

down in the Acid Condensate Flash Tank. Acid condensate from the Main Condenser and Vent Condenser (also Acid Condensate from the ejector system condensers if operating) drain into the Acid Condensate Flash Tank. Acid Condensate is then pumped out of the system at Terminal Point C or is utilized as wash water.

- I. Mist Eliminator Wash - (Dashed Blue) - The mesh pads are washed with the Acid Condensate discharging from the acid condensate pump.
- J. Cooling Water - (not colored) - From Terminal Point G to the condensers and seal water trim cooler, then out to Terminal Point H. A portion of the cooling water from the Main Condenser is sent to the Feed Heat Exchangers and out to Terminal Point R.
- K. Seal Water - (Orange) - From the acid condensate pump discharge to the vacuum pump and returned by the separator seal water pump to the washwater line to the feed heat exchangers. Seal water for the centrifugal pumps is taken from the discharge of separator seal water pump and is returned to the separator tank.
- L. Washwater Flow - (Brown) - From the acid condensate pump discharge, to one of the feed heat exchanger, to the body on wash, and then pumped to Terminal Point C or Terminal Point D.
- A. EVAPORATOR EQUIPMENT (not colored)

EVAPORATOR BODIES

The 10 ft diameter (O.D.) SPRAY-FILM evaporator shells contain 1300 tubes, 17.1 ft long, 1 inch outside diameter with .049 inch wall. The tubesides of Body #1 and Body #2 are stamped in accordance with A.S.M.E. The shells are circumferentially reinforced to withstand full vacuum. All materials in contact with the process fluids are 316L SST with 2.75% minimum molybdenum content.

Design Pressure (psig)

<u>Effect</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Tubeside	50	50	15	15	15
Shellside	15	15	15	15	15

The tube bundles are a two-pass design. A partition plate in the steam chest end divides the bundle into two parts with 11 percent of the total tubes in the second pass. Splitting the tube bundle in this way helps keep tubeside vapor velocities high enough to ensure good "sweep-out" of noncondensables.