# **IBR-Indian Boiler Regulation-1950**

In the year 1863, a very serious boiler explosion occurred in Calcutta which caused the loss of several lives. As a result of this explosion, the necessity of inspection of boilers was widely recognised and a bill was introduced in the Bengal Council to provide for the inspection of steam boilers. In the year 1864, the Bengal Act VI of 1864 was passed which provided for the inspection of steam boilers and prime movers in the town and suburbs of Calcutta. This is the beginning of boiler legislation in India.

Following the Bengal Act of 1864, each of the other provinces framed legislation. At that time there were seven different Acts and seven different sets of rules and regulations. Those Acts and rules & regulations were inconsistent with one another. As the differences in the Acts and rules and regulations among the various provinces in India gave rise to many difficulties and hampered the development of industries, the Central Government appointed a committee called "The Boiler Law Committee" in 1920 to examine and report on the general question of boiler legislation in India.

The Boiler Laws Committee, 1920-21, the first to review the boiler laws on a national scale reported in March, 1921. The report criticised the differences in the Acts, rules and regulations. The report also pointed out that in the inspection of boilers the personal element was a weighty factor, and the difference in regulations resulted in what was termed as "provincial jealousy". The report stressed that all provinces should be subject to the same regulations and work done in one province should be accepted as correct in another province. The Committee recommended that regulations to cover the standard conditions for material, design and construction of boilers should be framed by Government of India and make applicable to all the provinces. The report also pointed out that regulations were entirely of technical nature and there was no reason for which these regulations would be affected by local conditions. The Committee prepared a draft Act on the lines of which, the basic All-India Act was passed in 1923. The Boiler Laws Committee also prepared a uniform set of technical regulations and a model set of administrative rules. A sharp distinction was drawn between the regulations and the rules. The regulations referred entirely to technical matters where as the rules referred to questions concerning the administration of the Act. Indian Boiler act, 1923 provides for the safety of life and property of persons from the danger of explosion of boilers.

The Government of India Act, 1935 assigned the subject 'Boilers' to the concurrent field. The provision for constituting Central Boilers Board having the authority to make regulations consistent with the Act was made in the Indian Boilers (Amendment) Act, 1937. A Board called the Central Boilers Board was accordingly constituted in the year 1937.

The Central Boilers Board in exercise of the powers conferred under section 28 of the said Act, formulated regulations on boilers. The current version of these regulations is known as the Indian Boiler Regulations, 1950 with amendments up to 22nd February, 2005.

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### Services to the Power and Energy sector



Manufacturers and suppliers of boilers and associated components for use in India have to comply with the Indian Boiler Regulations, known as the IBR. The IBR covers all material and equipment utilised in the manufacture of boilers for use in India. The Indian Government strictly enforce the IBR and therefore it is not possible for any material or equipment to be imported into India unless it is accompanied by a certificate that confirms that all imports meet the IBR requirements. This certificate must be endorsed by an Inspecting Authority designated by the Indian Government.

The GINDT have the experience of Boiler and the requirements of the Central Boilers Board in India to support the vendors during the construction of boilers and its related components, procurement.

#### What is IBR?



To manufacture the Power/electricity the **steam** is required; the stored potential energy in steam may cause the accident and create damage to the working people around it, society and environment

The Indian Boiler Regulations (IBR) was created in 1950 to enforce section 28 & 29 of the Indian Boilers Act 1923.

#### Scope of the regulations

The regulations cover the following areas:

• Boilers – including feed piping from the discharge side of the feed pump and steam piping up to and including the stop valve of the steam consumer and fittings or vessels attached thereto

- Steam receivers, separators, steam traps, accumulators and similar vessels
- Heat exchangers, converters, evaporators and similar vessels in which steam is generated

As a an Inspection authority services we have experienced inspectors with the correct experience offering the following services to help clients meet the IBR design approval, material certification and inspection during construction.

## Forms issued

Below is a summary of which authority can issue each of the relevant forms:

#### • THESE MUST BE issued by the Boiler manufacturer:

• III – for the boiler

- VIII for the economiser
- THESE MUST BE COUNTERSIGNED BY THE INSPECTING AUTHORITY
- THESE MUST BE issued by the Inspecting Authority:
- II for the boiler or boiler part
- VII for the economizer
- THESE MUST BE issued by the material manufacturers and manufacturers of fittings & mountings:

• IIIA – issued by the pipe manufacturer and is applicable to all steam pipes, piping sections and butt weld fittings made from pipe

• IIIB – issued by the tube manufacturer, i.e. source material at the tube mill indicating the material, method of manufacture and testing

• IIIC-issued by the fitting/mounting manufacturer for boiler safety valves and other mountings, valves and flanged fittings

- IIID issued by the well known pipe manufacturer
- IIIE issued by the well known tube manufacturer
- IIIF issued by the well known foundry or forge shop

• IV – issued by the steelmakers indicating the method of manufacture of the steel and the results of physical and other tests

An updated list of well-known steelmakers, foundries, forges/Forging Manufacturer, tube/pipe makers recognised by the Central Boilers Board is available from us.

We have experience in inspection of Boiler Manufacturing, Super Thermal, Super Critical, Heat Exchanger, Evaporator, Condenser, Pressure Vessels, Valves, Safety Valves, Steam Trap, Forging and Foundries and their related Non Destructive Testing and Evaluation of **discontinuities** to the IBR and International Code requirements decide them as **defect**.

How can we help you?

Summary of business benefits

Working with us to meet the requirements of the IBR gives you the following benefits:

• Comfort in the knowledge and experience of GINDT inspectors

If you would like to speak to a member of our team to find out more about how we can help you

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