

INSPECTION AND TEST PLAN

Vendor Document No: LNH3-HEI-ITP-QC-001




Rev. No. 0

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OWNER : TORISHIMA PUMP MFG. CO.,LTD
PROJECT TITLE : LNH3 TESTING FACILITY
PO NO : 3100099788 & 3100099789
VENDOR : PT. HANAZONO ENGINEERING INDONESIA
LOCATION : TORISHIMA PUMP MFG. CO.,LTD - JAPAN

FOR APPROVAL

<input type="checkbox"/> A	Approved
<input type="checkbox"/> B	Approved with notes
<input type="checkbox"/> C	Commented
<input type="checkbox"/> D	Not approved or rejected
Return date :	
Approved by :	
Received date :	

						
0	February 08, 2024	For Approval	BENRIDHO	RUSNANDI	MURASATO	CLIENT
REV	DATE ISSUED	ISSUE PURPOSE	PREPARED	CHECKED	APPROVED	AUTHOLIZED

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Revision History




Revision No.	Date	Description of Revision
0	February 08, 2024	For Approval



		<h2 style="text-align: center;">Inspection and Test Plan</h2>									
Project : LNH3 TESTING FACILITY P.O. No. : 3100099788 & 3100099789 Order Item Name : AMMONIA TEST PLANT (STORAGE TANK, TEST TANK, SCRUBBER) Client Name : TORISHIMA PUMP MFG. CO., LTD.		Inspection Item : AMMONIA TEST PLANT FACILITY (STORAGE TANK, TEST TANK, SCRUBBER) ITP No. : LNH3-HEI-ITP-QC-001 Revision No. : 0 Vendor Name : PT. HANAZONO ENGINEERING INDONESIA									
Step No. (1)	Inspection Activity (2)	Reference Procedure (3)	Acceptance Criteria (4)	Verification Document (5)	Involved Party						Remark
					PT HEI	Sign	CLIENT	Sign	THIRD PARTY	Sign	
C	DOCUMENT										
1.	Approval of Drawing & Strength calculation	Drawing	Design Data	Drawing	P		R		R		
2.	Inspection Test Plan (ITP)	PO and Specification	Project Specification	Procedure	P		R		R		
3.	Approval / WPS & PQR	WPS & PQR Approval	ASME Section IX	Procedure	P		R		R		
4.	Welding & NDE Map	Drawing Approval and Welding Map	ASME Section VIII Div. 1	Procedure	P		R		R		
5.	Welder List & Certificate	Welder List Approval	ASME Section IX	Procedure	P		R		R		
6.	NDE Procedure & Personnel Certificates	Procedure	ASME Section V (ASNT-TC 1A)	Procedure	P		R		R		
7.	Surface Preparation & Painting Procedure	Procedure	Specification Protective Coating	Procedure	P		R		R		
8.	Hydrotest Procedure	Procedure	Specification General Equipment Requirements	Procedure	P		R		R		
9.	Others Are As Per Doc, List	-		-	P		R		R		
D	MATERIALS										
1.	Receiving Material Inspection Report	Drawing Approval /Documents Receiving Report	ASME Section II Part A, JIS Standard	Mill Test Certificate (MTC)	P		R		R		
2.	Review of Mill Certificate and Conformance to Code			Receiving Report							
E	WELDING CONSUMABLE										
1.	Electrode Storage and Drying	Manufacturer Standard	Specification Equipment Welding Carbon Steel	Certificate	P		R		R		
F	FABRICATION										
F-1	Marking and Cutting										
1.	Check Marking and Cutting ,Shell , Head, Pipe	Drawing Approval	Inspection Procedure	Material Traceability Report	P		R		R		
2.	Check Transfer Heat Number etc.										
F.2	Rolling Shell and Spinning Ellipsiodal Head 2:1										
1.	Visual and Dimensional	Drawing Approval	Inspection Procedure	Dimensional Check Report	P		W		R		
2.	Check of Wall Thickness Shell and Ellipsiodal Head 2:1										
F.3	Fit-up Inspection										
F3-1	STORAGE TANK										
1.	Check Nozzle orientation and Hole opening	Drawing Approval	Inspection Procedure	Dimensional Check Report	P		R		R		
2.	Fit-up Nozzle										
3.	Fit-up Shell to Head,										
4.	Other accessories										

		<h2 style="text-align: center;">Inspection and Test Plan</h2>									
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					PT HEI	Sign	CLIENT	Sign	THIRD PARTY	Sign	
F3-2	TEST TANK										
1.	Check Nozzle orientation and Hole opening	Drawing Approval	Inspection Procedure	Dimensional Check Report	P		R		R		
2.	Fit-up Nozzle, Pipe Column, Pipe Coil										
3.	Fit-up Shell to Head,										
4.	Other accessories										
F3-3	SCRUBBER TANK										
1.	Check Nozzle orientation and Hole opening	Drawing Approval	Inspection Procedure	Dimensional Check Report	P		R		R		
2.	Fit-up Nozzle										
3.	Fit-up Shell to Cover										
4.	Other accessories										
G	WELDING INSPECTION										
G-1	STORAGE TANK										
1.	Welder Performance Qualification Test	ASME Sect. IX Part C	Specification Equipment Welding Austenitic Stainless Steel	Welder List & Certificate	P		R		R		
2.	Check Weld. Consumables being used for each process of welding	JIS Standard	Welding Procedure/ITP	Mill Test Certificate (MTC)	P		R		R		
3.	Welding Inspection and Visual	Procedure	NDE Map	Welding Record	P		W		R		
G-2	TEST TANK										
1.	Welder Performance Qualification Test	ASME Sect. IX Part C	Specification Equipment Welding Austenitic Stainless Steel	Welder List & Certificate	P		R		R		
2.	Check Weld. Consumables being used for each process of welding	JIS Standard	Welding Procedure/ITP	Mill Test Certificate (MTC)	P		R		R		
3.	Welding Inspection and Visual	Procedure	NDE Map	Welding Record	P		W		R		
G-3	SCRUBBER TANK										
1.	Welder Performance Qualification Test	ASME Sect. IX Part C	Specification Equipment Welding Austenitic Stainless Steel	Welder List & Certificate	P		R		R		
2.	Check Weld. Consumables being used for each process of welding	JIS Standard	Welding Procedure/ITP	Mill Test Certificate (MTC)	P		R		R		
3.	Welding Inspection and Visual	Procedure	NDE Map	Welding Record	P		W		R		

		Inspection and Test Plan									
Project P.O. No. Order Item Name Client Name		: LNH3 TESTING FACILITY : 3100099788 & 3100099789 : AMMONIA TEST PLANT (STORAGE TANK, TEST TANK, SCRUBBER) : TORISHIMA PUMP MFG. CO., LTD.			Inspection Item ITP No. Revision No. Vendor Name		: AMMONIA TEST PLANT FACILITY (STORAGE TANK, TEST TANK, SCRUBBER) : LNH3-HEI-ITP-QC-001 : 0 : PT. HANAZONO ENGINEERING INDONESIA				
Step No. (1)	Inspection Activitry (2)	Reference Procedure (3)	Acceptance Criteria (4)	Verification Document (5)	Involved Party						Remark
					PT HEI	Sign	CLIENT	Sign	THIRD PARTY	Sign	
H	NDT										
H-1	STORAGE TANK										
	1. Radiographic Test (RT) 100%) for Butt Joint	ASME V, ASME VIII Div. 1	NDE Map	NDE Inspection Report	P		R		R		
	2. Dye Penetrant Test/Magnectic Particle Test: 100% (Weld Seam)	NDE Procedure									
	3. Lifting Lug	ITP									
	4. Temaporary Tack weld	Procedure									
II-2	TEST TANK										
	1. Radiographic Test (RT) 100%) for Butt Joint	ASME V, ASME VIII Div. 1	NDE Map	NDE Inspection Report	P		R		R		
	2. Dye Penetrant Test/Magnectic Particle Test: 100% (Weld Seam)	NDE Procedure									
	3. Lifting Lug	ITP									
	4. Temaporary Tack weld	Procedure									
H-3	SCRUBBER TANK										
	1. Radiographic Test (RT) 10% : for Butt Joint	ASME V, ASME VIII Div. 1	NDE Map	NDE Inspection Report	P		R		R		
	2. Dye Penetrant Test/Magnectic Particle Test: 100% (Weld Seam)	NDE Procedure									
	3. Lifting Lug , Lifting Trunnion	ITP									
	4. Temaporary Tack weld	Procedure									
I	FINAL INSPECTION										
I-1	STORAGE TANK										
	1. Final Dimensional assembly Check	Drawing Approval	Inspection Procedure	Dimensional and Visual welding Report	P		W		W		
	2. Visual Welding Check	Welding Procedure									
	3. Hydrotest	ITP	Hydrostaic Test Procedure	Hydrotest and Leaked Test Report	P		W		W		
I-2	TEST TANK										
	1. Final Dimensional assembly Check	Drawing Approval	Inspection Procedure	Dimensional and Visual welding Report	P		W		W		
	2. Visual Welding Check	Welding Procedure									
	3. Hydrotest	ITP	Hydrostaic Test Procedure	Hydrotest and Leaked Test Report	P		W		W		

 PT. HANAZONO Engineering Indonesia <i>We are always partner with you</i>		<h2>Inspection and Test Plan</h2>									
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I-3	SCRUBBER TANK										
1.	Dimensional assembly Check	Drawing Approval	Inspection Procedure	Dimensional and Visual welding Report	P		W		W		
2.	Visual Welding Check	Welding Procedure									
3.	Hydrotest	ITP	Hydrostaic Test Procedure	Hydrotest and Leaked Test Report	P		W		W		
J	PAINTING										
J-1	STORAGE TANK, TEST TANK, SCRUBBER TANK	Panting Procedure	Panting Procedure	Painting Inspection Report (PIR)	P		W		R		
1.	Check Surface Preparation										
2.	Visual Inspection (RAL colour) / D.F.T Check										
K	COMISIONING AND TESTING										
1.	ITP	Procedure Pre-Comisioning	Procedure Pre-Comisioning	Comisioning Report	P		W		W		
2.	Mechanical Completion Checklist										
3.	Pre-Comisioning Testing										
L	DOCUMENTATION MDR										
1.	Manufacturers Data Index	ITP Procedure		MDR Pakage	P		R		R		
2.	Manufacturers Data Report (MDR)										
<div style="display: flex; justify-content: space-between;"> <div> <p>PREPARED BY PT.HANAZONO (HEI)</p>  <p>PT. Hanazono Engineering Indonesia</p> </div> <div> <p>Legend</p> <p>H : Hold</p> <p>P : Perform</p> <p>W : Witness</p> <p>R : Review</p> <p>S : Surveillance</p> </div> </div>											