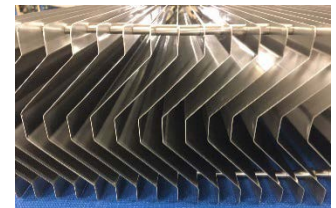
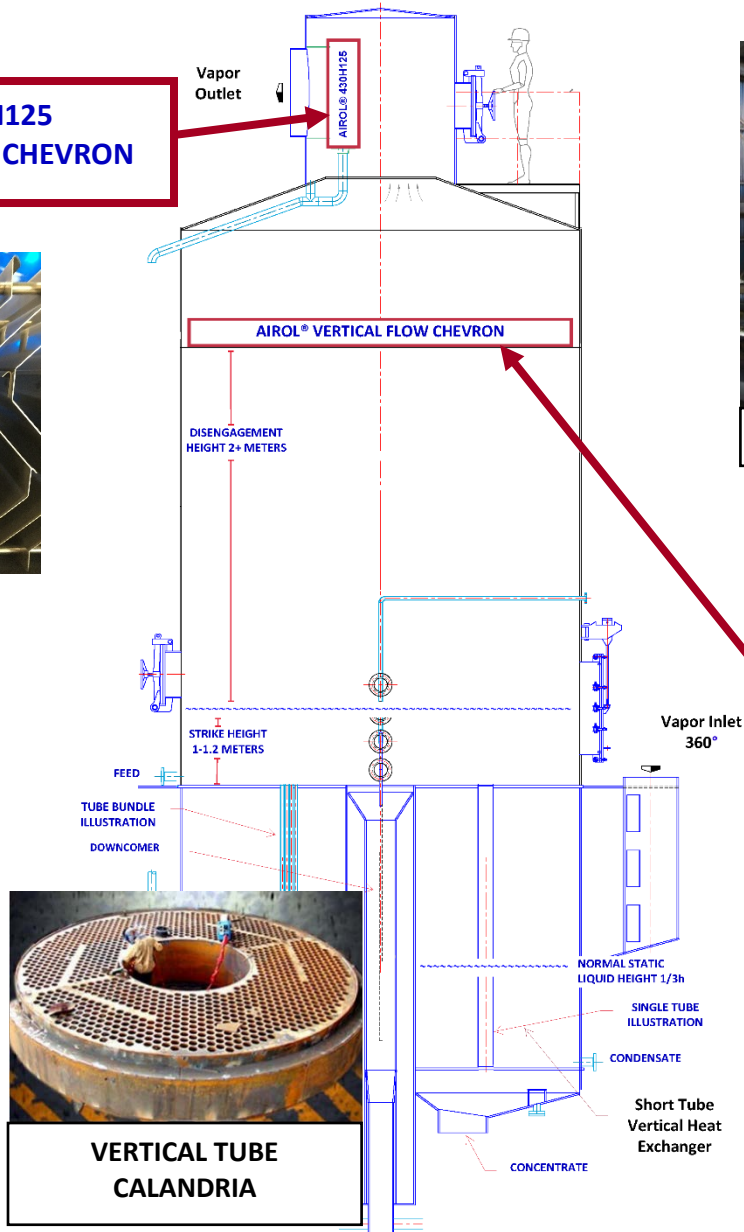
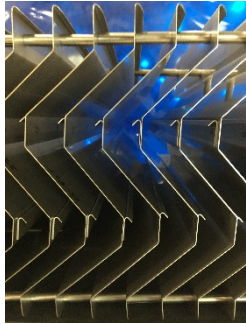


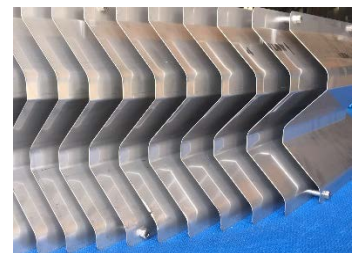
**AIROL® 430H125
HORIZONTAL FLOW CHEVRON**



**AIROL® 120H875 or
AIROL® 130H150
VERTICAL FLOW CHEVRON**



VERTICAL TUBE CALANDRIA



Short Tube Vacuum Pan Evaporators

Material flows through tubes heated by low pressure steam condensing on the outer tube surface. The boiling liquid is under a moderate vacuum, which reduces its boiling point, thereby increasing the heat transfer rate in the evaporator.

In single effect evaporation, vapor from the boiling liquid is condensed and discarded. Although this is a simple method, it utilizes steam ineffectively. If vapor from one evaporator is fed into the steam chest of a second, and vapor from the second is sent to a condenser, the operation doubles efficiency. The heat in the original steam is reused and the amount of water evaporated is almost doubled. Multiple "effects" can be added, each subjected to a progressively higher vacuum, boiling the liquid at progressively lower temperatures, greatly enhancing efficiency. Steam utilization efficiency increases linearly with an increasing number of effects.