



HeatNet, RBI's proprietary integrated boiler management system is the driving force behind RBI's energy optimization philosophy for its high efficiency equipment and is standard equipment on all Fusion and Futera (XLF & III) Air-Fuel coupled products. Designed for precise system control, Heat Net provides repeatability and feedback thru digital communication. The control monitors boiler temperatures and limit circuit inputs, maintains system and domestic hot water requirements, supports boiler room components including system/domestic pump, boiler pump, combustion air damper and modulates boiler firing rate to maximize turndown ratios in order to maintain peak efficiency.

Developed and manufactured by RBI's sister company Mestek Technologies, Heat Net provides an intuitive interface with plug-and-play connections to speed the set-up and diagnostic process for installing contractors. Heat Net is capable of operating RBI units as a stand-alone boiler, multi-boiler Master/Member network protocol of up to 16 boilers or to a Boiler Management System. The network can incorporate mixing of condensing, non-condensing boilers or base loading an existing boiler based on conditional and priority firing – all of which eliminate the need for an additional third party wall-mounted control platform .

The control configuration “learns” the applications optimal firing rates by using microprocessor electronics to monitor time-average responses based on actual usage to determine the load for the system for optimal energy efficiency. Standard Heat Net controls use a Modbus protocol with optional processor boards for BACnet and Lon Works based building management systems. Typical master/member systems using 2, 3 or 4 boiler configurations can see a total turndown ratio of 10, 15 or even 20:1!

Variable control settings for Mod/Max firing rates allow adjustable maximum firing rates (factory pre-set at 70%) enabling all boilers run at extremely efficient levels until all units in the sequence have fired at which time firing rates can increase above the standard setting to meet system demands. Firing rate is kept as low as possible to take advantage of increased efficiency at lower inputs. Boiler firing rotations can be programmed for first on/first off, first on/last off or “True Rotation” which rotates boiler run-times so that all units run for the same amount of time. The control incorporates a compensated output signal based on firing rate to modulate the local boiler pump for primary/secondary systems in order to maintain optimum boiler delta t.

Heat Net's proprietary design allows for seamless flash drive or laptop driven updateable firmware adding continuous value and boiler system control without the need for physical control platform updates that can make some equipment obsolete. Electronics are located in a self-contained control enclosure through which all internal components and terminal blocks are easily accessed via a hinged, swing open door panel on the front of all units.