

IBR CERTIFICATES / FORMS
Under the Indian Boiler Regulations, 1950

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“FORM I

(See regulation 386)

**MEMORANDUM OF INSPECTION BOOK
OR
REGISTRATION BOOK**

**BOILER INSPECTION DEPARTMENT
BOILER REGISTRY NUMBER**



GENERAL

District.....
 Owner.....
 Address of Factory.....

Nearest Railway Station.....
 Factory is..... KMs from station
 Work or Factory.....
 Working Season

Boiler registered at..... on.....
 Register Book No. Page.....
 Registry Number..... verified on.....
 Approved Working Pressure
 Boiler Rating..... Inspection Fee.....
 Registration Book Filed at..... on.....

Remarks on transfers, etc.

PROVISIONAL ORDER AND CERTIFICATE RECORD

<i>Fee Rs</i>	<i>Date of Payment</i>	<i>Date of Inspection</i>	<i>Certificate No. and Date</i>	<i>Period of certificate</i>	<i>Working Pressure Kg/cm2</i>	<i>Boiler Rating</i>	<i>Evaporation T/hr or Kg/hr</i>	<i>Initials of Inspector/ Competent Person</i>

PARTICULARS AND DIMENSIONS

Type of Boiler:

Leading Dimensions:

Maker:

Intended Working Pressure :

Place and Year of make :

Maker's Number :

Description of Boiler:

Details of Maker's stamp

Position of Stamp

MAKER'S CERTIFICATE

Boiler Name.....

Maker Manufacture, hydraulic test to Kgs/Cm². Drawing No.....
received.....

Inspecting Name.....

Authority Tests of material, construction, supervision, hydraulic test.....
received.....

DETAILS OF PRESSURE PARTS

S NO	NAME OF THE PRESSURE PART	SIZE	MATERIAL SPECIFICATION

CYLINDRICAL SHELL

	(a) <i>Shell or Mud Drum</i>	(b) <i>Steam Drum</i>
Name of parts		
Number		
Length between end plates		
Length between end plates seam		
Diameter inside largest belt		
Thickness of Plates		
Number of belts of plating		
Longitudinal seams		

Position (o'clock)		
Circumferential seams		
No. of seams (end and inner)		

SHELL END PLATES AND STAYS

PLATES	Flat, dished, hemispherical (in..... pieces,) not stayed, not flanged			
	Diameter (outside), front..... back,.....	crown.....	Largest circle	
	Radius of curvature front.....	back,	crown	
	Radius of curvature, corner of flange,.....	shell,	furnace, uptake, ...	
	Plate, thickness, front back,	crown.....	tubeplate F,..... B,	
	Attach. to shell, crown or front,			
	Attach. to shell, back end,			
	Attach. to uptake or furnace crown or front,.....			
Attach. to furnace flue, back end.....				
STAYS	Gusset Stay, No. F.E., top,	Bottom,	B.E., top,	bottom,
	Longtl. Stays No.	dia.,	,
	Longtl. Stays pitch, Vertical	Horizontal.....	Circumferential
	Diagl. Do,		

MANHOLES, HAND AND SIGHT HOLES, DOORS AND STAND BLOCKS

Parts and materials hereunder.....

MANHOLES	No. and position			
	Framed or plate flanged			
	Boiler opening, length x width			
	Frame opening, length x width			
	Frame inside, outside, raised, pressed			
	Frame solid, welded, cast			

Frame section on longtl. axis			
Door, type and thickness			
Door, if inside, spigot clearance			
Bolts, No. dia., threads Nut			
Bolts, pitch circle			
Compensation ring, width x thickness			

SIGHT HOLES	No.	dimensions	positions
	Compensation rings fitted	section	
	Doors, type	bolts dia.,..... threads.....	spigot clearance.....
	Cleaning plugs, No	dia.	position
BLOCK ETC.	Height	dia. (outside), top,... bottom....	thickness
	Standpipe below stop valve,	height,..... dia. (outside)	thickness
	Flanges		

FIREBOX DETAILS

DETAILS OF FLUE TUBES			
I & II PASS TUBES	No. plain,	Stay overall	length specification
	Plain, dia. (out)	thickness, ...	Front End.,welded, expd., beaded, feruled. Smoke End.,welded Expd., beaded, or
	Stay, dia. (out)	thickness,	F.E.,welded, expd., beaded, , S.E,welded, Expd., ..
	Pitch of plain tubes, V	H	D C.Z.
	Pitch of stay tubes, V	H.....	D C, Z
II & III PASS TUBES	No. plain,	Stay overall	length specification
	Plain, dia. (out)	thickness, ...	Front End.,welded, expd., beaded, feruled. Smoke End.,welded Expd., beaded, or
	Stay, dia. (out)	thickness,	F.E.,welded, expd., beaded, , S.E,welded, Expd., ..
	Pitch of plain tubes, V	H	D C.Z.
	Pitch of stay tubes, V	H.....	D C, Z

FURNACE, CROWN AND UPTAKE

HORIZONTAL AND VERTICAL FURNACES	No.,		Type
	No. of stiffener rings in each Furnace.....		Longtl. seams position
	Length between Centre		
	Inside diameter		
	Plate thickness		
Positions of cross tubes or stiffener			

MOUNTINGS AND FITTINGS

	<i>Number</i>	<i>Diameter</i>	<i>Type</i>	<i>Material</i>	<i>Bolted OR welded to</i>
Valves etc.	Safety				
	Safety				
	Main. Stop				
	Aux. Stop				
	Feed				
	Blow Down				
	Injector				

MISCELLANEOUS FITTINGS	Water gauges, No. type	Test cocks No.
	Water gauges, top of lower nut is mm above	
	Pressure gauge, Type	dia.in mm ... range Kg/cm ²
	Pressure gauge, Maker	No. red line at Kg/ cm ²
	Fusible plug, type position	
	Blow down pipe connected to	
	Feed apparatus	
Additional fittings		

SAFETY VALVES

	(A)	(B)	(C)
No. of valves each chest			
Type			
Diameter of valve seat(mm)..			
Diameter of Neck(mm).....			
Diameter of outlet(mm).....			
.....			

REQUISITE AREA OF SAFETY VALVES

For Saturated steam

For Superheated steam

$$A = \frac{E}{C.P.}$$

$$A_s = \sqrt[4]{1 + \frac{1.5T}{1000}}$$

E = ; C = ; P = ; A =

As = ; T = ; A = ;

HEATING SURFACE

Total Heating SurfaceSq. m.

Boiler Rating

HYDRAULIC TEST (REGISTRATION)

Inspector Date of test Test pressure Kgs/ cm²
 Duration of test mins. Boiler pressure, gauge No. use at test
 Boiler pressure gauge compared with on found
 Position of Boiler at test
 Brick work Lagging
 Condition of boiler under test
 Condition of boiler mountings under test

M I book prepared by on submitted on
 M I Book Checked by on
 Least pressure, that for Kg/ cm²
 Approved working pressure Kg/ cm²
 Chief Inspector/Director of Boiler's remarks and signature

STEAM TEST (REGISTRATION)

Inspector Date of Test
 Approved working pressure Kg/ cm² Test pressure Kg/ cm²
 Boiler connections Condition of fire
 Fuel used Draught
 Safety Valve lifted at (A) kg/ cm².. (B) kg/ cm². (C) kg/ cm²..

	Beginning	5 mins.	10 mins.	15 mins.	Difference
Timing of test.....					
Height of water in glass.....					
Pressure by Boiler gauge.....					

Accumulation of pressure, in (%)
 Do safety valves efficiently relieve boiler?
 Condition of boiler under steam
 Condition of mountings under steam
 Thickness of washers or ferrules

Feed pump or injector worked
 Water gauge tested
 Boiler Attendant (or) Boiler Operation Engineer
 Limit of load on safety valves to be entered in Certificate

NOTES ON WORKING OF BOILER

Boiler is used for
Constant, intermittent or seasonal work
Is boiler relieved by spare boiler ?
Nature of feed water
Fuel used Are printed instructions kept near boiler ?
Period between cleanings recommended by Inspector

STEAM-PIPES
PLAN OF MAIN STEAM-PIPES

Registry Nos. of connected boilers

Provisions for disconnection from other boiler

RECORDS OF INSPECTIONS AND TESTS

First inspection by on
First hydraulic test to Kgs/ cm² ... by on

INSPECTION NOTES

PARTICULARS OF BOILER ATTENDANTS & BOILER OPERATION ENGINEER				
Date of visit	Name	Grade	Certificate No.	Date of Issue".

..

“FORM II (1)
[See regulation 4(c)(i)]

CERTIFICATE OF INSPECTION FOR SHOP ASSEMBLED BOILERS

INSPECTING AUTHORITY: _____ Certificate No. _____

We hereby certify that the _____ Boiler, built by M/s _____

under Maker’s number _____ was constructed under our supervision and inspected at various stages of construction by the Competent Person and that the construction and workmanship were satisfactory and in accordance with the standard conditions for the design and construction of boilers as per regulations framed under the Boilers Act, 1923.

The boiler is stamped on the _____ Shell Plate with stamp as shown hereunder:-

MAKER’S NAME	: _____
MAKER’S NO.	: _____ YEAR OF MAKE : _____
TESTED TO	: _____ Kg./cm ² (g) ON : _____
W.P.	: _____ Kg./cm ² (g)
COMPETENT PERSON’S OR INSPECTING AUTHORITY’S OFFICIAL STAMP	

The boiler on completion was subjected to a Hydrostatic test pressure of _____ kg/cm² (g) in the presence of the Competent Person on _____ day of _____ and satisfactorily withstood the test.

All welded seams were subjected to destructive and Non-Destructive examination wherever applicable and found satisfactory.

We have satisfied ourselves that the construction and dimensions of the boiler are as shown in the Maker’s Drawing Number _____ signed by us and that the particulars entered in Maker’s certificate of manufacture in Form III countersigned by us are correct to the best of our knowledge and belief.

Signature of Competent Person

Signature of Inspecting Authority
Date and Seal

FORM II (2)
[See regulation 4(c)(i)]

CERTIFICATE OF INSPECTION FOR SITE ASSEMBLED BOILERS
INSPECTING AUTHORITY : _____ Certificate No. _____

We hereby certify that the _____ boiler; built by M/s _____
_____ under Maker's Number _____ was constructed under our supervision and inspected at various stages of construction by the Competent Person and that the construction and workmanship were satisfactory and in accordance with the Standard Conditions for the design and construction of boilers as per regulations framed under the Boilers Act,1923.

The Boiler components are stamped as per details below, wherever applicable.

Component Name	Drawing No.
----------------	-------------

Stamping Details

Maker's Name : _____
Maker's Number : _____ Year of make : _____
Tested to : _____ Kg/cm²(g) on _____
W.P. : _____ Kg/ cm² (g)

Competent Person's or Inspecting Authority's Official Stamp

Samples of materials used in the constructions of the boiler were tested in the presence of the Competent person and found to comply with the regulations.
All welded seams were subjected to destructive and Non-Destructive examination wherever applicable and found satisfactory.

We have satisfied ourselves that the construction and dimensions of the boiler are as shown in the Maker's Drawing Number _____ signed by us, and that the particulars entered in the Maker's certificate of manufacture in Form III countersigned by us are correct to the best of our knowledge and belief.

Signature of Competent Person

Signature of Inspecting Authority
Date and Seal ”.

FORM II-A

**INSPECTING AUTHORITIES CERTIFICATE OF INSPECTION DURING
CONSTRUCTION IN RESPECT OF A BOILER MADE TO FOREIGN CODE FOR EXPORT**

[Regulation 3A]

Designation of Inspecting Authority

We hereby certify that the type boilers; length diameter working pressure built by Messrs under Shop No. was constructed under our supervision and inspected at various stages at construction by the Competent Person and that the design, construction and workmanship were satisfactory and in every respect in accordance with Code Specification. The boiler is stamped as under :

The boiler on completion was tested to in the presence of the Competent Person on and it satisfactorily withstood the test. Details of tests and inspections are furnished with this certificate.

We have satisfied ourselves that the design, construction and dimensions of the boiler are as shown in the Maker's Drawing No. approved and signed by us, and that the particulars entered in the Maker's Certificate of manufacture are correct to the best of our knowledge and belief.

Maker's certificate, signed by them and countersigned by us, as required by the Code/Specification, is enclosed.

Signature of Inspecting Authority

FORM II-B

INSPECTING AUTHORITY CERTIFICATE OF INSPECTION DURING CONSTRUCTION OF BOILERS FOR WHICH VARIATIONS FROM STANDARD CONDITIONS HAVE BEEN PERMITTED

[Regulation 4(c)(1) Note]
Designation of Inspecting Authority

We hereby certify that the type boilers; length diameter working pressure built by Messrs at under Shop Number was constructed under our supervision and inspected at various stages of construction by the Competent Person, and that the design, construction and workmanship were satisfactory and in accordance with the variations from the standard conditions laid down in the Indian Boiler Regulations, 1950, for material design and construction features have been permitted by the Board of Inspecting Authority under the Indian Boilers Act, 1923.

The Boiler is stamped on the front end plate with our stamp as shown hereunder :—

Maker's Name Year of Make Works Number Tested to on W.P. Competent Person's or Inspecting Authority's official stamp.

The boiler on completion was subjected to a water pressure test of..... in the presence of
The drum and header were Competent Person on 20 and satisfactorily withstood the test.

*Samples of materials used in the construction of the boiler were tested in the presence of the Competent Person and found to comply with the requirements. All welded seams were subjected to physical tests and radiographic examination wherever applicable and found satisfactory.

Note: Strike off this paragraph where no such test have been carried out and the certificate in Form IV by a Well-Known Maker is intended to be furnished.

* Strike out which is not applicable.

We have satisfied ourselves that the constructions and dimensions of the boiler are as shown in the Maker's Drawing No. signed by us and that the particulars entered in the Maker's certificate of manufacture in Form III countersigned by us, are correct to the best of our knowledge and belief. Particulars of variations from the standard conditions laid down in the said regulations as permitted by the Board or Inspecting Authority are enclosed.

Signature of Inspecting Authority

Dated at this day of 20.....

“FORM IIC
INSPECTING AUTHORITIES CERTIFICATE OF INSPECTION
DURING ERECTION
[Regulation 4 (c) (1)]

Designation of Inspecting authority

We hereby certify that the.....type boilers working pressure.....kg/square cm built by Messrs..... at..... under makers number was erected under our supervision and inspected at various stages of erection by the Competent Person and that the erection and workmanship were satisfactory and in accordance with the Standard Conditions for construction of land boilers under the Indian Boilers Act, 1923.

All welded seams were subjected to post weld Heat treatment and Non-destructive examination wherever applicable and found satisfactory.

The boiler on completion of erection was subjected to a water pressure tests ofKg per Square cm in the presence of the Competent Person on.....and satisfactorily withstood the test. We have satisfied ourselves that the erection of the boiler are as shown in the Maker's Drawing No.....are correct to the best of our knowledge and belief.

Signature of Competent Person

Signature of Inspecting authority

Dated atthis..... Day of20..... ”.

“FORM III

[See regulation 4(c)(ii)]

Constructor’s Certificate of Manufacturer and Test

1. Description	Constructor’s Name and address..... Manufactured for/Stock purposes Contract No. Type of Boiler Length overall Diameter inside Largest belt Design pressure Kg/cm ² Reheater Pressure -----Kg/ cm ² Maker Number of boiler Year of Make Total heating surface Sq. m Evaporation capacity (for calculation of relieving capacity of safety valves) Final Temperature of steam (Design) Superheater Outlet.....°C Reheater Outlet °C Brief description of boiler
----------------	---

2. Parts manufactured at the constructor’s works	Name of Components(s)..... Drawing No..... Manufactured by Identification marks Part(s) manufactured, inspected at all stages of construction by (Inspecting Authority). Part(s) hydraulically tested and inspected after test by
--	---

3. Parts manufactured outside the constructor’s works	Name of Components(s) Drawing No..... Manufactured by Identification marks Part(s) manufactured, inspected at all stages of construction by (Inspecting Authority). Part(s) hydraulically tested and inspected after test by
---	--

Note: Similar information is to be furnished for each part manufactured outside the constructor’s Works.

4. Construction

(a) The construction is in accordance with Chapter III/ V / X / XII / XIV of the Indian Boiler Regulations.

Number of longitudinal seams in shell/drum in each belt

Number of longitudinal seams in furnace in each ring

Number of circumferential seams in shell/drum
(including end seams)

Number of circumferential seams in the furnace

Details of repairs, if any, carried out in welded seams during construction

Details of heat treatment

All welded seams were subjected to Radiographic examination to the satisfaction of the Inspecting Authority, where required.

Note : Strike out whichever is not applicable

5. Details of Drums/Shells

No.	Nomenclature	Nominal dia.	Length	Shell plate		Tube plate		Head			Manholes No. & Size	Hydrostatic test lbs./sp.in
				Thickness in mm.	Inside radius mm.	Thickness in mm	Inside radius mm	Thickness in mm	Type*	Radius of dish in. mm		
1	2	3	4	5	6	7	8	9	10	11	12	13

*Indicate (1) Flat (2) Dished (3) Ellipsoidal (4) Hemispherical.

6. Headers and Boxes

<i>Description</i>	<i>Size and shape</i>	<i>Thickness in mm</i>	<i>Head or end</i>		<i>Hydrostatic test Kg/cm²</i>
			<i>Shape</i>	<i>Thickness in mm</i>	

7. Mountings

<i>No.</i>	<i>Nomenclature</i>	<i>Material</i>	<i>Type</i>	<i>No.</i>	<i>Size</i>
1.	Main stop valve				
2.	Auxiliary stop valves				
3.	Safety valves (a) (b) (c)				
4.	Blow down valves				
5.	Feed Check valves				

8. Details of the safety valves and test results (Regulation 4 (c) (Vii))

Manufacturer

Identification marks of valves

Maker's No.

Type

Life (mm) Drawings Nos.

Valves details :

Material

.....

Valve Seat

.....

Flat/Bevel

.....

Diameter of valve seating

Valve Body :

Material

.....

Opening at neck

Opening at outlet

Springs:

Material

.....

Process of manufacture

Chemical composition

Dimensions :

Outside diameter of coil

Section of wire

Number of coils

.....

Free length of coils

Test results :

Place of test Date

Closing down pressure

Remarks :

Does the valve chatter?

Does the valve seat leak?

Blow off pressure

Type of valve and extract of test results

Type of valve

.....

Place of test date

Constant 'C' by test results

Capacity of the valve for the intended blow off pressure

Signature of Maker's representative

INSPECTING AUTHORITY witnessing tests

9. Certified that the particulars entered herein in manuscript by us are correct and that parts and fittings in sections 2 to 9, against the names of which entries are made have been used in the construction and fittings of the boiler.

The particulars shown against the various parts used are in accordance with the enclosed certificates from the respective Makers.

The design of the boiler is that as shown in Drawing Nos.

The boiler has been designed and constructed to comply with the regulations under the Boilers Act, 1923, for a working pressure of Kg/ cm² at our Works above-named and satisfactorily withstood a water test of Kg/ cm² on the day of 20 in the presence of our responsible representative whose signature is appended hereunder.

Least pressure is for (name of the component)_____ and is _____ kg/cm²(g)

Maker's Representative

Maker _____

(Name, signature and stamp)

(Name, signature and stamp)

Name, signature and stamp of
Competent Person

Name, signature and stamp of
Inspecting Authority

Dated the day of 20.....".

“ FORM III-A
[See regulation 4(e)]

Certificate of Manufacture and test for Pipes

Certificate No.----- Date:-----
 Name of part & Quantity.....
 Drawing No.....
 Maker's name and address.....
 Customer's Name & Address.....
 Design pressure.....Kg/cm²
 Design temperature..... °C

RAW MATERIAL

Process of manufacture.....
 Fully Killed/rimmed.....
 Chemical composition.....
 Heat Number.....
 Size.....
 Test Certificate No. & Date.....
 Name of the Steel Maker.....
 Name of Inspecting Authority.....

PIPES

Process of manufacture.....
 Main dimensions.....
 Tolerances.....
 Specification.....
 Bend test on pipe or weld.....
 Flattening test.....
 Other tests.....
 Tensile strength.....
 Chemical Composition.....
 Heat treatment.....
 Hydraulic test..... Kg/cm²

Identification mark of Inspecting Authority/Well known pipe maker

NOTE.- In addition, the following information in respect of the material shall be furnished in a tabular form in conformity with the requirements of regulation 4(c)(vi) or the note thereto, as the case may be. The information may be given from the established test data or if the material is of standard quality an extract from the standard may be furnished instead.

Metal temperature °C	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600
E _t															
S _c															
S _f															
MAWP															

Tensile strength at 20°C.

Where

E_t = Yield point at temperature t (0.2% proof stress)

** S_c = Average stress to produce an elongation of 1% (creep) in 100,000 hours at various working metal temperatures.

** S_r = Average and lowest stress to produce rupture in 100,000 hours at the various working metal temperatures.

MAWP = Maximum Allowable Working Pressure in Kg./cm²

Temperature range in the table may extend upto the limit of applicability of the material.

**The value of S_c and S_r need be furnished only in respect of Pipes intended to be used for working metal temperature above 454°C (850°F).

Certified that the particulars entered herein are correct. The particulars of fabricated component are shown in drawing No.

The pipe has been designed and constructed to comply with the Indian Boiler Regulations for a maximum working pressure of _____ Kg/cm² and maximum temperature of _____ °C and satisfactorily withstood a water test of _____ Kg/cm² on the _____ day of _____ 20____, in the presence of our responsible representative whose signature is appended hereunder.

Maker's Representative
(Name and signature)

Maker _____
(Name and Signature)

We have satisfied ourselves that the _____ have been constructed in accordance with Indian Boiler Regulations 1950. The tests conducted on the samples taken from the finished pipes have been witnessed by us and the particulars entered herein are correct.

Name and signature of
Competent Person

Name and signature of
Inspecting Authority/Well Known Pipe Maker

Place _____

Date _____

NOTE (1).- This form is intended for the use of both pipe manufacturers and pipe fabricators. Only such of the columns or paragraphs that are applicable, or information that can be obtained and furnished from other certificates, need be filled or entered in this form.

NOTE (2).- In the case of fabrications made from steel pipes obtained from elsewhere, particulars in regard to the "material" and "pipes" shall be taken from similar forms of certificates obtained in respect of pipes and noted in the appropriate columns or paragraphs.

NOTE-(3).- For Stock and sale purpose, one Form shall be issued for not more than five pipes.

In the case of pipes made from steel, made and tested by well known Steel Makers in India or other countries, particulars regarding the 'material' as certified by them in Form IV shall be noted in the appropriate columns or paragraphs of Raw material in this certificate."

“FORM III-B
[See regulation 4(f)]

Certificate of Manufacture and Test for Tubes

Certificate No.----- Date:-----
 Name of part & Quantity.....
 Drawing No.....
 Maker’s name and address.....
 Customer’s Name & Address.....
 Design pressure..... Kg/cm²
 Design temperature..... °C

RAW MATERIAL

Process of manufacture.....
 Fully killed/rimmed.....
 Chemical Composition.....
 Heat Number.....
 Size.....
 Test Certificate No. & Date.....
 Name of the Steel Maker.....
 Name of Inspecting Authority.....

TUBES

Process of manufacture.....
 Main dimensions.....
 Tolerances.....
 Specification.....
 Tensile strength.....
 Chemical Composition.....
 Elongation percentage.....
 Bend test.....
 Flattening test.....
 Crushing test.....
 Flare test.....
 Flange test.....
 Other Tests
 Heat treatment.....
 Hydraulic test..... Kg/cm²

Identification mark of Inspecting Authority/Well known tube maker

NOTE.- In addition, the following information in respect of the material shall be furnished in a tabular form in conformity with the requirements of Regulation 4(c)(vi) or the note thereto, as the case may be. This information may be given from the established test data or if the material is of standard quality, an extract from the standard may be furnished instead.

Metal temperature °C	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600
E _t															
S _c															
S _r															
MAWP															

Tensile strength at 20°C.....

Where

- E_t = Yield at temperature t (0.2% proof stress).
- ** S_c = Average stress to produce an elongation of 1%(creep) in 100,000 hours at the various working metal temperatures.
- ** S_r = Average and lowest stress to produce rupture in 100,000 hours at various working metal temperatures.

MAWP = Maximum Allowable Working Pressure in Kg./cm²

Temperature range in the table may extend upto the limit of applicability of the material.

**The value of S_c and S_r need be furnished only in respect of tubes intended to be used for working metal temperature above 454°C (850°F).

Certified that the particulars entered herein are correct. The particulars of fabricated component are shown in drawing No.

The tube has been designed and constructed to comply with the Indian Boiler Regulations for a maximum working pressure of _____ Kg/cm² and maximum temperature of _____ °C and satisfactorily withstood a water test of _____ Kg/cm² on the _____ day of _____ 20____, in the presence of our responsible representative whose signature is appended hereunder.

Maker's Representative
(Name and signature)

Maker _____
(Name and Signature)

We have satisfied ourselves that the _____ have been constructed in accordance with Indian Boiler Regulations 1950. The tests conducted on the samples taken from the finished tubes have been witnessed by us and the particulars entered herein are correct.

Name and signature of
Competent Person

Name and signature of
Inspecting Authority/Well Known Tube Maker

Place _____
Date _____

NOTE (1).- This form is intended for the use of both tube manufacturers and tube fabricators. Only such of the columns or paragraphs that are applicable, or information that can be obtained and furnished from other certificates, need be filled or entered in this form.

NOTE (2).- In the case of fabrications made from steel tubes obtained from elsewhere, particulars in regard to the "material" and "Tubes" shall be taken from similar forms of certificates obtained in respect of pipes and noted in the appropriate columns or paragraphs.

NOTE-(3).- For Stock and sale purpose, one Form shall be issued for not more than ten tubes.

In the case of tubes made from steel, made and tested by well-known Steel Makers in India or other countries particulars regarding the 'material' as certified by them in Form IV shall be noted in the appropriate columns or paragraphs of Raw material in this 'certificate.'.

“FORM III-C

[See regulation 4(g)]

Certificate of Manufacture and test of Boiler Mountings and Fittings

Certificate No. Date:-----
 Name of part...
 Quantity ----- SL No
 Drawing No.....
 Maker’s name and address.....
 Customer’s Name & Address.....
 Design pressure..... kg./cm²
 Design temperature..... °C

Metal temperature °C	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600
MAWP															

MAWP = Maximum Allowable Working Pressure in Kg./cm²

Hydraulic test pressure..... kg./cm²
 Main dimensions.....
 Specification.....
 Inspecting Authority’s Identification Marks.....
 Chemical composition.....
 Physical test results.....
 (i) tensile strength.....
 (ii) transverse bend test.....
 (iii) elongation.....
 Other Tests.....

RAW MATERIAL

Process of manufacture.....
 Fully killed/rimmed.....
 Specification.....
 Heat Number.....
 Size.....
 Test Certificate No. & Date.....
 Name of the Maker.....
 Name of Inspecting Authority.....

Certified that the particulars entered herein by us are correct.
 The _____ has been designed and constructed to comply with the Indian Boiler Regulations 1950 for a maximum working pressure of _____ kg./cm² and maximum temperature of _____ °C and satisfactorily withstood a hydraulic test using water or kerosene or any other suitable liquid to a pressure of _____ kg./cm² on the _____ day of _____ 20__ in the presence of our responsible representative whose signature is appended hereunder:

Maker Representative
 (Name and signature)

MAKER _____
 (Name and Signature)

We have satisfied ourselves and the _____ has been constructed and tested in accordance with the requirements of the Indian Boiler Regulations, 1950. We further certify that the particulars entered herein are correct.

Name and signature of
Competent Person
who witnessed the tests

Name and signature of
Inspecting Authority

Place _____
Date _____

- Note: (1) In the case of valve chest made and tested by well known Foundries or Forges recognized by the Central Boilers Board in the manner as laid down in regulations 4A to 4H, particulars regarding the material as certified by them, in Form III-F / Form III-G & Form IV, shall be noted in the appropriate columns or paragraphs in the certificates and in case of certificates from Well Known Foundries or Forges is produced, such certificate may be accepted in lieu of the certificate from Inspecting Authority in so far as it relates to the testing of material specified in the Form.
- (2) In case of safety valves, details and test results as required in item No.8 of Form-III shall also be furnished duly signed by manufacturer and inspecting authority.
- (3) For Stock and sale purpose, one Form shall be issued for not more than fifty mountings and fittings.”.

“FORM III-D (deleted)

&

FORM III-E (deleted)

“FORM III-F
(See regulations 73 to 80)

CERTIFICATE OF MANUFACTURE AND TEST OF CASTINGS

Certificate No. and date

Heat Number* and date of pouring

Maker's name and address

Customer's name and address

Drawing Nos.

Description and quantity _____ Sl.No. _____

Foundry identification _____

Chemical composition

Heat treatment

Physical test results.

- (i) Tensile strength
- (ii) Transverse bend test
- (iii) Elongation
- (iv) Other tests

Certified that the particulars entered herein by us are correct. This satisfies the requirements of Indian Boiler Regulations, 1950.

Maker's Representative
(Name and signature)

Maker _____
(Name and Signature)

Name and signature of
Competent Person

Name and signature of
Inspecting Authority/Well Known foundry

*for castings of size more than 100mm Heat number must be as Cast.”.

“FORM III-G

(See regulations 81 to 85)

CERTIFICATE OF MANUFACTURE AND TEST OF FORGINGS

Certificate No. and date

Heat Number

Details of raw material

Maker's name and address

Customer's name and address

Drawing Nos.

Description and quantity _____ SI.No. _____

Forge shop identification _____

Chemical composition

Heat treatment

Physical test results.

(i) Tensile strength

(ii) Transverse bend test

(iii) Elongation

(iv) Other tests

Certified that the particulars entered herein by us are correct. This satisfies the requirements of Indian Boiler Regulations, 1950.

Maker's Representative
(Name and signature)

Maker _____
(Name and Signature)

Name and signature of
Competent Person

Name and signature of
Inspecting Authority/Well Known Forge.”.

"FORM III-H
(See regulation 4)

**CERTIFICATE OF MANUFACTURE AND TEST FOR
(HEADERS,DESUPERHEATERS/ ATTEMPERATOR,BLOWDOWN TANK,FEEDWA
TERTANKS, ACCUMULATOR, DEAERATOR)**

T.C.NO.:

DATE :

Name of the Part :

Maker's Name & Address :

Customer's Name & Address :

Drawing No. :

Design Pressure :
(Kg/cm²)

Design Temp.(°C) :

Heat Treatment :

Hydraulic Test :
Pressure

Non-destructive :
Testing

Process of Manufacture,
Material condition,
chemical composition,
Tensile Strength,
Tolerances,
Bend Test, Flattening Test
etc.

*Refer enclosed Raw
material Test Certificates
or Form IV-A in lieu of
Raw material Test
Certificates*

Inspecting Authority Identification Mark:

Item No.	PART NAME	MATERIAL SIZE	QUANTITY	MELT No.
01	PIPE			
02	END COVER			
03	STUBS			
04	BRANCH PIPES			
05				
06				

Certified that the particulars entered herein are correct.

The parts have been constructed to comply with the Indian Boiler Regulations for a working pressure of --
----- and temperature of -----and satisfactorily withstood a water test of -- on the -- day of -- in the
presence of our responsible representative whose signature is appended hereunder.

Final Inspection Date :

Signature and Seal of Maker's Representative

Signature and Seal of Maker

Final Inspection Date :

We have satisfied ourselves that the..... have been constructed in accordance with Indian Boiler Regulations, 1950. The tests conducted have been witnessed by us, wherever applicable and the particulars entered herein are correct.

Name and Signature of
Competent Person

Name and Signature of
Inspecting Authority

Place :
Date :.

"FORM III- I
(See regulation 4)

CERTIFICATE OF MANUFACTURE AND TEST FOR DISHED ENDS / END COVERS

T.C.NO.:

DATE :

Name of the Part :

Maker's Name & Address :

Customer's Name & Address :

Drawing No. :

Design Pressure :
(Kg./cm²)

Process of Manufacture,
Material condition, chemical
composition, Tensile
Strength, Tolerances,
Bend Test, Flattening Test
etc.

*Refer enclosed Raw
material Test Certificates
or Form IV-A in lieu of
Raw material Test
Certificates*

Design Temp.(°C) :
Heat Treatment :
Hydraulic Test :
Pressure
Non-destructive :
Testing

Inspecting Authority Identification Mark:

ITEM No.	PART NAME	MATERIAL SIZE	QUANTITY	SPECN.	MELT No/ PLATE NO.	TC NO & DATE
01	PLATE / FORGING					

Certified that the particulars entered herein are correct.

Signature and Seal of Maker's Representative

Signature and Seal of Maker

Final Inspection Date :

We have satisfied ourselves that the _____ have been constructed in accordance with the Indian Boiler Regulations, 1950. The test conducted have been witnessed by us and the particulars entered herein are correct.

Name and Signature of
Competent Person

Name and Signature of
Inspecting Authority

Place :

Date :".

FORM IV

STEEL MAKER'S CERTIFICATE OF MANUFACTURE AND RESULTS OF TESTS

[Regulation 4(c)(iv) & 4(f)]

Designation of rolling mill

We hereby certify that the material described below has been made by M/s. by the process, as per specifications and rolled by and has been satisfactorily tested in the presence of our Test House Manager or his representative in accordance with the stipulated tests and tolerances.

For gothic bars/scalps, billets and hot rolled strips which are to be processed further by the same manufacturer for making tubes/pipes, the physical properties are not required to be mentioned by the steel manufacturer.

Date of tests 20.....

Ordered by

.....

Boiler Number

Signature or Initials

Test House Manager

Date

Order Number

RESULTS OF TESTS

<i>Charge Number</i>	<i>Brand & Number</i>	<i>Part of Boiler</i>	<i>Size of plate and bar</i>			<i>Number of pieces</i>	<i>Tensile breaking strength in tons per sq. in.</i>	<i>Elongation in inches</i>	<i>Bend Tests</i>	<i>Remarks</i>
			<i>Length Ft. in.</i>	<i>Breadth Ft. in.</i>	<i>Thickness or diameter in 32nds in.</i>					

Chemical analysis.....

Note: Where the steel is manufactured by a maker, who is not recognised as a Well-known Steel Maker, the certificate of test shall be signed by the Inspecting Authority.

“FORM IV-A

[See regulation 4(c)(iv)]

CERTIFICATE OF MANUFACTURE AND RESULTS OF TESTS IN LIEU OF ORIGINAL TEST CERTIFICATES

It is hereby certified that original Test Certificate contain the following information in respect of the material used in the manufacture of the boiler or components thereof bearing Makers Number according to Drawing Number :

<i>Boiler component</i>	<i>Quantity</i>	<i>size</i>	<i>Cast/Heat No. Plate No.</i>	<i>Steel Making Process</i>	<i>Specification</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>

<i>Name of Steel Maker/Part Maker</i>	<i>Certificate No. & Date</i>	<i>Heat Treatment</i>
<i>7</i>	<i>8</i>	<i>9</i>

<i>% Chemical Analysis CMnPSSi* other alloying elements</i>	<i>Yield strength (Kg/mm²)</i>	<i>U.T.S. (Kg/mm²)</i>	<i>Elongation % Gauge Length</i>	<i>Bend Test</i>	<i>Name of the inspecting authority</i>
<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>	<i>14</i>	<i>15</i>

*(Carbon, Maganese, Phosphorus, Sulpher, Silicon).

Certified that the particulars entered herein by us are correct. This satisfies the requirements of Indian Boiler Regulations, 1950.

Maker's Representative
(Name and signature)

Maker _____
(Name and Signature)

Name and signature of
Competent Person

Name and signature of
Inspecting Authority".

<p><i>Counter foil</i></p> <p>No.</p> <p>are hereby permitted to use the Boiler (Registry No.) Boiler Rating made by and bearing Maker's number at a maximum pressure of lbs. per square inch pending the issue of or refusal of a certificate within six months from the date thereof after which period this order will become void.</p> <p><i>Date</i> <i>Inspector of Boilers</i></p>	<p>FORM V [Regulation 381(c)]</p> <p>PROVISIONAL ORDER UNDER SECTION 9 OF THE INDIAN BOILERS ACT OF 1923</p> <p>..... are hereby permitted to use the Boiler (Registry No.) Boiler Rating made by and bearing Maker's number at a maximum pressure of lbs. per square inch pending the issue of or refusal of a certificate within six months from the date thereof after which period this order will become void.</p> <p><i>Dated</i> <i>Inspector of Boilers</i></p> <p>N.B.: This order must be produced on demand by any authorised person and surrendered to Chief Inspector on receipt of orders.</p>
--	--

FORM VI

.....**Boiler Inspection Department**

CERTIFICATE FOR USE OF A BOILER

(Regulation 389)

Registry Number of Boiler	Type of Boiler	
Boiler Rating	Place and year of manufacture	
Maximum Continuous Evaporation		
Name of Owner		
Situation of Boiler		
Repairs		
Remarks		
Hydraulically Tested on	to	lbs. per sq. inch

I hereby certify that the above described boiler is permitted by me/the Chief Inspector under the provisions of Section 7/8 of the Indian Boilers Act, No. V of 1923, to be worked at a maximum pressure of lbs. to the square inch for the period from to

The loading of the safety valve is not to exceed

Fee Rs. paid on

Dated at this day of 20.....

Competent Person
Countersigned
Chief Inspector
See Reverse for "Conditions"

CONDITIONS

(REVERSE OF FORM VI)

(1) No structural alteration, addition of renewal shall be made to the boiler otherwise than in accordance with section 12 of the Act.

(2) Under the provisions of Section 8 of the Act this certificate shall cease to be in force:

- (a) on the expiry of the period for which it was granted; or
- (b) when any accident occurs to the boiler; or
- (c) when the boiler is moved the boiler not being vertical boiler the heating surface of which is less than two hundred square feet, or a portable or vehicular boiler; or
- (d) save as provided in section 12 of the Act, when any structural alteration, addition or renewal is made in or to the boiler; or
- (e) if the Chief Inspector in any particular case so directs when any structural alteration, addition or renewal is made in or to any steam-pipe attached to the boiler; or
- (f) on the communication to the owner of the boiler of an order of the Chief

Inspector or Inspector prohibiting its use on the ground that it or any boiler component attached thereto is in a dangerous condition.

Under Section 10 of the Act, when the period of a certificate relating to a boiler has expired, the owner shall, provided that he has applied before the expiry of that period for a renewal of the certificate be entitled to use the boiler at the maximum pressure entered in the former certificate, pending the issue of orders on the application but this shall not be deemed to authorise the use of a boiler in any of the cases referred to in clauses (b), (c), (d), (e) and (f) of sub-section (1) of section 8 occurring after the expiry of the period of the certificate.

(3) The boiler shall not be used at a pressure greater than the pressure entered in the certificate as the maximum pressure nor with the safety valve set to a pressure exceeding such maximum pressure.

(4) The boiler shall not be used otherwise than in a condition which the owner reasonably believes to be compatible with safe working.

Note: The particulars and dimensions regarding this boiler may be obtained by the owner on payment in the prescribed manner on application to the Chief Inspector.

FORM VII

**INSPECTING AUTHORITY'S CERTIFICATE OF INSPECTION UNDER CONSTRUCTION
DESIGNATION OF INSPECTION AUTHORITY**

[Regulation 501(e)]

We hereby certify that type, Economiser, consisting of sections and tubes to each section was constructed for a working pressure of lbs. Messrs under our supervision and inspected at various stages of construction by the Competent Person and that the construction and workmanship were satisfactory and in accordance with the standard conditions for the design and construction of Economiser laid down in Chapter XI of the Indian Boiler Regulations, 1950.

Identification Mark on each section.

Branch Pipe on other pressure part.

Position of same.

The sections on completion were subjected to a water pressure of lbs. per sq. in. for ten minutes in the presence of the Competent Person on and satisfactorily withstood the test in accordance with Reg. 504.

Samples of the material used in the constructions of the Economiser were tested in the presence of the Competent Person and were found to comply with the tests prescribed in Chapter XI of the Indian Boiler Regulations, 1950.

We have satisfied ourselves that the construction and dimensions of the Economiser are as shown in the Maker's Drawing No. signed by us and that the particulars entered in the maker's certificate of manufacture in Form VIII countersigned by us are correct to the best of our knowledge and belief.

Dated at this day of 20.....

Signature of Inspecting Authority

FORM VIII
WORKS ADDRESS

Constructor's Certificate of Manufacture and Test
[Regulation 501(D)]

1. Description	Type of Economiser No. of Sections Intended working pressure Year of manufacture Description	No. of tubes lbs. Total heating Surface of tubes
2. Inspecting Authority	Economiser constructed under supervision of	
	Sections hydraulically tested for minutes and inspected after test by	
3. Construction and Workmanship	Details are in Drawing No. All castings are well finished free from external defects, porous places and blow-holes and true to dimensions without warping. Where chapters are used, there is satisfactory fusion with the metal. Chapters properly tinned with metal free from lead. All screw threads are of Whitworth form. All components parts are manufactured to limit gauges to secure interchangeability throughout.	
4. Economisers and fittings	<i>Parts</i>	<i>Material</i>
	<i>Maker</i>	<i>Inspecting Officer Remarks</i>
Particulars of material used	Headers Tubes and/or Pipes Valve Chest Bolt	

THICKNESS OF PARTS AND TENSILE TEST—LIMIT

5. Part of Economiser	Thickness in 32nds	Tensile strength limits to tons	Elongation limits to %	Gauge Length	Brand and No.
Headers					
Tubes					
Bolts					

Certified that the particulars entered herein are correct and that the parts and fittings mentioned above have been used in the construction and fittings of the Economiser.

The particulars shown against the various parts used are in accordance with the Maker's certificates in our possession.

The design of the economiser in section and end view with principal parts fully dimensioned is that shown in Drawing No. The Economiser has been designed and constructed to comply with the Indian Boiler Regulations for a working pressure of lbs. per sq. in. at our Works Regulations for a working pressure of lbs. per sq. in. at our Works above-mentioned and the sections satisfactorily withstood a water test of lbs. per sq. in. for minutes on day of 20..... in the presence of ourresponsible representative whose signature is appended hereunder.

Signature of Engineer who witnessed the test

Designation of Maker

Dated at this day of 20.....

Signature of Inspecting Authority

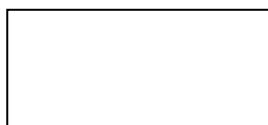
Note: The drawing of the Economiser and Maker's certificate of manufacture showing results of tests for tensile strength and elongation must accompany this certificate and if the economiser has been built under the supervision of an Inspecting Authority their certificate in Form VII must accompany.

FORM IX

(Regulation 528)

INDIAN BOILERS ACT, 1923

BOILERS INSPECTION
DEPARTMENT
ECONOMISERS
REGISTRY NUMBER



**MEMORANDUM OF INSPECTION
OR
REGISTRATION BOOK**

MISCELLANEOUS

District

Owners

Address of Factory

Nearest Railway Station

Economiser Registered at on

Register Book No Page

Registry Number Verified on

Approved Working Pressure lbs

Economiser Rating Inspection fee

Registration Book filled at on

Remarks on transfer etc.

PROVISIONAL ORDER AND CERTIFICATE RECORD

<i>Fee</i>	<i>Date of payment</i>	<i>Date of Inspection</i>	<i>Certificate No. and Date</i>	<i>Period of Certificate</i>	<i>Working pressure</i>	<i>Economiser Rating</i>	<i>Remarks and Inspector's initial</i>

Type of Economiser

.....

Maker

Intended Working Pressure

Place and year of make

Maker's No

Description of Economiser

No. of tubes length Dia.

Thickness Thickness

Internal dimensions Thickness

No. of Headers

Thickness of Headers

Length of Top Branch Pipe

Length of Bottom Branch Pipe

Dimensions of cap openings

Diameter of cap bolts

MOUNTINGS

<i>No.</i>	<i>Diameter</i>	<i>Type</i>	<i>Position</i>	<i>Material</i>

Relief Valve				
.....				
Stop Valve				
Blow Down				
Thermometers				
Pressure Gauge				

Additional Fittings

MAKER'S CERTIFICATE

Name of Maker

Maker's Hydraulic Test Pressure

Maker's Drawing No.

Name of Inspecting Authority

Name of Maker of Material

Tubes

Process

Headers

Bolts

Tubes

Headers

Pipes

Bolts

Test Results

T E

T E

T E

T

% Sulphur

% Phosphorus

Maker's Identification Mark

Position

CALCULATIONS

HEADERS

TUBES

BRANCH PIPES

BOLTS

HEATING SURFACE

Total Heating Surface

Economiser Ratings

Calculations made by submitted on

Calculations checked by on

Least pressure, that for lbs.

Approved working pressure lbs.

Chief Inspector's remarks and signature

INSPECTOR'S NOTES

FORM X	
[Regulation 525(e)]	
<i>Counterfoil</i>	No.
No.	Provisional Order under the Indian Boilers Act, 1923
Name of the person or firm to which Provisional Order is granted.	_____
Description of Economiser	are hereby permitted to use the Economiser Ry. No. and
Maker's No.	Economiser Rating made by and bearing Maker's No.
Rating at a maximum pressure of lbs. per sq. in./maximum
Pressure permitted	temperature of °F pending the issue or refusal of a certificate within
Period	six months from the date thereof after which period this order will become
Date	void.
	Dated at this day of 19.....
<i>Inspector</i>	<i>Inspector</i>

FORM XI

.....**Boiler Inspection Department**

CERTIFICATE FOR THE USE OF AN ECONOMISER

(Regulation 530)

Registry Number of Economiser	Type
No. of tubes	
Number of Headers	
Economiser Rating	Place and year of manufacture
Name of owner	
Situation of Economiser	
Repairs	
Remarks	
Hydraulically tested on	kg. per sq. cm. to lbs. per sq. in.

I/We hereby certify that the above described Economiser is permitted by me/Chief Inspector under the provisions of Section of the Indian Boilers Act, 1923 (V of 1923) to be worked at a maximum pressure lbs. per sq. in./maximum temperature of °F or the period from to

This loading of the safety valve is not exceed, lbs.

Fee Rs. paid on

Dated at

This day of 20.....,

Countersigned

Competent Person

Chief Inspector

CONDITIONS

(REVERSE OF FORM XI)

(1) No structural alteration, addition or renewal shall be made to the Economiser without a written permission from the Chief Inspector.

(2) This certificate shall cease to be in force—

- (a) on the expiry of the period for which it was granted, or
- (b) when any accident occurs to the Economiser, or
- (c) when any structural alteration, addition or renewal is made in or to the Economiser, or
- (d) save as provided in section 12 of the Act, when any structural alteration, addition or renewal is made in or to the Economiser; or
- (e) on the communication to the owner of the Economiser of an order of the Chief Inspector or Inspector prohibiting its use on the ground that it is in a dangerous conditions.

(3) The Economiser shall not be used at a pressure greater than the pressure/temperature entered in the certificate as maximum pressure/temperature not with the relief valve set to pressure/temperature exceeding such maximum pressure/temperature.

(4) The Economiser shall not be used otherwise than in a condition which the owner reasonably believes to be compatible with safe working.

N.B. : Details regarding this Economiser are recorded in a Registration Book No. of which a copy may be obtained on payment on application to the Chief Inspector.

FORM XII
(Regulation 613)

Record of Welder's Qualifications/Requalifications Tests (Indian Boiler Regulations, 1950)

Place of Test

Date

Name of Welder

Father's name

Date of Birth

Address

.....

Service of experience on Gas/Electric Arc years.....

Signature of Welder

Names and addresses of the firms where trained

.....

Tested on (Plate, pipe, tube)

Gas of electric A.C./D.C.

Kind of test (Groove/Gillet/Branch)

Position

.....

Thickness of material used

Diameter and thickness of pipe, branch or tubes used

Quality of base material and electrode or filler rod

RESULTS OF OBSERVATIONS

	<i>Marks</i>	
	<i>Maximum</i>	<i>Awarded</i>
A. Procedure		
1. Preparation of specimen	3	
2. Size & Grade of electrode or filler rod	2	
3. Number of runs and manipulation of control	5	
B. Visual Inspection		
4. Root penetration	10	
5. Freedom from undercut	5	
6. Disposition of runs	2	
7. Uniformity of surface	1	
8. Shape of profile	1	
9. Smoothness of joints	2	
10. Freedom from cavities & slags	5	
11. Dimensions of weld deposit	1	

12. Quality of weld metal (Overheating, surface cracks, spongy surface etc.) 3

C. Physical Test

13. Face bend test 10

14. Root bend test 20

D. Etch Test

15. Disposition of runs 2

16. Degree of fusion 5

17. Root Penetration 11

18. Slags inclusions and porosity 5

E. Fractured Surface

19. Quality of weld metal (Excessive oxidation, carburisation, overheating, roughness, porosity, appearance). 7

100

Signature of Competent Authority

Observation on radiographic examination (if conducted)

.....

Marks awarded %

Results of Oral or Written examination

Marks awarded %

GENERAL REMARKS OF COMPETENT AUTHORITY

TYPE AND CLASS OF WELDING QUALIFIED in Gas or Electric Arc welding.

PERIOD OF VALIDITY OF CERTIFICATE From To

Place

Date

Competent Authority

FORM XIII

QUALIFIED BOILER WELDER'S CERTIFICATE ISSUED UNDER THE INDIAN BOILER REGULATIONS, 1950

PHOTO Passport Size

(SEAL) and Signature of Competent Authority
--

Name of Welder

Father's Name

Date of Birth

Identification marks

Left Hand Thumb Impression

Signature of Welder

Address of Welder

Period of Validity

From	To
.....
.....
.....
.....

This is to certify that Shri son of Shri has been examined and tested in the prescribed manner in the presence of (Representative of Competent Authority) and is deemed to have satisfactorily proved his ability to make sound welds as per particulars given below and is hereby authorised to undertake such welds. He is authorised/not authorised to undertake welding where radiographic examination is necessary under the Regulations.

Granted this day of 20..... under the seal and authority of

SEAL

Representative of Competent Authority

*Particulars :—

*Particulars shall contain information on the following:

Tested on	Plate/Pipe/Tube	with
position		
Date		
Material	Mild Steel or alloy steel	
Process		
Class of welding		
Backing strip		
Electrode	Class (Carbon or alloy steel)	
Filter rod	Type	
Test piece X-rayed or not.		
Period of Validity		

From	To
.....
.....
.....
.....

EMPLOYMENT PARTICULARS

From	To	Name of employer	Work on which engaged	Signature of employer

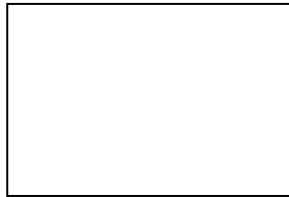
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FORM XIV

[Regulation 394(C)]

INDIAN BOILERS ACT, 1923
Boiler Inspection Department
Steam Pipes and Connected Fittings
Identification Number



Memorandum of Inspection Book

MISCELLANEOUS

District

Owner

Address

Work of Factory :

Registration Number of Boilers to which the pipes and fittings, particulars of which are given in this Memorandum are connected.

Remarks

<i>Date</i>	<i>Particulars of additions & alterations</i>
.....
.....
.....
.....

PLAN OF STEAM PIPES & THEIR CONNECTED FITTINGS

FEE AND APPROVAL TO PLAN RECORD

<i>Drawing No.</i>	<i>Total length of Steam Pipes</i>	<i>No. of Connected vessels</i>	<i>Fee</i>	<i>Date of Payment</i>	<i>No. & date of approval of Plan & Layout</i>	<i>W.P. approval Kg/cm²</i>	<i>Temp allowed °C</i>	<i>Remarks & initial of Inspector</i>
--------------------	------------------------------------	---------------------------------	------------	------------------------	--	--	------------------------	---

STEAM PIPES—PARTICULARS AND DIMENSIONS

Situation

Ry. No. of connected Boilers

Steam Piping System include

Pipes Material Diameter (outside)

Pipes Thickness Make

Attachment of Flanges

Elbows, Tees etc.

.....

Support

Flexibility

Drainage

Feed pipes

.....

Outside Dia. Thickness

.....

Make

Max. Pressure Max. Temp

Connected Vessel

No.

Type

Max. Design Press Max. Design Temp.

Date of Installation

First Inspection inside &
Outside

Feed Pipes Hydraulic Test to kg/cm² By on

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Remarks

CALCULATIONS

Steam Pipes :

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CALCULATIONS

Steam Pipes :

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CALCULATIONS

Steam Pipes :

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CALCULATIONS

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INSPECTOR'S NOTE

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“FORM XV-A

[See regulation 4 A (2)]

**QUESTIONNAIRE TO BE ANSWERED BY FIRMS/COMPANIES SEEKING
RECOGNITION BY THE CENTRAL BOILERS BOARD TO BECOME AN
“INSPECTING AUTHORITY”**

1. The registered name and address of the company/firm:
2. Address for correspondence:
3. The year in which the company/firm was established.
4. Proposed countries/areas of operation as Inspecting Authority:
5. Is company/firm registered in the proposed countries of operations?
If so, please give details thereof.
6. Have you any Branch or Associate Office?
If so, please give their names and addresses.
7. Is company/firm functioning as an Inspecting Authority under the Indian or International codes and standards?
If so, details thereof.
8. In case of renewal of recognition as Inspecting Authority under the Indian Boiler Regulations, 1950, had you conducted inspection during the last five years?
If yes, details thereof.
9. Is company/firm involved in any commercial activity other than inspection, certification and related activities under the Indian or International Codes and standards?
If so, details thereof.

10. Please state the types, size and the range of working pressure of the boilers which you have so far inspected during manufacture as an Inspecting Authority, also state the classes of service you render, namely:-
 - (a) Please name the various stages of manufacture at which inspections are carried out.
 - (b) Only hydraulic test after the manufacture of the boiler.
11. How many Inspectors/Competent persons have you in your employment? Please give details of the qualifications held by those persons.
12. Have you any Testing Laboratory of your own to conduct all destructive and non-destructive tests required in connection with the manufacture of boilers?
If so, details thereof.
13. Have you in-house design and drawing inspection office?
If so, details thereof.
14. Have you any documented quality programme established and maintained to fulfill the inspection requirements as per Indian Boiler Regulations, 1950?
If so, details thereof.
15. Are you having Curriculum Vitae of all the inspectors/competent persons employed in the organization for inspection and certification work?
16. Are you having a training programme for Inspectors/Competent persons?
If so, details thereof.
17. Are you prepared to conduct the work of Inspection of boilers, economisers and their accessories strictly in conformity with the Indian Boiler Regulations, 1950?

18. Are you prepared to accept full responsibility for the certificate issued by you?
19. Has your request for recognition as an Inspecting Authority been rejected by any Authority? If so, please give details.
20. Are you prepared to issue certificates for the products, you inspect, in the formats of the Indian Boiler Regulations?
21. Are you aware that the recognition is for a period of five years only, which is renewable after every five years on fresh assessment?

SIGNATURE & SEAL

FORM XV-B

[See regulation 4 A (2)]

QUESTIONNAIRE FOR ELICITING INFORMATION REGARDING THE COMPETENCY OF A FIRM/COMPANY TO BE RECOGNISED AS “COMPETENT AUTHORITY”

1. Registered name and address of the company/firm.
2. Address for correspondence.
3. Year in which the company/firm was established.
4. Address of branch or associate office, if any.
5. Principal work of the company/firm.
6. Does the company/firm have any training section for the welders? If so, details of the scheme to be stated.
7. Does the company/firm regularly conduct tests on welds done by its welders? If so, the code followed and the details of tests carried out may please be stated.
8. What are the facilities that can be provided or availed of by the organisation for conducting the tests?
9. Is the company/firm prepared to undertake testing of welders employed by other organisation?
10. In case of renewal of recognition as Competent Authority under the Indian Boiler Regulations, 1950, have you undertaken inspection and certification of welders during the last five years?

If yes, details thereof.

11. Whether the company/firm is prepared to conduct tests as per requirements of the Indian Boiler Regulations, 1950?
12. The amount of fee which the company/firm would charge from a candidate for conducting a test for the issue of certificate. Estimates under the following heads may be given:
 - (a) For the supply of tests pieces, electrodes and/or filler rods:
 - (b) For the use of welding machine:
 - (c) For machining the test pieces and preparation of specimen:
 - (d) For conducting mechanical tests (including specimen preparation):
 - (e) For non-destructive testing:
13. Is the company/firm prepared to examine and issue certificate to welders in accordance with the requirements of the Indian Boiler Regulations, 1950?
14. Is the company/firm prepared to take full responsibility for certificates issued by it.
15. Are you aware that the recognition is for a period of five years only which is renewable after every five years on fresh assessment?

SIGNATURE & SEAL

FORM XV-C
[See regulation 4A (2)]

**QUESTIONNAIRE TO BE ANSWERED BY STEEL MAKER SEEKING
RECOGNITION BY CENTRAL BOILERS BOARD TO BE NOTIFIED AS
“WELL KNOWN STEEL MAKERS”**

1. Registered Name and address of the firm/company:
2. Works address:
3. The year in which the factory was established:
4. Capacity for production of steel:
5. Process of manufacture of steel:
6. Variety of steel products:
7. Range of steel produced in each variety:
8. Various national and international Standards to which the steel products are manufactured:
9. Testing facilities available within the works:
10. Types of tests conducted:
11. If so, by whom conducted:
12. Are the tests conducted by the firm/company acceptable to the other organisations of the country? If so, by whom?
13. Is the firm/company prepared to conduct tests in accordance with the Indian Boiler Regulations, 1950?
14. Is the firm/company recognised as “Well Known Steel Maker” in any other country?
15. Whether the firm/company has any previous experience to produce steel in accordance with the provision of Indian Boiler Regulations, 1950 under the inspection of any recognised Inspecting Authority.

If yes, details thereof.

16. Whether the firm/company is prepared to furnish certificates under the provision of Indian Boiler Regulations, 1950.
17. In case of renewal of recognition, had you manufactured and supplied steel as “Well Known Steel Maker” under the Indian Boiler Regulations, 1950 during the last five years?
If yes, details thereof.
18. Whether the firm/company manufacture steel from the ore itself or from ore and scrap or scrap only:
19. Whether the firm is agreeable to show their manufacturing process and in-house testing facilities to a team consisting of three members appointed by the Board.
20. Are you aware that the recognition is for a period of five years only which is renewable after every five years on fresh assessment?

SIGNATURE & SEAL

FORM XV-D
[See regulation 4A (2)]

**QUESTIONNAIRE TO BE ANSWERED BY FOUNDRY/FORGE SEEKING
RECOGNITION BY CENTRAL BOILERS BOARD TO BE NOTIFIED AS
“WELL KNOWN FOUNDRY/FORGE”**

1. The registered name and address of the firm/company:
2. Works address:
3. The year in which the factory was established:
4. Capacity of the foundry/forge:
5. (i) Capacity for production of forgings/castings:
(ii) Maximum weight and size of forgings/castings:
6. Detailed description of the type of job done by the firm/company:
7. Materials of castings/forgings (ferrous-plain or alloy steel, non-ferrous alloys):
8. Range of forgings/casting produced in each variety:
9. Testing facilities available within the works:
10. Details of testing facility, namely chemical and physical tests:
11. Types of test conducted:
12. If so, by whom conducted?
13. Are the tests conducted by the firm/company itself acceptable to the other organisations of the country? If so by whom?
14. Is the firm/company prepared to conduct tests in accordance with the Indian Boiler Regulations, 1950?
15. Is the firm/company recognised as “Well Known Foundry/Forge” in any other country?

16. Whether the firm/company is in a position to produce forgings/casting in accordance with any national/international specifications fulfilling the minimum requirements of Indian Boiler Regulations, 1950:
17. Whether the firm/company has any previous experience to produce forgings/castings in accordance with the provision of Indian Boiler Regulations, 1950 under the inspection of any recognised Inspecting Authority.
If yes, details thereof.
18. Whether the firm/company is prepared to furnish certificates under the provision of Indian Boiler Regulations, 1950.
19. In case of renewal of recognition, had you manufactured and supplied castings/forgings as “Well Known Foundry/Forge” under the Indian Boiler Regulations, 1950 during the last five years?
If yes, details thereof.
20. Whether the firm/company is agreeable to show their process of manufacture, in-house testing facilities to a team of members appointed by Central Boilers Board.
21. Are you aware that the recognition is for a period of five years only, which is renewable after every five years on fresh assessment?

SIGNATURE & SEAL

FORM XV-E
[See regulation 4A (2)]

**QUESTIONNAIRE TO BE ANSWERED BY TUBE/PIPE MAKER SEEKING
RECOGNITION BY CENTRAL BOILERS BOARD AS
“WELL KNOWN TUBE/PIPE MAKER”**

1. Registered name and address of the firm/company:
2. Works address:
3. The year in which the factory was established:
4. Capacity of production of Tube/Pipe and the tonnage details per during the last three years:
5. Steel grades of Tube/Pipes under production:
6. Size range of Tubes/Pipes under production:
7. Process of manufacture of Tube/Pipes:
8. (a) Whether the firm/company is producing the raw material or purchasing the raw material.

(b) If the raw material is purchased, give the details of purchase in last three years.
 - (i) from well known steel makers under Indian Boiler Regulations, 1950.
 - (ii) from other sources.
9. If purchase is as per 8(b)(ii), state whether the raw material is tested at Tube maker's/Pipe maker's premises under Indian Boiler Regulations, 1950.
10. If the firm/company is producing raw material, state whether the firm/company is recognised as Well Known steel maker under Indian Boiler Regulations, 1950.
11. Major manufacturing facilities available with the firm/company:
12. Testing facilities available with the works:
13. Types of tests conducted on Tubes/Pipes (enclose complete quality control plan from raw material stage to finished stage along with the quality control and inspection personnel of the firm):

14. The details of failures and rejection
 - (a) By Non-Destructive Testing(NDT)
 - (b) By Destructive Testing.
15. Whether the firm/company is in a position to manufacture Tubes/Pipes and also provide for their necessary testing facilities in accordance with the provision in Indian Boiler Regulations, 1950.
16. Whether the firm/company has any previous experience to produce Tubes/Pipes in accordance with the provision of Indian Boiler Regulations, 1950 under the inspection of any recognised Inspecting Authority.
If yes, details thereof.
17. Whether the firm/company is prepared to furnish certificates under the provision of Indian Boiler Regulations, 1950.
18. In case of renewal of recognition, had you manufactured and supplied Tubes/Pipes as “Well Known Tubes/Pipes Maker” under the Indian Boiler Regulations, 1950 during the last five years?
If yes, details thereof.
19. The name of the firms to whom the firm /company has supplied Tubes/Pipes:
20. Whether the firm/company is agreeable to show their manufacturing process and in- house facilities to a team consisting of three members appointed by the Board.
21. Whether the firm/ company is aware of the fact that the recognition is for a period of five years only, which is renewable after every five years term on fresh assessment?

SIGNATURE & SEAL

FORM XV-F
[See regulation 4A (2)]

**QUESTIONNAIRE TO BE ANSWERED BY A LABORATORY SEEKING
RECOGNITION BY CENTRAL BOILERS BOARD AS A
“WELL-KNOWN MATERIAL TESTING LABORATORY”**

1. The registered name and address of the laboratory:
2. Address of the laboratory:
3. The year in which the laboratory was established:
4. (a) Whether the laboratory is recognised by the Central Government or by a State Government:

(b) If so, please furnish particulars of recognition:
5. Name and address of branch or associate laboratory, if any:
6. How long the laboratory has been functioning for testing of the products?
7. Equipment or machines available in the laboratory for carrying out the non-destructive or destructive testing:
8. Type and range of tests carried out by the laboratory:
9. Details of testing personnel and their qualifications or experience:
10. Are you prepared to conduct the testing of specimens strictly as per the requirements of the Indian Boiler Regulations, 1950?
11. Has your request for recognition as an approved laboratory been rejected by any authority? If so, please give details.
12. Are you prepared to issue the certificates for the products you test in the formats of the Indian Boiler Regulations, 1950?

13. Whether you have any previous experience of conducting tests in accordance with the provision of Indian Boiler Regulations, 1950 under the inspection of any recognised Inspecting Authority.
If yes, details thereof.
14. In case of renewal of recognition, had you conducted tests under the provisions of Indian Boiler Regulations, 1950 during the last five years?
If yes, details thereof.
15. Are you agreeable to show your laboratory and in- house facilities to a team consisting of three members appointed by the Board?
16. Are you aware that the recognition is valid for a period of five years only, which is renewable for five years on fresh assessment?.

SIGNATURE & SEAL

FORM XV-G

[See regulation 4A (2)]

**QUESTIONNAIRE TO BE ANSWERED BY A FIRM SEEKING RECOGNITION BY
CENTRAL BOILERS BOARD AS “REMNANT LIFE ASSESSMENT ORGANISATION”
UNDER REGULATION 391A**

1. The registered name and address of the firm/company :
2. Address of the firm /company :
3. The year in which the firm /company was established :
4. (a) Whether the firm/company is recognised by the Central
Government or by State Government :
- (b) If so, furnish particulars of recognition :
5. Name and address of branch or associate firm,
if any :
6. How long your firm has been functioning for
Remnant Life Assessment of Boilers and Boiler
Parts :
7. Equipment or machines available in the
laboratory for carrying out the non-destructive
or destructive testing :
8. Type and range of tests carried out by the firm/company:

9. Details of testing personnel and their qualifications
and experience :
10. Are you prepared to conduct the testing of
specimens strictly as per the requirements
of the Indian Boiler Regulations, 1950? :
11. Has your request for recognition as an approved
organisation been rejected by any authority?
If so, please give details. :
12. Are you prepared to issue the certificates for
the tests recommended in the formats of the
Indian Boiler Regulations, 1950?
13. In case of renewal of recognition, had you
conducted Remnant Life Assessment of Boilers
and Boiler parts under the Indian Boiler
Regulations, 1950 during the last five years?
If yes, details thereof.
14. Are you agreeable to show your laboratory and in-house
facilities to a team consisting of three members appointed by the Board?
15. Are you aware that the recognition is valid for a period
of five years only, which is renewable for five years on fresh assessment.

SIGNATURE & SEAL”.

“FORM XVI-A
[See regulation 4C (2)]

National Emblem

Serial No.

File No.

CENTRAL BOILERS BOARD
CERTIFICATE OF APPROVAL FOR INSPECTING AUTHORITY

This is to certify that the Inspection and Quality Management System of:

M/s _____

has been evaluated by the Central Boilers Board and has been granted recognition under regulation 4C(2) of the Indian Boiler Regulations, 1950, as an INSPECTING AUTHORITY for operation in

This certificate is valid for five years, i.e. upto.....

Validity is subject to the adherence to the quality Control prescribed under the provisions of the Indian Boiler Regulations, 1950.

Certificate No. _____

Date of Issue

Secretary

FORM XVI-B
[See regulation 4C (2)]

National Emblem

Serial No.

File No.

CENTRAL BOILERS BOARD
CERTIFICATE OF APPROVAL FOR COMPETENT AUTHORITY

This is to certify that the Examination of Welder System of:

M/s _____

has been evaluated by the Central Boilers Board and has been granted recognition under regulation 4C(2) of the Indian Boiler Regulations, 1950, as a COMPETENT AUTHORITY for operation in

This certificate is valid for five years, i.e. upto.....

Validity is subject to the adherence to the quality Control prescribed under the provisions of the Indian Boiler Regulations, 1950.

Date of Issue

Certificate No. _____

Secretary

FORM XVI-C
[See regulation 4C (2)]

National Emblem

Serial No.

File No.

CENTRAL BOILERS BOARD
CERTIFICATE OF APPROVAL FOR WELL-KNOWN STEEL MAKER

This is to certify that the Inspection and Quality Management System of:

M/s _____

has been evaluated by the Central Boilers Board and has been granted recognition under regulation 4C(2) of the Indian Boiler Regulations, 1950, as WELL KNOWN STEEL MAKER, for the manufacture of _____

for their factory at _____

This certificate is valid for five years, i.e. upto _____

Validity is subject to the adherence to the quality control prescribed under the provisions of the Indian Boiler Regulations, 1950.

Date of Issue

Certificate No. _____

Secretary

FORM XVI-D
[See regulation 4C (2)]

National Emblem

Serial No.

File No

CENTRAL BOILERS BOARD
CERTIFICATE OF APPROVAL FOR WELL-KNOWN FOUNDRY

This is to certify that the Inspection and Quality Management System of:

M/s. _____

has been evaluated by the Central Boilers Board and has been granted recognition under regulation 4C (2) of the Indian Boiler Regulations, 1950 as a WELL KNOWN FOUNDRY for the manufacture of

for their factory at _____

This certificate is valid for five years, i.e. upto _____

Validity is subject to the adherence to the quality control prescribed under the provisions of the Indian Boiler Regulations, 1950.

Date of Issue

Certificate No. _____

Secretary

FORM XVI-E
[See regulation 4C (2)]

National Emblem

Serial No.

File No

CENTRAL BOILERS BOARD
CERTIFICATE OF APPROVAL FOR WELL KNOWN FORGE

This is to certify that the Inspection and Quality Management System of:

M/s _____

has been evaluated by the Central Boilers Board and has been granted recognition under regulation 4C (2) of the Indian Boiler Regulations, 1950 as a WELL KNOWN FORGE for the manufacture of

for their factory at _____

This certificate is valid for five years, i.e. upto _____

Validity is subject to the adherence to the quality control prescribed under the provisions of the Indian Boiler Regulations, 1950.

Date of Issue

Certificate No. _____

Secretary

FORM XVI-F
[See regulation 4C (2)]

National Emblem

Serial No.

File No

CENTRAL BOILERS BOARD
CERTIFICATE OF APPROVAL FOR WELL KNOWN TUBE MAKER

This is to certify that the Inspection and Quality Management System of:

M/s _____

has been evaluated by the Central Boilers Board and has been granted recognition under regulation 4C(2) of the Indian Boiler Regulations, 1950, as a WELL KNOWN TUBE MAKER for the manufacture of Tubes of Sizes from _____ to _____

for their factory at _____

This certificate is valid for five years, i.e. upto _____

Validity is subject to the adherence to the quality control prescribed under the provisions of the Indian Boiler Regulations, 1950.

Date of Issue

Certificate No. _____

Secretary

FORM XVI-G
[See regulation 4C (2)]

National Emblem

Serial No.

File No

CENTRAL BOILERS BOARD
CERTIFICATE OF APPROVAL FOR WELL KNOWN PIPE MAKER

This is to certify that the Inspection and Quality Management System of:

M/s _____

has been evaluated by the Central Boilers Board and has been granted recognition under regulation 4C(2) of the Indian Boiler Regulations, 1950, as a WELL KNOWN PIPE MAKER for the manufacture of pipe of sizes from _____ to _____

for their factory at _____

This certificate is valid for five years, i.e. upto _____

Validity is subject to the adherence to the quality control prescribed under the provisions of the Indian Boiler Regulations, 1950.

Date of Issue

Certificate No. _____

Secretary

FORM XVI-H
[See regulation 4C (2)]

National Emblem

Serial No.

File No

CENTRAL BOILERS BOARD
CERTIFICATE OF APPROVAL AS WELL-KNOWN MATERIAL
TESTING LABORATORY

This is to certify that after evaluation of the inspection and material testing system of the following laboratory, the Central Boilers Board has granted recognition to it under sub-regulation (2) of regulation 4C of the Indian Boiler Regulations, 1950, as a Well-known Material Testing Laboratory.

M/s _____

This certificate is valid for five years, i.e. upto _____

Note:- The recognition will be as per the standards specified under the provisions of the Indian Boiler Regulations, 1950.

Date of Issue

Certificate No. _____

Secretary

FORM XVI-I
[See regulation 4C (2)]

National Emblem

Serial No.

File No

CENTRAL BOILERS BOARD
CERTIFICATE OF APPROVAL AS WELL KNOWN REMNANT LIFE ASSESSMENT
ORGANISATION

This is to certify that after evaluation of the inspection and material testing system of the following firm, the Central Boilers Board has granted recognition to it under sub-regulation (2) of regulation 4C of the Indian Boiler Regulations, 1950 as a Well Known Remnant Life Assessment Organisation.

M/s. _____

This certificate is valid for five years, i.e. upto _____

Date of Issue

Certificate No. _____

Secretary”.

FORM XVII

**CERTIFICATE OF MANUFACTURE AND TEST FOR CERTIFICATE OF MANUFACTURE
AND TEST FOR SMALL INDUSTRIAL BOILERS INCLUDING SMALL INDUSTRIAL
SOLAR BOILERS**

(Manufactured Under Chapter XIV)

1. Maker's Name Year of Make
.....

2. Manufactured for

3. Location of Installation

4. Boiler Identification Competent Person's stamp

5. Drawing No. Alteration No.

5A. Design Code Working Pressure (kg/Cm²)

6. Size of Boiler

<i>Length (Meters)</i>	<i>Width (Meters)</i>	<i>Height (Metres)</i>	<i>Diameter (Metres)</i>
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7. Shell/Furnace/Tube Plates/Flange Details

Material Specification

CHEMICAL COMPOSITION

MECHANICAL PROPERTIES

<i>C</i>	<i>Si</i>	<i>Mn</i>	<i>P</i>	<i>S</i>	<i>Y</i>	<i>S</i>	<i>U.T.S.</i>	<i>%</i>	<i>EL.</i>
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Shell

Furnance

Tube Plates

Flange

Boiler Tubes/Pipe/Pads Details

*Diameter Thickness Material
Specification*

CHEMICAL COMPOSITION

MECHANICAL PROPERTIES

<i>C</i>	<i>Si</i>	<i>Mn</i>	<i>P</i>	<i>S</i>	<i>Y</i>	<i>S</i>	<i>U.T.S.</i>	<i>%</i>	<i>EL.</i>
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Tube

Pipes

Pads

8. Volumetric Capacity

9. Heating Surface (Sq. Metres)

10. Nozzle connection

(a) Steam Outlet
(No. Size and Type of Nozzles)

(b) Safety Valve
(No. Size and Type of Nozzles)

(c) Auxiliary (Air vent)
(No. Size and Type of Nozzles)

(d) Blowoff Valve
(No. Size and Type of Nozzles)

(e) Feed Valve
(No. Size and Type of Nozzles)

11. Shop Hydro Test Pressure (Kg. Cm²) Date

Signature of Manufacturer

We certify that the above boiler constructed under our supervision and inspected at various stages of construction by the Competent Person and that the construction, workmanship were satisfactory as per Indian Boiler Regulations.

Inspecting Officer

Signature of Inspecting Authority

Dated this Day of 20.....

“FORM XVIII

[See regulation 392(4)]

QUESTIONNAIRE FORM FOR REPAIRER OF BOILERS/ECONOMISER/STEAM LINE/FEED WATER LINES

1. (a) Registered name of the firm and its permanent address.....
(b) Address of the workshop:
2. Year of establishment
3. Classification applied for—
 - (a) Special Class (For any Boiler Pressure)
 - (b) Class I (For Boiler Pressure upto 125 kg.cm²)
 - (c) Class II (For Boiler Pressure upto 40 kg./cm²)
 - (d) Class III (For Boiler Pressure upto 17.5 kg/cm²)
4. Type of jobs executed by the firm earlier, with special reference to their maximum working pressure, temperature and the materials involved, with documentary evidence
5. (a) Whether the firm has ever been approved by any Boilers' Directorate/Inspectorate? If so, give details.....
(b) Has your request for recognition as a repairer under Indian Boiler Regulations, 1950 been rejected by any Authority? If so, please give details.....
6. Whether having rectifier/generator, grinder, general tools and tackles, dye penetrant kit, expander and measuring instruments or any other tools and tackles under regulation 392(5)(i).
7. Detailed list of technical personnel with designation, educational qualifications and relevant experience (attach copies of documents) who are permanently employed with the firm
8. How many working sites can be handled by the firm simultaneously?
9. Whether the firm is prepared to execute the job strictly in

conformity with the regulations and maintain a high standard of work?.....

- 10. Whether the firm is prepared to accept full responsibility for the work done and is prepared to clarify any controversial issue, if required?.....
- 11. Whether the firm is in a position to supply materials to required specification with proper test certificates if asked for?
- 12. Whether the firm has an internal quality control system of their own? If so, give details.....
- 13. List of welders employed with copies of current certificate issued by a Competent Authority under the Indian Boiler Regulations, 1950.

.....
Date
Place

*Name & Signature of the authorised signatory
of the firm with stamp*

Note 1: The recognition of the firm as a repairer shall be for a period of two years, thereafter they shall apply for renewal of their recognition at least two months before the expiry of the said period.

Note 2: In case the repairer is found violating the provisions of the Act or Regulations knowingly or unknowingly, the firm shall be blacklisted under intimation to Chief Inspectors or Directors of Boilers of all the States/Union territories and renewal shall not be done in any case.”.

“FORM XIX

[See regulation 376(ff) and 376(fff)]

**DETAILS TO BE FURNISHED ALONGWITH APPLICATION FOR INSPECTION OF BOILER
AFTER TWELVE/TWENTY FOUR MONTHS OF THE CERTIFICATION UNDER REGULATION
390 AS PER APPENDIX ‘JA’ AND APPENDIX ‘JB’**

1. Name and address of the owner
2. Registry number of the boiler
3. Steam pressure and temperature
4. Rate of steam generation.....
5. Heating surface
6. Year of make
7. Brief description of boiler
8. Type of construction (Whether riveted or welded)
9. Whether fired or waste heat boiler
10. Date of registration.....
11. Details of past exemption granted by the Government, if
any
12. Date of last annual inspection
13. Expiry date of current certificate
14. Working pressure at which last certificate was issued
15. Details of past repairs (year-wise)
16. Remark as entered in the last certificate
17. Quality of boiler feed water
18. Whether requisite number of feed pumps are in
satisfactory working condition at present?.....
19. Number of safety valves mounted on shell/drum and super
heater.....
20. Total number of soot blowers provided in boiler

21. Number of soot blowers in working condition

22. Whether safety valves are blowing satisfactorily at or below design pressure?.....

23. Whether safety valve assembly is free from jamming as verified by operating casing lever?.....

24. Whether high and low water level alarm is in good condition?

25. Whether main steam stop valves, feed check valves, blow down valves and master pressure gauge in working condition?

26. Whether additional requirements for automatic boilers as per regulation 281A are complied with? (If 'No', give details)

27. Last date of calibration for master pressure gauge, temperature indicator/recorder for superheater, hot reheat, cold reheat and main steam line.....

28. (a) Last date when boiler protection devices were satisfactorily tested and details thereof

- (b) Last date when boiler protection devices were tested by simulation.....

29. Details of boiler stoppages in last twelve months with reasons and remedies thereof.

30. Present irregularities in instruments and controls if any observed in control-room of boiler house.....

31. Details of present boiler leakage.

32. Present operating pressure of the boiler

33. Whether water quality is tested on-line (enclose copy of test report showing values of analysis including Total Dissolved Solids(TDS)

34. State at what intervals such test is carried out

35. When boiler was last opened for internal and/or external cleaning?

- 36. State at what intervals such cleaning is carried out.....
- 37. Whether there was any shut down since last inspection when the boiler could have been offered for inspection?.....
- 38. Whether working pressure of the boiler ever exceeded in the past beyond certified limit? If any, give details.....
- 39. Details of boiler accident which took place in the past, if any
- 40. List of Boiler Operation Engineers/Attendants
- 41. Irregularities, if any, noticed in the past in compliance of the Act.
- 42. Whether guidelines laid down by Central Boilers Board for granting exemption to the waste heat boilers are fulfilled or not?

General Manager (Generation)

Remarks of the Competent Person who verified correctness of above statement paying check visit to the Boiler House.

Competent Person".