

Amendment 1: VA250-13-B-0233, Project 539-13-107, "Replace Hospital Steam Heating Systems –FCA"

Response (R) to Questions (Q):

Q: 1. Question regarding copper condensate.

R: 1. The contractor shall use copper condensate pipe per the specifications. A di-eletric fitting will be required for any connections of dissimilar metals per the specifications.

Q: 2. The factory needs more information on the flashtanks. 1FT-1,1-FT-2, and 8FT1

What are the connection sizes of the openings, inlet pressures and capacities, and number of perforated holes for the internal diameter of the internal pipe in the center of the flash tank.

R: 2. The size of the inlet opening should be the same as the size of the tank inlet header, which is labeled on the floor plans as 4" for 1-FT1 & 1-FT2, and 2" for 8-FT1.

Regarding inlet pressures and capacities, this is impossible to pinpoint given the number of different sources, both original and those that have been tied in over the years, the fact that there are leaking traps blowing medium/high pressure steam through the return lines, etc. So to estimate flash tank size, the A/E used the existing condensate pump capacities, there would be no more condensate than these currently handle.

Regarding perforated holes, per the flash tank detail on Sheet H4, perforations shall be ¼" diameter holes (approx. 0.049 sq. in. each), with total additive area equal to transverse area of the inlet pipe (4" or 2", per above). For a 4" pipe, this amounts to 256 perforations along the length of the pipe, and for the 2" pipe, 64 perforations.

Capacities

Pump for 1-FT1: 150 GPM.

Pump for 1-FT2: 16 GPM pump.

Pump for 8-FT1: design drawings from another A/E states 97 gpm, but this pump (and new flash tank) only pick up 3 unit heaters and a handful of drips. Although this pump appears excessive, size the flash tank for 38"x16".