

BRYAN[®] BOILERS.



100 years of boiler
technology leadership.



Boiler technology leaders since 1916.

Spray Type and Tray Type Deaerator Features

- Constructed and Stamped to ASME Section VIII, Division 1 for 50 psig
- 1/16" corrosion allowance
- Easily accessible manway
- 10 minutes of deaerated water storage to overflow
- All internal surfaces that contact undeaerated water are constructed of stainless steel
- 2-stage deaeration
- Structural steel stand/pump platform
- Available as completely packaged unit including pumps and control panel

Why Deaerate Boiler Feedwater?

There are many advantages to deaerating water prior to boiler input, but they all boil down to reduced cost operations.

- Water is heated during deaeration to near the temperature of the boiler water, thus minimizing the risk of thermal shock damage to a high value boiler system.
- The deaerating process removes noncondensable gases (oxygen and carbon-dioxide) which tend to act as insulators inhibiting the transfer of heat within the boiler.
- Removal of corrosive oxygen and carbon-dioxide controls corrosion within the boiler and piping, extending the life expectancy of the system and reducing maintenance cost.
- Higher temperature feedwater reduces the drop in boiler operating pressure which can occur when cold water is added.
- Recycling of steam from vents and flash steam from traps that would otherwise be vented to the atmosphere can result in appreciable energy savings.
- Mechanical deaeration by a feedwater deaerator can cut the amount of chemical consumables used for water conditioning for a continuing operating cost saving.

Pressurized Spray Type Deaerator Capacities from 5,000 pph - 60,000 pph



Model DSH-150-5-2-2

Bryan spray-scrubber type deaerators offer a competitive alternative for feedwater deaeration. The initial investment is lower, yet they offer comparable results, particularly where wide or rapid fluctuations in load are not anticipated. The spray type deaerator may also be advantageous in situations where headroom in the boiler room is restricted. The Bryan spray type deaerator is rated for oxygen removal to .005cc/l (7 PPB) and CO₂ to zero measurable across its entire operating range. With its all stainless steel spring loaded spray valve and second stage steam scrubber, the spray type deaerator is a good choice for most deaerator applications.

Units are available with a complete range of boiler feedpumps and control options making them a total deaerator package with minimal amount of field assembly.