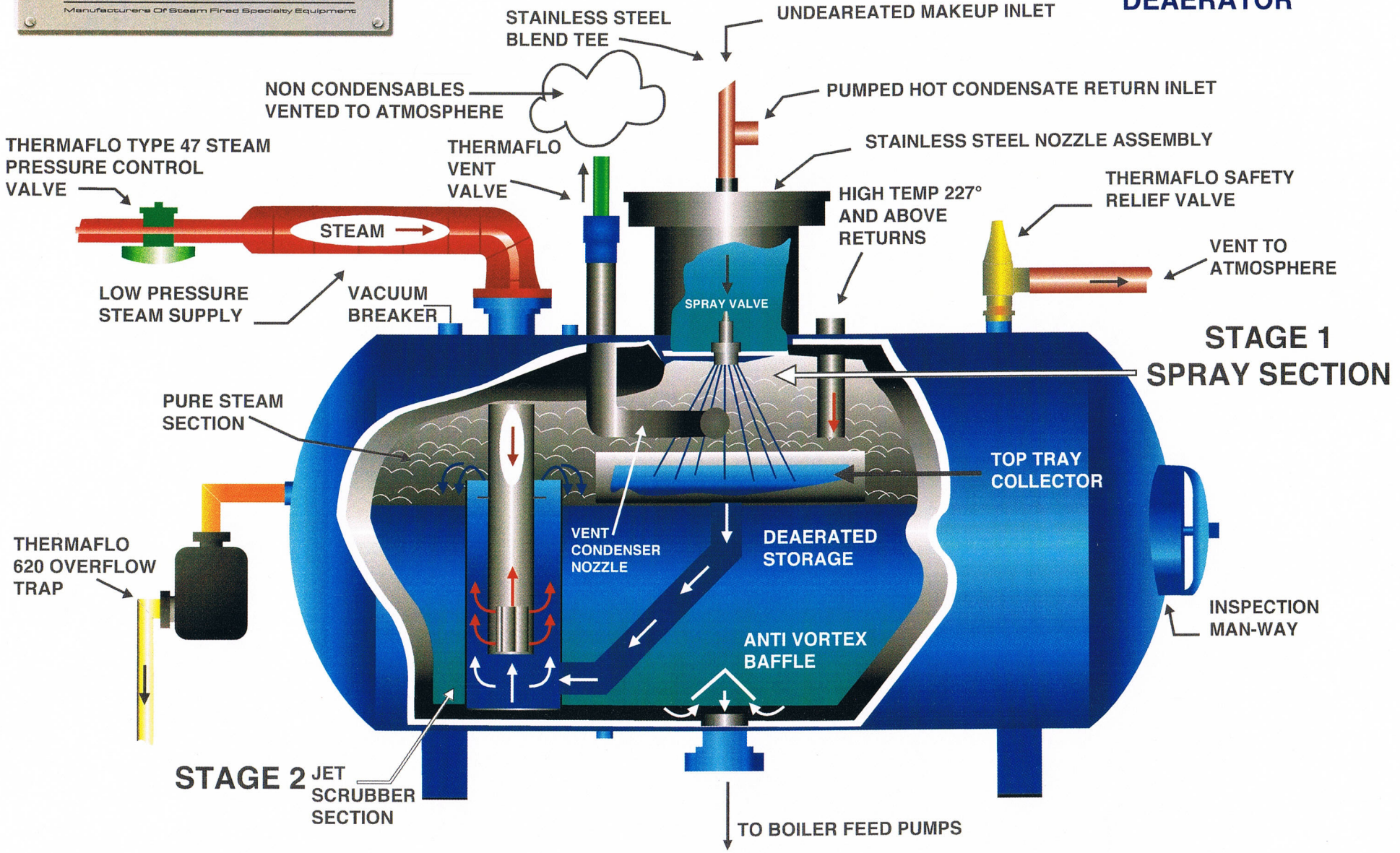
THERMAFLO ENGINEERING INCORPORATED
Manufacturers Of Steam Fired Specialty Equipment
Since 1986

THERMAFLO ENGINEERING TYPE JS SPRAY TYPE DEAERATOR



Undeaereated makeup flows into the deaerator through the top water inlet connection. This flow is directed into the stainless steel nozzle assembly where it flows to the stainless steel spray valves. The spray valve disperses the flow into very thin conical hollow cone sheets into the direct pure steam contact vent condenser Stage 1 section.

The makeup is instantly heated in this Stage 1 section and most of the air is removed before it is collected in the top tray collector. This partically deaerated hot makeup flows down from the top tray collector to Stage 2 the "Jet Scrubber" section. In this section the partically deaerated makeup collides with the incoming steam. This produces a violent scrubbing and heating action that mechanically scrubs and removes the last traces of non condensable gases out of the feed water. The deaerated water flows out to the top of the Stage 2 scrubber section into the storage tank. At the same time pure steam fills the top section of the deaerator and the cycle is continuously repeated. The released non condensable gases are vented to the atmosphere through the stainless steel direct contact vent condenser discharge nozzle. Pressure in the JS Series Deaerator is precisely controlled by the Type 47 steam pressure control valve sensing at the top of the storage compartment.

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