

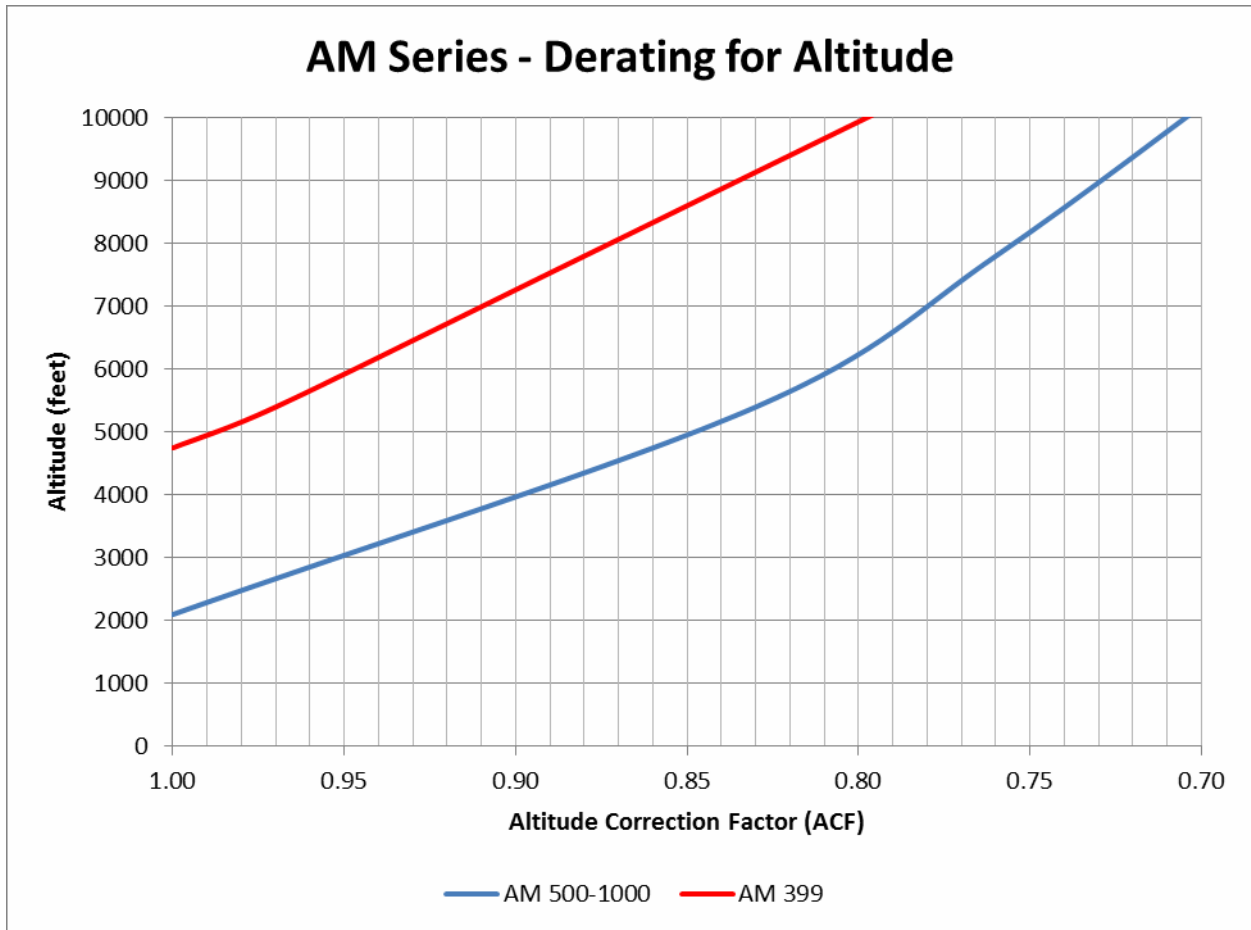


## Natural Gas Altitude De-Rate Factor AM Series Boilers & Water Heaters

International, Inc.

Due to the reduced density of air at higher altitudes, the output of the AM must be de-rated at elevations above 5000 feet. Please contact your local AERCO Sales Representative for details.

The following illustration determines the Altitude Correction Factor (ACF) to be applied to de-rate the AM Series. The ACF values are based on 1000 BTU/cu.ft. gas BTU content. The ACF should be multiplied by the BTU/H input at sea level to determine the corrected input. For installations with lower gas BTU content, multiply the ACF by (Actual gas BTU content / 1000). Sizing of the equipment is then performed utilizing the corrected input multiplied by the full load efficiency.



Example:

AM 399 Boiler applied at an altitude of 7,000 ft and the gas BTU content is 850 BTU/cu.ft.

$$\begin{aligned} & \text{ACF} * (\text{Actual gas BTU content} / 1000) * 399,000 \text{ BTU/H input} \\ & = .91 * (850 / 1000) * 399,000 \text{ BTU/H input} = \underline{308,626 \text{ BTU/H corrected input}} \\ & 308,626 \text{ BTU/H} * .92 \text{ (92\% full load efficiency)} = \underline{283,936 \text{ BTU/H corrected output}} \end{aligned}$$