



A Thermax Group Company



THERMAX

## Energy Environment Solutions for Sustainable Growth



# Auto Blowdown Control

**STEAM ENGINEERING**

Keep your boiler at peak efficiency

## What is blowdown?

When steam gets released from the boiler, the Total Dissolved Solids (TDS) in feed water are left behind. This concentration of TDS in the boiler water only increases with time. This water with high TDS content, if not discarded from the boiler, causes scale formation and reduces the effectiveness of heat transfer. The process of discarding the water with high TDS content from the boiler is referred to as Blowdown.

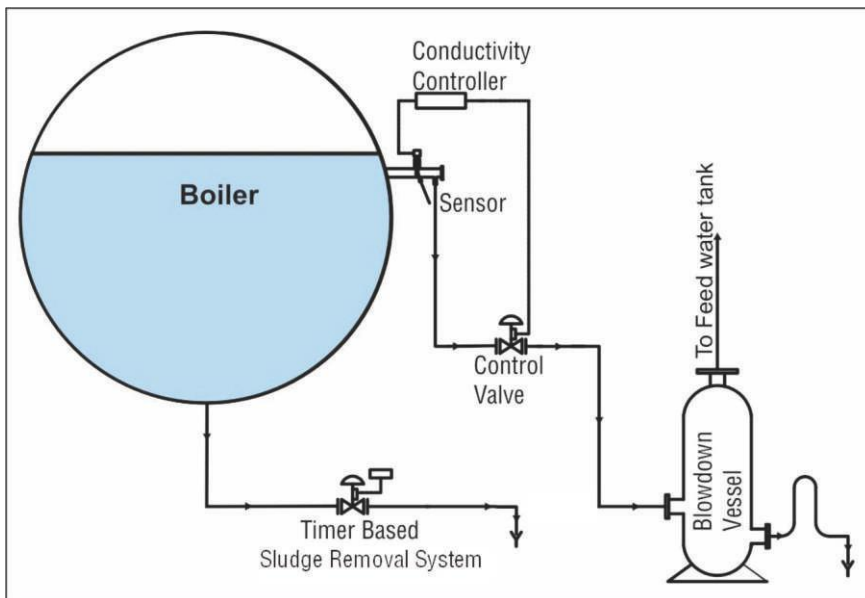
## Why Surface Automatic Blowdown System?

- Enables accurate TDS control, since the TDS gets removed as it forms.
- TDS control is most effective, if water is drained from near the steam water interface.
- Avoids choking of the sensor chamber, which is otherwise common in bottom blowdown system
- Prevents coating of sensor by sludge

## Energy efficient solution

To control the blowdown quantity accurately, and to recover the heat content in the blowdown water, it is proposed to install the following:

- Surface auto blowdown system
- Intermittent bottom sludge removal system
- Heat recovery of the hot blowdown water



Schematic drawing of auto blowdown system

## Features and benefits

- Increase in boiler safety and efficiency
- Real time conductivity sensing and control avoids excessive blow down of water from boiler having high heat value.
- Waste heat recovery from high TDS water results in energy conservation
- Reduced make up water requirement for boiler resulting into reduced water treatment cost
- Improved life of tubes and pressure vessels due to reduced scaling

For more information, please get in touch with your nearest Thermax representative. You can also mail us at [Steamengineering@thermaxglobal.com](mailto:Steamengineering@thermaxglobal.com) or visit us at [www.thermaxglobal.com](http://www.thermaxglobal.com)

In view of our constant endeavour to improve the quality of our products, we reserve the right to alter or change specifications without prior notice. All photographs shown in this publication are representative in purpose, and to be used for reference only. For actual scope, benefits including the specifications, please refer to Thermax offer document.



**THERMAX**

Sustainable Solutions in  
Energy & Environment

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### Thermax Business Portfolio

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