

Inspection and Test Plan for Pressure Vessel

No.	Inspection and Test Plan	Reference Document	Acceptance Criteria	Verifying Document	Activity By			Remark
					Manuf.	TPI	Client	
1	Pre-Inspection Meeting	Spec.	Spec.	MOM	H	H	H	-
Before Manufacturing								
2	DWG, Design, Calculation Document	ASME, Spec	ASME, Spec	DWG, Calculation book	H	R	A	-
3	WPS&PQR	ASME	ASME IX	Welding Book	H	R	A	-
4	Welder Qualification Certificates	ASME	ASME IX	Certificates	H	R	-	-
5	NDT procedure	ASME	ASME V,VIII, IX	Procedures	H	R	A	-
6	NDE Personnel Certificates	ASME	ASME V	Certificates	H	R	-	-
7	PWHT Procedure (if needed)	ASME	ASME VIII	Procedure	H	R	A	-
8	Hydro Static Test Procedure	ASME	ASME VIII	Procedure	H	R	A	-
9	Painting Procedure	ASME	Spec.	Procedure	H	R	A	-
Materials								
10	Material Certificates	ASME	ASME II	Original Material Certificates	H	R	-	-
11	Storage of raw material and Welding	ASME	ASME	-	H	W	-	-
12	Visual, Dimension and Marking Control	ASME VIII	ASME VIII	Report	H	W	-	-
During Manufacturing								
13	Transferring of marking Material	ASME VIII	ASME VIII	Report	H	SW	-	-

14	Cutting & Edge Preparation	DWG	DWG	-	H	SW	-	-
15	Head forming and Dimension Check	DWG	DWG, ASME VIII	Report	H	W	-	-
16	Check of Rolling for Shell	DWG	DWG, ASME VIII	-	H	SW	-	-
17	Check of Welding plan with WPS	DWG/WPS	WPS/DWG	-	H	SW	-	-
18	Fit Up & welding (shell to shell)	DWG/WPS	WPS/DWG	-	H	SW	-	-
19	Second Rolling of Shell	DWG	DWG, ASME VIII	Report	H	SW	-	-
20	Fit Up & welding (head to shell)	DWG/WPS	WPS/DWG	-	H	SW	-	-
21	Inspection of welds (N.D.T shell to shell and head)	ASME/NDT map/NDT Procedure	ASME VIII	Report	H	SW/R	-	-
22	Fit-Up, Welding of pipe to flange	ASME/DWG	ASME/DWG	-	H	SW	-	-
23	RT (Pipe to flange)	ASME/Spec./NDT Procedure/NDT Map	ASME VIII	Report	H	R	-	-
24	Marking ,Opening Nozzles	DWG	DWG	-	H	W	-	-
25	Fit-Up, Welding (Nozzle to Shell)	WPS/DWG	WPS/DWG	-	H	W	-	-
26	PT, UT (Nozzle)	ASME/NDT map/NDT Procedure	ASME VIII	Report				
27	Fit-Up, Welding (Pad of shell)	WPS/DWG	WPS/DWG	-	H	SW	-	-
28	Inspection for Fit-Up & Welding saddle & Lug	WPS/DWG	WPS/DWG	-	H	SW	-	-
29	Visual & Dimensional Check	DWG/Spec.	DWG	-	H	W	-	-
30	PWHT(if needed)	Procedure	ASME VIII / Spec	PWHT Online graph	H	H		

31	Hardness measurement (if needed)	Spec.	ASME II	Report	H	W		
32	Hydrostatic Test	Procedure	ASME VIII	Report	H	H	W	-
Final Inspection								
33	Final Visual & Dimensional Check	DWG/Spec.	DWG	Report	H	H	-	-
34	Surface Preparation and Painting	Procedure	SSSP/Spec.	Report	H	W	-	-
35	Check of Name Plate	DWG	DWG	Report	H	SW	-	-
36	Check of Final Book	Spec.	Spec.	DWG/ P.O	H	R		
Documentation								
37	Inspection Reports	Spec./DWG	Spec./DWG	Report	H	R	-	-
38	NCR	Spec./DWG	Spec./DWG	Report	H	R		
39	Review Final Data Report	Spec./DWG	Spec./DWG	Report	H	R		
Pre-Shipment Inspection								
40	Marking Control & Release Note	Spec.	Spec.	Report	H	H	-	-
41	Loading Inspection	Spec.	Spec.	Report	H	H	-	-
42	Shipping Document Control	Procedure	Spec.	Packing List	H	R	-	-

Abbreviations:

H: Hold Point = Hold on the production till TPI Inspector performs inspection and supervise the required test

W: Witness Point = Manufacture shall notify client and TPI Inspector but there is no hold on the production;
Client can waive this inspection based on his discretion and informs TPI Inspector accordingly.

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R: Document Review = Review means Review document, which includes of material test certificates, WPS, PQR, NDT Procedures and etc.

A: Approval

SW: Spot Witness = for items with spot witness manufacture shall notify TPI inspector as fulfilling the monitoring;
For example one random visit for whole UT tests or one or two visits for whole surface preparation works for painting.

MOM: Minute of Meeting

P.O: Purchase Order

for more information review following articles:

<http://www.inspection-for-industry.com/third-party-inspection-for-pressure-vessel.html>

<http://www.inspection-for-industry.com/inspection-and-test-plan-for-pressure-vessel.html>

<http://www.inspection-for-industry.com/pressure-vessel-inspections.html>