

TECHNICAL BULLETIN

Boiler Base Loading

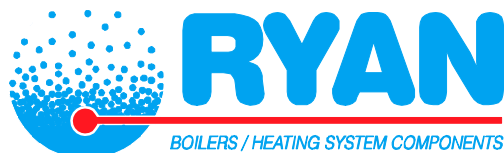
Boiler Base Loading is a term that refers to the operation of a multiple boiler system using a combination of small & large units which are staged on/off according to load demand to achieve maximum system efficiency.

The smaller units handle the load during the summer and warmer winter months while the larger units handle the colder or higher demand months. This concept allows the staged boiler to run at or close to full capacity where it operates at its highest efficiency. Therefore, the system operating efficiency throughout the year will be at a maximum and the fuel usage will be at a minimum.

Originally, base loading was accomplished using multiple firetube boilers operating at a maximum efficiency of about 83.5%. Today, we have improved on this concept by using ultra high efficiency condensing boilers, operating at 90%+ efficiency, to handle the smaller loads (summer & warmer winter months). These units maintain their high efficiency even while operating at reduced loads providing even greater energy savings. In addition, these condensing boilers will not be damaged due to any condensation that may occur from low water temperature setbacks.

Furthermore, the larger units can be setup with dual fuel burners which allows the facility to reduce their fuel costs by taking advantage of interruptible gas savings. Also, additional savings may be possible in the form of a rebate from the utility company for the installation of high efficiency equipment.

If you would like to know more about boiler base loading, dual fuel burners, or utility company rebates, please feel free to contact us.



Ryan Company, Inc.
3361 Republic Ave
St. Louis Park, MN 55426
Phone (952) 915-6475
Fax (952) 915-6480
www.ryancompanyinc.com