

DR, AB, RV & RW Series

“Compliance+” Low NOx Water or Steam Boilers Forced Draft Gas & Gas/Oil Fired

Please delete these paragraphs from the standard DR, AB, RV & RW Series Boiler Sample Specification:

GAS BURNER AND CONTROL EQUIPMENT

Boiler shall be furnished with a UL listed forced draft flame retention gas burner. Burner shall be complete with integral motor and blower for supplying sufficient combustion air with normal vent conditions.

OR

DUAL FUEL GAS/OIL BURNER AND CONTROL EQUIPMENT

Boiler shall be furnished with a UL listed forced draft, pressure atomizing, dual fuel burner, suitable for operation with No. 2 fuel oil and natural gas (or other gas). Burner shall be complete with integral motor and blower for supplying sufficient combustion air with normal vent conditions.

And substitute these paragraphs:

LOW NOX GAS BURNER OR DUAL FUEL GAS/OIL BURNER AND CONTROL EQUIPMENT *

The Bryan “Compliance +” boiler shall be furnished with a UL listed forced draft Low NOx – Gas burner or dual fuel burner suitable for operation with natural gas and/or No. 2 fuel oil. Burner shall be complete with integral motor and blower for supplying sufficient combustion air with normal vent conditions.

Burner must be Low NOx type for reduced emissions service. Burner NOx reduction strategy shall reduce the production of NOx by controlling low excess air operation and reducing flame temperature. Optimum stoichiometry shall be maintained by a fuel metering control with characterized cams for each fuel. Each cam shall have a minimum of six (6) points of adjustment through the modulating range assuring NOx reduction and high fuel efficiency.

Internal recirculation, and staged air burners, where portions of the main flame are combusted within the burner head, behind a cone or diffuser assembly shall be acceptable. Burners using a separate forced draft fan are acceptable.

Where required, flue gas recirculation piping shall be furnished and installed to connect the boiler stack to the burner inlet connection. The piping shall be seamless carbon steel pipe or tubing, sized in accordance with the burner manufacturers recommendations and run to avoid interference with any boiler inspection parts, etc. Piping will be supplied loose for field mounting. Insulation is supplied by others. Both piping and insulation shall be in accordance with all applicable codes.

On natural gas firing, NOx emissions will not exceed 30 ppm.

On oil firing, due to fuel composition, NOx emissions shall result in a reduction from that experienced without NOx control.

All emissions measurements are to be corrected to 3% O₂.

* NOTE: DR Series boiler only available with Low NOx gas burners and are 2 stage firing not modulating.