



LOCKWOOD®

WHEN EXPERIENCE COUNTS

Benefits of the LOCKWOOD® Spray Scrubber Deaeration System

TWO STAGE DEAERATION

- Reduces oxygen content in the boiler feed water to 0.005 cc/liter oxygen - the primary reason for effective deaeration.
- Reduces the free carbon dioxide in the feedwater to zero.
- Gravity flow, two stage design provides a "one-two punch" to assure the most effective deaeration without the additional cost of transfer pumps required on dual compartment units.
- Cold make-up water is blended with returning pumped condensate prior to entering the first stage of deaeration

COMPLETE PACKAGED SYSTEMS

- Unlike some manufacturers who offer "knocked down" systems which require extensive field piping, LOCKWOOD® packaged deaeration systems include pre-piped make-up valve assemblies with three valved by-pass, pre-piped pump suction piping with strainers and isolation valves (optional flex connectors are available), pre-piped high and low level switches, and pre-wired control panels. Also included are steam control valves and relief valves which may be field piped by the contractor in order to accommodate favorable location at the job site.
- Pre-piped and pre-wired systems reduce installation costs.

COST SAVINGS

- Reduced levels of dissolved oxygen in the boiler feed water results in increased life of the boiler, condensate, and steam lines thus reducing overall maintenance and replacement costs.
- LOCKWOOD® Spray Scrubber deaerators provide preheated feed water (230-250 degrees F) greatly reducing the possibility of thermal shock to boiler tubes and heat transfer surfaces.
- The effective removal of unwanted non condensable gases greatly reduces plating out of air on heat transfer surfaces that reduces their efficiency.
- Improved efficiencies result in lower overall operating costs, reducing chemical and fuel usage.
- High pressure drips may be returned directly to the deaerator reducing losses due to flashing trapped condensate in atmospheric systems. (Consult factory for allowable percentages of HPR).

RUGGED CONSTRUCTION

- LOCKWOOD® Spray Scrubber vessels are constructed of not less than 1/4" thick carbon steel plate, even when ASME Code allows for thinner materials.
- Support stands are constructed of heavy structural steel, with reinforcing gussets (and cross bracing when required).