

Inspection and Test Plan for Reciprocating Compressor

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 618	API 618	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)	API 618	API 618	Procedure	H	R	A	-
8	Compressor Mechanical Running Test Procedure	API 618	API 618	Procedure	H	R	A	-
9	Compressor Strip Down Test Procedure	API 618	API 618	Procedure	H	R	A	-
10	Pressure containg Part Hydro Static Test Procedure	API 618/ASME VIII	ASME VIII	Procedure	H	R	A	-
11	Painting Procedure	ASME	Spec.	Procedure	H	R	A	-
Materials								

12	Material Certificates	ASME/ASTM	ASME II/ASTM	Original Material Certificates	H	R	-	-
13	Material Identification	ASME	ASME	Report	H	W	-	-
14	Visual, Dimension and Marking Control	ASME/ASTM	ASME/ASTM	Report	H	W	-	-
During Fabrication								
15	Componenets Visual Inspection for Damage	API 618	API 618	Report	H	W	-	-
16	Componenets Dimensional check to drawing requirement	DWG/API 618	DWG/API 618	Report	H	W	-	-
17	Inspection of Parts, Particularly Cast in Passages and Piping for Cleanliness	DWG/API 618	DWG/API 618	Report	H	W	-	-
18	Visual Examination of Welded on Connections	ASME/API 618	ASME/API 618	Report	H	W	-	-
19	Confirmation of Satisfactory NDE	ASME/API 618	ASME/API 618	ASME/API 618	H	W	-	-
20	Componenets Mounting Control	DWG/API 618	DWG/API 618	Report	H	SW	-	-
21	Piston End Clearance Control	DWG/API 618	DWG/API 618	Report	H	W	-	-
22	Crankshaft Deflection Control	DWG/API 618	DWG/API 618	Report	H	W	-	-
23	Run-out Check	DWG/API 618	DWG/API 618	Report	H	W	-	-
24	Proper Match Marking	DWG/API 618	DWG/API 618	Report	H	W	-	-
25	Protection of Machined Surfaces	API 618	API 618	Report	H	SW	-	-

26	Hydrostatic Testing of Cylinder, Cooling Jackets, Pressure vessels, Filters and Cooler	ASME/API 618	ASME/API 618	Report	H	H	-	
27	Mechanical Runing Testing	API 618	API 618	Report	H	H	-	-
28	Strip Down Inspection	API 618	API 618	Report	H	H	-	-
Final Inspection								
29	Final Visual & Dimensional Check	DWG/Spec.	DWG	Report	H	H	-	-
30	Surface Preparation and Painting	Procedure	SSSP/Spec.	Report	H	W	-	-
31	Check of Name Plate	DWG	DWG	-	H	H	-	-
32	Check of Final Book	-	Spec.	DWG/ P.O	H	R	-	
Documentation								
33	Inspection Reports	Spec./DWG	Spec./DWG	Report	H	R	-	-
34	NCR	Spec./DWG	Spec./DWG	Report	H	R	-	-
35	Review Final Data Report	Spec./DWG	Spec./DWG	Report	H	R	-	-
Pre-Shipment Inspection								
36	Preservation and Packing	Spec.	Spec.	Report	H	H	-	-
37	Marking	Spec.	Spec.	Report	H	H	-	-
38	Loading Inspection	Spec.	Spec.	Report	H	H	-	-

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39	Shipping Document Control	Procedure	Spec.	Packing List	H	H	-	-
auxiliary equipment such as lub oil system, filter, silencesr, strainer, piping, steel structuer and etc are not included to this ITP								

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.

MOM: Minute of Meeting

P.O: Purchase Order

for more information review following articles:

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

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

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