O.D.		*All*
Fillet - Pipe 73 - 610 mm O.D.		*All*
Fillet - Pipe 25 - 73 mm O.D.		*All*
Fillet - Pipe < 25 mm O.D.		*All*
Vertical Progression	*Uphill*	*Uphill*

Test Methods	Test Result	Test Report
Visual Examination per QW-302.4	*Performed and Acceptable*	
1 face bend test - ref. QW-161.2	*Not tested*	
1 root bend test - ref. QW-161.3	*Not tested*	
Radiographic examination Cl. QW-302.2	*Performed and Acceptable*	RT Report 14825/23/03.pdf
Ultrasonic examination Cl. QW-302.2	*Not tested*	

CERTIFICATION

Test Date	06-Oct-2023	Specification	ASME IX:2023
Requalification?	No	Test Location	Shop
Place of Testing	Shop	Weather	good
Date Issued	25-Feb-2024	Ambient Temp.	20 °C
Notes from testing: -		Authorization notes: -	

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We certify that the statements in this record are correct and that the test coupons were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME BOILER AND PRESSURE VESSEL CODE 2023 edition.

R.Hilder IPE 042/CP PV 410 PR TECH ENG 201170327	Digital signature Examined by - Rodger Hilder Examined on - 06-OCT-2023 Guild Moore & Hilder cc				

APPROVED

ATTACHMENTS

IND-NDT c.c.
Vat No: 4770167569 Reg. No.1996/013860/23
NDT SERVICES
P.O.BOX 4765
Kempton Park 1620
Tel No. (011) 391-1290/1518
Fax: (011) 972-3168
Offices & Laboratories – 42 Quinine Street, Glen Marais X 1, 1620

RADIOGRAPHIC EXAMINATION REPORT

CLIENT: GMH VENDOR: GMH

ORDER No. 0000324 REPORT No: 14825/23/03 DATE: 2023/10/16

EXAMINATION LOCATION: IND-NDT LABS	JOB NR:---
COMPONENT DESCRIPTION: TEST PLATES / PIPES FOR DYNAMIC OPTIONS	
DRG NUMBER: REFER TO VENDOR DRW NO.	MATERIAL: DESCRIPTION BELOW
OD: VARIOUS	EXTENT OF EXAMINATION: 100%
BEFORE P.W.H.T. N/A	AFTER P.W.H.T. N/A

TECHNICAL DATA					SPECIFICATION DETAILS
X-RAY	KV	N/A	MA	N/A	WELDING TYPE:
GAMMA RAY	CURIES: 32ci				CODE OF MANUFACTURE: ASME IX 2023
EXPOSURE TIME: 1min 25sec					EXAMINATION PROCEDURE: IND/WI/RT-02 REV 02 2019
FFD/SFD: 89mm					ACCEPTANCE CRITERIA: ASME IX 2023
IQI: 10 fe en					
TECHNIQUE No.: DWSI					
FILM AND SCREENS: PB SCREENS 0.125					

WELD No.:	POS	SENS	DENS	WELDER	DEFECTS e/ee	DEFECTS ne	RESULTS	REMARKS
TP 11	0-10	2%	2-3	A.GUVAKUVA	e		ee	
310S	10-20	2%	2-3		e		ee	
3"	20-0	2%	2-3		e		ee	
SCH40S								
TP 12	0-10	2%	2-3	J.NKUNA	e		ee	
310S	10-20	2%	2-3		F		ee	
3"	20-0	2%	2-3		F		ee	
SCH40S								
TP 13	0-10	2%	2-3	C.RATAU	F		ee	
310S	10-20	2%	2-3	7510165853087	F		ee	
3"	20-0	2%	2-3		e		ee	
SCH40S								
TP 14	0-10	2%	2-3	C.RATAU	Aa		ee	
3"	10-20	2%	2-3	7510165853087	e		ee	
SCH40	20-0	2%	2-3		e		ee	
TP 15	0-10	2%	2-3	A.GUVAKUVA	e		ee	
304L	10-20	2%	2-3		e		ee	
3"	20-0	2%	2-3		e		ee	
SCH80								
TP 16	0-10	2%	2-3	A.GUVAKUVA	e		ee	
304L	10-20	2%	2-3		e		ee	
3"	20-0	2%	2-3		e		ee	
SCH40								

e - No Visible defects
ee - Acceptable defects
ne - Unacceptable defects
A - Gas bubbles
E - Cracks
Ea - Longitudinal Cracks
F - Undercut
B - Slag inclusions
Aa - Porosity
Ag - Worm Holes
Ba - Inclusions any shape and direction
EG - Transverse cracks
FF - Obvious film
D - Incomplete penetration
Bg - Slag lines
C - Lack of Fusion

TECHNICIAN: DA BENNIE SNT-TC-1A (LEVELII) DATE: 2023/10/16	INSP. AUTHORITY DATE: