G.S.R.237.- Whereas certain draft regulations, further to amend the Indian Boiler Regulations, 1950, were published, as required by sub-section (1) of section 31 of the Indian Boilers Act, 1923 (5 of 1923) at pages 652 to 662 in Part II, Section 3, Sub-section (i) of the Gazette of India dated the 31st April, 1999, under the notification of the Government of India in the Ministry of Industry (Department of Industrial Development) (Central Boilers Board) number G.S.R. 100, dated the 22nd March, 1999 inviting objections and suggestions from all persons likely to be affected thereby till the expiry of forty-five days from the date on which copies of the Gazette containing the said notification were made available to the public;

And whereas the said Gazette was made available to the public on the 8th April, 1999;

And whereas no objections or suggestions have been received;

Now, therefore, in exercise of the powers conferred by section 28 of the Indian Boilers Act, 1923 (5 of 1923), the Central Boilers Board hereby makes the following regulations further to amend the Indian Boiler Regulations, 1950, namely:

1. (1) These regulations may be called the Indian Boiler (Third Amendment) Regulations, 1950.

   (2) They shall come into force on the date of their publication in the Official Gazette

2. In the Indian Boiler Regulations, 1950 (hereinafter referred to as the said regulations), for regulation 251, the following shall be substituted, namely:

   “251. Cylindrical shell of drums. – Each drum shell plate shall be of cylindrical form to the extreme edges of the plate. The bending shall be done entirely by machine and local heating or hammering is prohibited. Where the plates are bent to an internal diameter less than 20 times the plate thickness, they shall be efficiently heat-treated after bending to relieve internal stresses unless during the last stages of bending they have been uniformly heated throughout.”

3. In the said regulations, in regulation 267 (a), for the “Table”, the following “Table” shall be substituted, namely:
“Table

<table>
<thead>
<tr>
<th>Type of Steel</th>
<th>Range of Temperature in degree centigrade</th>
<th>Time at temperature per mm of thickness of plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>½Mo ½Cr ½Mo</td>
<td>620-660</td>
<td>2.5 minutes (30 minutes min.)</td>
</tr>
<tr>
<td>1Cr ½Mo</td>
<td>630-670</td>
<td>2.5 minutes (30 minutes min.)</td>
</tr>
<tr>
<td>2¼Cr 1Mo</td>
<td>650-750</td>
<td>2.5 minutes (1 hour min.)</td>
</tr>
</tbody>
</table>

Note.- For pipes of 2¼Cr 1Mo specification upto and including 127 mm outside diameter and upto 13 mm wall thickness, the time may be 30 minutes minimum.

The heat treatment of steels having Cr Mo V shall be carried out as per the requirements of the code of manufacture of plates, pipes.”.

4. In the said regulations, in regulation 270 (a), for the words and figures, “The weld factor shall not be taken as more than 0.95”, the following shall be substituted, namely:-

“For Class I boilers, the weld factor shall be taken as 1.”.

5. In the said regulations, in regulation 281, under the phrase “Every boiler shall be provided at least with the following:”, for the entry “A fusible plug when boiler has internal furnaces”, the following entry shall be substituted, namely:-

“Fusible plugs as provided under Regulation 331.”.

6. In the said regulations, in regulation 281A, in sub-regulation (3), in clause (b),-

(i) in sub-clause (v), for the word “boiler”, the word “furnace” shall be substituted;

(ii) sub-clause (vi) shall be deleted.

7. In the said regulations, in regulation 357 (b), for the “Table”, the following “Table” shall be substituted, namely:-

“Table

<table>
<thead>
<tr>
<th>Type of Steel</th>
<th>Range of Temperature in degree centigrade</th>
<th>Time at temperature per mm of thickness of plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>½Mo ½Cr ½Mo</td>
<td>620-660</td>
<td>2.5 minutes (30 minutes min.)</td>
</tr>
<tr>
<td>1Cr ½Mo</td>
<td>630-670</td>
<td>2.5 minutes (30 minutes min.)</td>
</tr>
<tr>
<td>2¼Cr 1Mo</td>
<td>650-750</td>
<td>2.5 minutes (1 hour min.)</td>
</tr>
</tbody>
</table>
Note: For pipes of 2¼Cr 1Mo specification up to and including 127 mm outside diameter and up to and 13 mm wall thickness, the time may be 30 minutes minimum.

The heat treatment of steels having Cr Mo V shall be carried out as per the requirements of the code of manufacture of plates, pipes.”.

8. In the said regulations, in regulation 360 (b), for the “Table”, the following “Table” shall be substituted, namely:-

“Table

<table>
<thead>
<tr>
<th>Type of Steel</th>
<th>Range of Temperature in degree centigrade</th>
<th>Time at temperature per mm of thickness of plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>½Mo</td>
<td>620-660</td>
<td>2.5 minutes (30 minutes min.)</td>
</tr>
<tr>
<td>½Cr ½Mo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1Cr ½Mo</td>
<td>630-670</td>
<td>2.5 minutes (30 minutes min.)</td>
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<tr>
<td>1½Cr ½Mo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2¼Cr 1Mo</td>
<td>650-750</td>
<td>2.5 minutes (1 hour min.)</td>
</tr>
</tbody>
</table>

Note.- For pipes of 2¼Cr 1Mo specification up to and including 127 mm outside diameter and up to and 13 mm wall thickness, the time may be 30 minutes minimum.

The heat treatment of steels having Cr Mo V shall be carried out as per the requirements of the code of manufacture of plates, pipes.”

9. In the said regulations, for regulation 385, the following shall be substituted, namely:-

“385 Registration fee.- The required fee to accompany an application under sub-section (1) of section 7 of the Act shall be:-

| For boiler rating not exceeding 10 | Rs.600/- |
| For boiler rating exceeding 10 but not exceeding 30 | Rs.800/- |
| For boiler rating exceeding 30 but not exceeding 50 | Rs.900/- |
| For boiler rating exceeding 50 but not exceeding 70 | Rs.1100/- |
| For boiler rating exceeding 70 but not exceeding 90 | Rs.1300/- |
| For boiler rating exceeding 90 but not exceeding 110 | Rs.1500/- |
| For boiler rating exceeding 110 but not exceeding 200 | Rs.1700/- |
| For boiler rating exceeding 200 but not exceeding 400 | Rs.1900/- |
| For boiler rating exceeding 400 but not exceeding 600 | Rs.2200/- |
| For boiler rating exceeding 600 but not exceeding 800 | Rs.2400/- |
| For boiler rating exceeding 800 but not exceeding 1000 | Rs.2700/- |
| For boiler rating exceeding 1000 but not exceeding 1200 | Rs.3200/- |
| For boiler rating exceeding 1200 but not exceeding 1400 | Rs.3600/- |
| For boiler rating exceeding 1400 but not exceeding 1600 | Rs.4200/- |
| For boiler rating exceeding 1600 but not exceeding 1800 | Rs.4500/- |
| For boiler rating exceeding 1800 but not exceeding 2000 | Rs.5000/- |
For boiler rating exceeding 2000 but not exceeding 2200 Rs.5400/-
For boiler rating exceeding 2200 but not exceeding 2400 Rs.6000/-
For boiler rating exceeding 2400 but not exceeding 2600 Rs.6300/-
For boiler rating exceeding 2600 but not exceeding 2800 Rs.6800/-
For boiler rating exceeding 2800 but not exceeding 3000 Rs.7200/-

Above 3000 for every 200 or part thereof an additional fee of Rs.200/- shall be charged:

Provided that the Chief Inspector may direct that no fee shall be payable in respect of a fresh application made in pursuance of sub-section (2) of section 14 of the Act.”.

10. In the said regulations, in regulation 395 A,-

(i) for sub-regulation (3), the following shall be substituted, namely:-

“(3) For inspection of tubes and pipes, the fee shall be charged at the rate of Rs.150/- per metric tonne or a fraction thereof.”;

(ii) for sub-regulation (6), the following shall be substituted, namely:

“(6) For inspection of pipe fittings other than forged pipe fittings, the fees shall be charged as under:

(a) up to and including 50mm, for 100 kg. or a fraction thereof: Rs.50/-

(b) over 50mm and up to and including 100mm for 450 kg. or fraction thereof: Rs.250/-

(c) over 100mm for 900 kg. or a fraction thereof: Rs.500/-.”.

11. In the said regulations, for regulation 395 B, the following shall be substituted, namely:-

“395 B Fees for inspection of pipes.-

(a) for the pipes of nominal bore not exceeding 100mm inclusive of all fittings excepting fittings like desuperheaters, steam-receivers, feed heaters and separately fired super-heaters Rs.200/- for 30 metres of pipes or part thereof;

(b) for pipes of nominal bore exceeding 100mm inclusive of all fittings excepting fittings like desuperheaters, steam receivers, feed heaters and separately fired superheaters Rs.500/- for 30 metres or part thereof;
(c) fee for inspection of fittings like feed water heater, desuperheater, steam receiver, separators and separately fired superheaters Rs.500/- for each such fitting.”.

12. In the said regulations, for regulation 395 C, the following shall be substituted, namely:

“395 C Fee for inspection of valves.– Fees for inspection of valves shall be charged as under:

(1) Subject to a minimum inspection fee of Rs.500/- per inspection for the valves, the inspection fee shall be charged as under:

   (a) upto 25mm        Rs.5/- per piece
   (b) above 25mm and upto 100mm    Rs.20/- per piece
   (c) above 100mm and upto 250mm  Rs.150 per piece
   (d) above 250mm      Rs.400 per piece

(2) Fees for inspection of flanges shall be charged as under:

   (i) for forged and cast flanges:
        (a) upto and including 25mm for a batch of 50 or part thereof:   Rs.120/-
        (b) upto and including 25mm for a batch of 100 or part thereof: Rs.220/-
        (c) over 25mm upto and including 50mm for a batch of 50 or part thereof:
            Rs.240/-
        (d) over 50mm upto and including 100mm for a batch of 25 or part thereof:
            Rs.240/-
        (e) over 100mm upto and including 250mm for a batch of 10 or part thereof: Rs.260/-
        (f) over 250mm for a batch of 5 or part thereof:
            Rs.300/-

   (ii) for plate flanges:
        The fees shall be charged at half the rate as charged for forged and cast flanges.”.

13. In the said regulations, for regulation 395 G, the following shall be substituted, namely:

“395 G. Fee for inspection of spares and scantlings:

(i) Spares – For all types of coils, namely, economiser coils, superheater coils, reheater coils, the fee for inspection shall be charged on the basis of surface area as provided in Regulation 385.

(ii) Scantlings – The fee for inspection of scantlings shall be charged as under:
(a) for outside surface area not exceeding 1 sq. metre Rs.500/-
(b) for outside surface area exceeding 1 sq. metre but not exceeding 3 sq. metres Rs.600/-
(c) for OSA exceeding 3 sq. metres but not exceeding 5 sq. metres Rs.700/-
(d) for OSA exceeding 5 sq. metres but not exceeding 7 sq. metres Rs.800/-
(e) for OSA exceeding 7 sq. metres but not exceeding 9 sq. metres Rs.900/-
(f) for OSA exceeding 9 sq. metres but not exceeding 11 sq. metres Rs.1000/-

For outside surface area exceeding 11 sq. metres a fee of Rs.50/- shall be charged for every 2 sq. metres or part thereof subject to a maximum of Rs.5000/-."

14. In the said regulations, for regulation 533, the following shall be substituted, namely:-

“533. Registration fee – An application for registration of Economiser shall be accompanied by appropriate fee as specified below:-

For economiser rating not exceeding 50 Rs.500/-
For economiser rating exceeding 50 but not exceeding 100 Rs.600/-
For economiser rating exceeding 100 but not exceeding 150 Rs.700/-
For economiser rating exceeding 150 but not exceeding 200 Rs.800/-
For economiser rating exceeding 200 but not exceeding 250 Rs.900/-
For economiser rating exceeding 250 but not exceeding 300 Rs.950/-
For economiser rating exceeding 300 but not exceeding 350 Rs.1000/-
For economiser rating exceeding 350 but not exceeding 400 Rs.1100/-
For economiser rating exceeding 400 but not exceeding 450 Rs.1200/-
For economiser rating exceeding 450 but not exceeding 500 Rs.1300/-
For economiser rating exceeding 500 but not exceeding 600 Rs.1400/-
For economiser rating exceeding 600 but not exceeding 700 Rs.1500/-
For economiser rating exceeding 700 but not exceeding 800 Rs.1600/-
For economiser rating exceeding 800 but not exceeding 900 Rs.1700/-
For economiser rating exceeding 900 but not exceeding 1000 Rs.1800/-

Above 1000 sq. metres for every 200 sq. metres or part thereof, an additional fee of Rs.100/- shall be charged.”.

15. In the said regulations, in regulation 561, in sub-regulation (b), in clause (ii), in sub-clause (b), in the portion relating to gauge length of specimen, for the entry, “four times the square root of the cross-sectional area of the specimen”, the following entry shall be substituted, namely:-

“five times the diameter of the specimen or 5.65 times the square root of the cross-sectional area of the specimen.”.
16. In the said regulations, for regulation 608, the following shall be substituted, namely:-

“608. Age and experience – A candidate who wishes to qualify for a certificate under these regulations shall not be less than eighteen years of age and shall have undergone a regular apprenticeship of two years in Industrial Training Institutes or an industrial organisation followed by at least one year regular on-job experience as a welder in a workshop or industry.”.

17. In the said regulations, for regulation 616, the following regulation shall be substituted namely:-

“616. Fees for examination of welders. - Fees for examination of welders under these regulations shall be Rs.100/- and this shall be borne by the applicant/sponsor. In addition, the applicant/sponsor shall bear all other expenses like cost of material and workshop and testing facilities as fixed by the Competent Authority.

The fee for endorsement of welder’s certificate shall be Rs.100/- and will be borne by the applicant/sponsor.”.

18. In the said regulations, in Regulation 621, in sub-regulation (c), for the entry “13 kg./cm²” the entry “7kg/cm²” shall be substituted.

19. In the said regulations, in Form XIII, for the entry “weight”, the entry “left hand Thumb Impression” shall be substituted.

F. No.6(14)/98-Boilers.

Sd/-

(V.K. GOEL)
Secretary, Central Boilers Board

Footnote:- The principal regulations were published in the Gazette of India vide S.O. 600, dated the 15th September, 1950 and subsequently amended vide notifications –

(i) G.S.R. 178, dated the 24th March, 1990;
(ii) G.S.R. 179, dated the 24th March, 1990;
(iii) G.S.R. 488, dated the 9th October, 1993;
(iv) G.S.R. 516 dated the 23rd October, 1993;
(v) G.S.R. 634 dated the 25th December, 1993;
(vi) G.S.R. 107 dated the 26th February, 1994;
Errata G.S.R. 223 dated the 14th May, 1994;
(vii) G.S.R. 250 dated the 4th June, 1994;
(viii) G.S.R. 402 dated the 13th August, 1994;
(ix) G.S.R. 427 dated the 20th August, 1994;
(x) G.S.R. 562 dated the 12th November, 1994;
(xi) G.S.R. 607 dated the 10th December, 1994;
(xii) G.S.R. 83 dated the 25th February, 1995;
(xiii) G.S.R. 93 dated the 4th March, 1995;
(xiv) G.S.R. 488 dated the 9th November, 1996;
(xv) G.S.R. 582 dated the 28th December, 1996;
(xvi) G.S.R. 59 dated the 25th January, 1997;
(xvii) G.S.R. 117 dated the 1st March, 1997;

To

The General Manager,
Government of India Press,
Ring Road, Mayapuri,
New Delhi-110064.