

## Inspection and Test Plan for Fire Tube Boiler

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	-
<b>Before Manufacturing</b>								
2	DWG, Design, Calculation Document	ASME I	ASME I	DWG, Calculation book	H	R	A	-
3	WPS&PQR	ASME IX, I	ASME IX, I	Welding Book	H	R	A	-
4	Welder Qualification Certificates	ASME IX, I	ASME IX, I	Certificates	H	R	-	-
5	NDT procedures	ASME V	ASME V	Procedures	H	R	A	-
6	NDE Personnel Certificates	ASME I	ASME I	Certificates	H	R	-	-
7	PWHT Procedure (if needed)	ASME I	ASME I	Procedure	H	R	A	-
11	Hydro Static Test Procedure	ASME I	ASME I	Procedure	H	R	A	-
12	Painting Procedure	Spec.	Spec.	Procedure	H	R	A	-
<b>Materials</b>								
13	Material Certificates	ASME II	ASME II	Original Material Certificates	H	R	-	-
14	Material Identification	ASME II	ASME II	Report	H	H	-	-
15	Visual, Dimension and Marking Control (Plates, Tubes, Flanges and etc.)	ASME II	ASME II	Report	H	W	-	-

During Fabrication								
16	Shell Plate Fit-up Inspection	WPS	WPS	Report	H	W	-	
17	End Plate Fit-up Inspection	WPS	WPS	Report	H	W	-	
18	Shell and End Plate Dimensional Inspection	DWG/ASME I	DWG/ASME I	Report	H	W	-	
19	Shell and End Plate welding Inspection	WPS/ASME I	WPS/ASME I	Report	H	W	-	
20	Dimensional Control after Shell Post Rolling	ASME I	ASME I	Report	H	SW	-	
21	Confirmation of NDE in Shell and End Plate	ASME I	ASME I	Report	H	W	-	
22	Tubes and Integral Pipes Fit-up Inspection	WPS/ASME I	WPS/ASME I	Report	H	W	-	
23	Tubes and integral Pipes Welding Inspection	WPS/ASME I	WPS/ASME I	Report	H	W	-	
24	Visual and Dimensional Inspection on Attachments and Reinforcement Plates	DWG/ASME I	DWG/ASME I	Report	H	W	-	
25	Visual and Dimensional Inspection on Nozzles Attachments	DWG/ASME I	DWG/ASME I	Report		W		

25	Hydrostatic Testing	Procedure/ASME I	Procedure/ASME I	Report	H	H	-	
27	Auxiliary Equipment Inspection and Test i.e. Piping, Valves and etc.	ASME I	ASME I	Report	H	W	-	
<b>Final Inspection</b>								
39	Final Visual & Dimensional Check	DWG/Spec.	DWG	Report	H	H	-	-
40	Surface Preparation and Painting	Procedure	SSSP/Spec.	Report	H	W	-	-
41	Check of Name Plate	DWG	DWG	-	H	H	-	-
42	Check of Final Book	-	Spec.	DWG/ P.O	H	R	-	Submitted by
<b>Documentation</b>								
43	Inspection Reports	Spec./DWG	Spec./DWG	Report	H	R	-	-
44	NCR	Spec./DWG	Spec./DWG	Report	H	R	-	-
45	Review Final Data Report	Spec./DWG	Spec./DWG	Report	H	R	-	-
<b>Pre-Shipment Inspection</b>								
46	Preservation and Packing	Spec.	Spec.	Report	H	H	-	-
47	Marking	Spec.	Spec.	Report	H	H	-	-
48	Loading Inspection	Spec.	Spec.	Report	H	H	-	-
49	Shipping Document Control	Procedure	Spec.	Packing List	H	H	-	-
auxiliary equipment such as Piping, filter, burner, safety valve 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-fire-tube-boiler.html>

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