

File No:

Boiler Division:

**REPORT OF INSPECTION FOR REGISTRATION OF/RENEWEL OF CERTIFICATES FOR BOILER/ECONOMISER
ETC**

**PART-1
GENERAL**

- 1.1 Name and address of the factory :
 1.2 Name and address of the owner :
 1.3 Registration number of the boiler & location : New, Boiler House
 1.4

Type of boiler	Working Pressure	Rating	Capacity of boiler	Fuel Used

- 1.5 Register number of other connected boiler if any :
 1.6 Brief account on the repair carried out since
 Last inspection :
 1.7 Extension/modification of steam line made after
 Last inspection :
 1.8 Qualified personnel in charge of operation of boilers
 (a) Boiler operation engineer(Name) 1) Certificate No...../.....
 (b) Boiler operators-
 (c) Boiler operators-
 1.9 Remittance details of inspection fee:

PART-II(a)

**DETAILS OF INSPECTION CONDUCTED ON 19-09-2015 & 29-12-2015 OPEN TEST/HYDRAULIC TEST/STEAM
TEST(FOR BOILER/ECONOMISER) PRESSURE PARTS**

SL No.	Pressure Parts	Inspection items	Inspection Method	Judgment standard	Observations
2.1	Boiler(water/ steam drums)/ shell	Boiler drum/ shell/ coil type etc.	(a) Inspection through manhole and check for damage, deformation, overheating, discoloration, leaks of water and steam pitting, corrosion and adhering soot etc. (b) Behavior under pressure	Shall be no damage, deformation, overheating, discoloration, leaks, pitting, marked corrosion soot problems etc	
2.2	Furnace/Flue	Furnace/ Flue (internal/ external/dry back/ wet back/ once through/ reverse etc.)	(a) Look for water side corrosion, deformation, pitting, leakage of water/ steam, adhering of soot, supports (localized overheating) (b) Behavior under pressure	Shall be no damage for deformation, overheating, corrosion, pitting, leak soot problems etc.	
2.3	End plates	Endplates/ tubes	(a) Expanded/ welded joints of smoke plates tube with endplates, condition of fusible plugs, gussets, supports, stays etc. (b) Behavior under pressure	Shall be no damage for deformation, overheating, corrosion, pitting, leak soot problems etc., leak through expanded/ welded joints, tubes, good condition of fusible plugs	
2.4	Water tubes/ smoke tubes	Water tubes, smoke tubes, stay tubes etc.	(a) From peepholes and fire holes check for damage, bulging, local overheating, bending, adhering soot, welding defect, expansion joint etc (b) Behavior under pressure	Shall be no damage, bulging, local over heating, leaks, corrosion, adhering soot	
2.5	Super heater	Super heater tubes, headers etc.	(a)(1) From peephole, cleaning hole etc. check for bending, discoloration,	(1) Shall be no bending, discoloration, bulging,	

			bulging, cracks, steam leaks, corrosion and dirt (2) Check the temperature of superheated steam (b) Behavior under pressure	cracks, leaks, marked corrosion and dirt (2) Shall be in normal temperature range.	
2.6	Economizer	Tubes etc.	(a)(1) Check for water leaks, cracks, damage, corrosion and dirt (2) Check feed water temperature difference between inlet and outlet (b) Behavior under pressure	(1) Shall be no water leaks, cracks, damage, marked corrosion and dirt (2) Shall be no abnormality in temperature difference	
2.7	Any other items (specify)				

PART-II B

Instruction/ suggestion for improvement issued (including repair/ replacement and major repairs like change in design/ alteration etc.) as noted below

Place:

Date:

* Strike off whichever not applicable

Inspector of Factories and Boilers

PART- III(A)

MOUNTINGS AND ACCESSORIES

SL No.	Item	Working Condition	Observation/ Remarks
3.1	Safety valves(Nos)		
3.2	Main steam stop valves		
3.3	Blow down valves		
3.4	Auxiliary valves		
3.5	Feed Check Valves		
3.6	Relief valves/ pipes		
3.7	Drain valve for water wall headers		
3.8	Fusible plug		
3.9	Non return valves		
3.10	Water level gauge (a) Valve & Cocks (b) Gauge glass		
3.11	Pressure gauges		
3.12	Any other item (Specify)		

PART- III(B)

Instruction/ suggestion for improvement issued (including repair/ replacement and major repairs like change in design/ alteration etc.) as noted below

Place:

Date:

* Strike off whichever not applicable

Inspecting Officer
Inspector of Factories and Boilers

PART- IV(A)

OTHER CONNECTED PARTS

SL No.	Item	Working Condition	Observation/ Remarks
4.1	External surroundings (a) Casing and brick wall (b) Insulating materials		

4.2	Foundation and Installation		
4.3	Oil heater		
4.4	Burner and connected equipments		
4.5	Combustion chamber		
4.6	Stocker and grate		
4.7	Blowers (a) ID/FD fans (b) Soot blower		
4.8	Chimney		
4.9	Explosion door etc.		
4.10	Service tanks		
4.11	Automatic control systems		
4.12	Control panel and operation panels		
4.13	Starting and Stopping		
4.14	Main safety controller		
4.15	Flame detector		
4.16	Fuel supply and allied system		
4.17	Fuel and air flow rate control devices		
4.18	Water level controller		
4.19	Water treatment equipment		
4.20	Feed water pump and motors		
4.21	Injector(No. of feed pumps, shall be two, if injector is not provided)		
4.22	Feed water tank		
4.23	Any other item (Specify)		

PART- IV(B)

Instruction/ suggestion for improvement issued (including repair/ replacement and major repairs like change in design/ alteration etc.) as noted below

Place:

Date:

* Strike off whichever not applicable

Inspecting Officer
Inspector of Factories and Boilers

PART- V(A)

CONNECTED STEAM LINES

SL No.	Inspection Items	Inspection Method	Judgment standard	Observations	Action taken
5.1	Steam pipe	Check for leak of water and steam, damage, bending and corrosion	Shall be no leaks, damage, abnormal bending or marked corrosion		
5.2	Expansion joint and pipe support fittings	Check for damage and check expansion/ contraction function	Shall be no damage, expansion and contraction shall be normal		
5.3	Draining	Check for accumulation of drain, steam traps	Shall be no accumulation		
5.4	Insulating material	Check for damage	Shall be no damage		
5.5	Outdoor piping and under ground piping	Check for flooding	Shall be no flooding		
5.6	Glands, flanges, steam traps etc.	Check for leak of water and steam, damage and looseness of bolts	Shall be no leaks, damage or looseness		

PART- V(B)

Instruction/ suggestion for improvement issued (including repair/ replacement/maintenance and major repairs like change in design/ alteration etc.) as noted below

Place:
Date:
* Strike off whichever not applicable

Inspecting Officer
Inspector of Factories and Boilers

PART- VI

INSPECTION DETAILS FOR REGISTRATION OF NEW BOILER/ ECONOMISOR, RENEWEL OF CERTIFICATE

Folder of documents received vide _____ of the Director of Factories and Boilers. Material identified on
Site inspection conducted on Boiler erection was carried out by M/s _____

Inspecting officer :
Inspector of Factories and Boilers,

A. INSPECTION FOR RENEWEL OF CERTIFICATE

1. Open test of boiler conducted on _____
2. Hydraulic test conducted on to Kg/square cm for minutes.
3. Steam test conducted on To ...
Safety Valves(1) set to on.....
Safety Valves(2) set to on.....
Safety Valves(3) set to on.....

B. STEAM LINE INSPECTION

1. Along with registration of boiler
Approval Order No _____ dated _____ of Director of Factories and Boilers.....
Work carried out by M/s _____
2. Extension/ modification of existing steam line
Approval No..... work carried out By recognized vide No.... valid
up to.....
3. Open test carried out
4. Hydraulic test carried out on _____ safety valve set to(in case of PRV's)
5. Condition of steam line.....

C. CONDITION OF BOILER/ ECONOMISER & CONNECTED STEAM LINES FOUND SATISFACTORY

Provisional issued for use of Boiler No _____ Dated- _____ of working pressure _____ Kg/square cm for six
months from _____

**D. RECOMENDED FOR PROHIBITION/ CONDEMNATION REPORTED TO THE JOINT DIRECTOR OF
FACTORIES AND BOILERS/ DIRECTOR OF FACTORIES AND BOILERS**

W.E.F..... vide letter no.....

Place:
Date:
* Strike off whichever not applicable

Inspecting Officer
Inspector of Factories and Boilers

Note

1. Inspecting officer is instructed to pursue the documents also maintained by the authorized operator / supervisor of the boilers for the preparation of inspection report. (eg. Log book of the boiler, quality of feed water, operational problems encountered etc.)
2. All part columns of this inspection report shall be filled up by the inspecting officer in his own handwriting.
3. Attach separate sheets, in case the space provided for suggestion/ improvement is not sufficient.
4. In respect of an accident investigation also relevant details to be made in the inspection report