

Inspection and Test Plan for Valve

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	API 594, 599, 600, 602, 603, 6D, 608, 609 and ASME B16.34	API 594, 599, 600, 602, 603, 6D, 608, 609 and ASME B16.34	DWG, Calculation book	H	R	A	-
3	WPS&PQR	ASME IX	ASME IX	Welding Book	H	R	A	-
4	Welder Qualification Certificates	ASME IX	ASME IX	Certificates	H	R	-	-
5	NDT procedures	ASME V	ASME V	Procedures	H	R	A	-
6	NDE Personnel Certificates	ASME	ASME	Certificates	H	R	-	-
7	PWHT Procedure (if needed)	API 594, 599, 600, 602, 603, 6D, 608, 609 and ASME B16.34	API 594, 599, 600, 602, 603, 6D, 608, 609 and ASME B16.34	Procedure	H	R	A	-
8	Shell Test Procedure	API 598	API 598	Procedure	H	R	A	-
9	Backseat Test Procedure	API 598	API 598	Procedure	H	R	A	-
10	Low Pressure closure Test Procedure	API 598	API 598	Procedure	H	R	A	-
11	High Pressure closure Test Procedure	API 598	API 598	Procedure	H	R	A	-

12	Painting Procedure	SSPC	SSPC	Procedure	H	R	A	-
Materials								
13	Raw Material Certificates	ASME II/ASTM	ASME II/ASTM	Original Material Certificates	H	R	-	-
14	Material Identification	ASME II/ASTM	ASMEII/ASTM	Report	H	W	-	-
During Fabrication								
15	Body, Cap and Bonnet Visual Inspection after Casting	MSS SP-55	MSS SP-55	Report	H	W	-	
16	Body, Cap and Bonnet Dimensional, Mechanical and Chemical Composition Inspection	DWG/ ASME II/ASTM	DWG/ ASME II/ASTM	Report	H	W	-	
17	Trim Material Visual Inspection (Stem, Ball, Disk, Seat and etc.)	MSS SP-55/ Construction Code	MSS SP-55/ Construction Code	Report	H	W	-	
18	Trim Material Dimensional, Mechanical and Chemical Composition Inspection (Stem, Ball, Disk, Seat and etc.)	DWG/ ASME II/ASTM	DWG/ ASME II/ASTM	Report	H	W	-	

19	Casting Defect Repair by Welding	WPS/ Construction Code	WPS/Construction Code		H	H		
20	PWHT Review	Procedure	Procedure	Report	H	R	-	
21	Confirmation on NDE Test Results for all Components	Procedure	Procedure	Report	H	W	-	
22	Valve Assembly Inspection	DWG	DWG	Report	H	W	-	
23	Valve Welding Inspection (If any)	WPS	WPS	Report	H	W		
24	Bolt, Nut, Gasket, Gland and other Bought Components Inspection	DWG/ ASME II/ASTM	DWG/ ASME II/ASTM	Report	H	SW	-	
25	Valve Body Shell Test	API 598	API 598	Report	H	H	-	
26	Valve Backseat Test	API 598	API 598	Report	H	H	-	
27	Low Pressure closure Test	API 598	API 598	Report	H	H	-	
28	High Pressure closure Test	API 598	API 598	Report	H	H	-	
29	Valve Functional Test	API 598/ Construction Codes	API 598/ Construction Codes	Report	H	H	-	
Final Inspection								

30	Final Visual & Dimensional Check	DWG/Spec.	DWG	Report	H	H	-	-
31	Surface Preparation and Painting	Procedure	Procedure	Report	H	W	-	-
32	Check of Name Plate	DWG	DWG	Report	H	H	-	-
33	Check of Final Book	Spec.	Spec.	DWG/ P.O	H	R	-	-
Documentation								
34	Inspection Reports	Spec./DWG	Spec./DWG	Report	H	R	-	-
35	NCR	Spec./DWG	Spec./DWG	Report	H	R	-	-
36	Review Final Data Report	Spec./DWG	Spec./DWG	Report	H	R	-	-
Pre-Shipment Inspection								
37	Preservation and Packing	Spec.	Spec.	Report	H	H	-	-
38	Marking	Spec.	Spec.	Report	H	H	-	-
39	Loading Inspection	Spec.	Spec.	Report	H	H	-	-
40	Shipping Document Control	Procedure	Spec.	Packing List	H	H	-	-

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.

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.

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MOM: Minute of Meeting

P.O: Purchase Order

for more information review following articles:

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

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

<http://www.inspection-for-industry.com/factory-acceptance-test-for-valve.html>