

Industry: Food Processing

Application: Pond Cooling

Product Descriptions: TH Nozzles with Junction Boxes

Situation: A distiller of rum needed to cool process water in their distillery. They wanted to construct a cooling pond with a total capacity of 1760 gpm (6662 L/min) and had an available pressure of 7.5 psi (0.52 bar). The customer wanted to use right angle tangential nozzles because of their large free passage.

BETE's solution: Using the BETE estimated trajectory program, Applications Engineering was able to estimate the coverage of a 2"THF8516 spraying upward at 7.5 psi to be approximately a 40' (6.1 m) diameter. This meant that the nozzle spacing would need to be 40' (6.1 m) to prevent the patterns from overlapping. Using 12 junction boxes with 4 nozzles each arranged as shown, worked out to a 6 x 8 nozzle array as shown in figure 2. Because clean water was being sprayed, brass was chosen as the material of construction for economic reasons.

Technical Questions?

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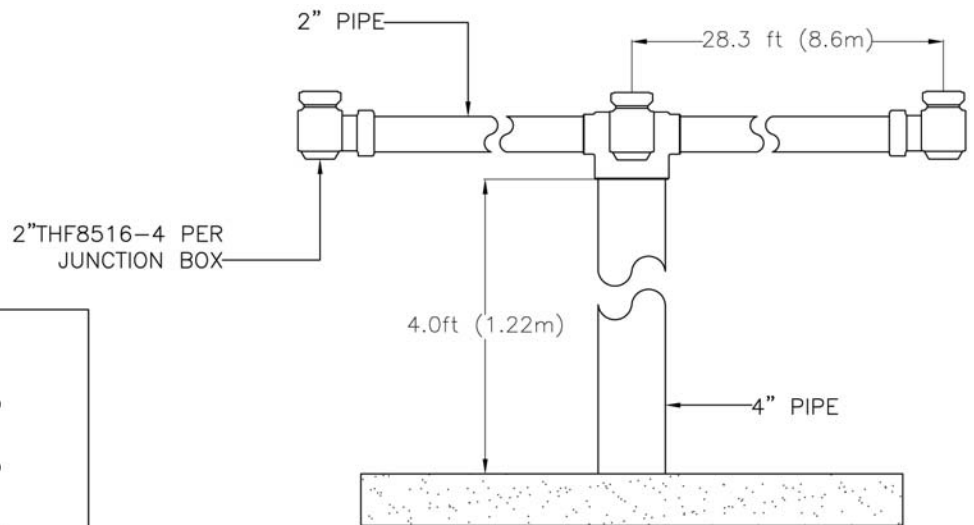


Figure 1. Pipe and Junction Box with 4 each 2"THF8516 Nozzles

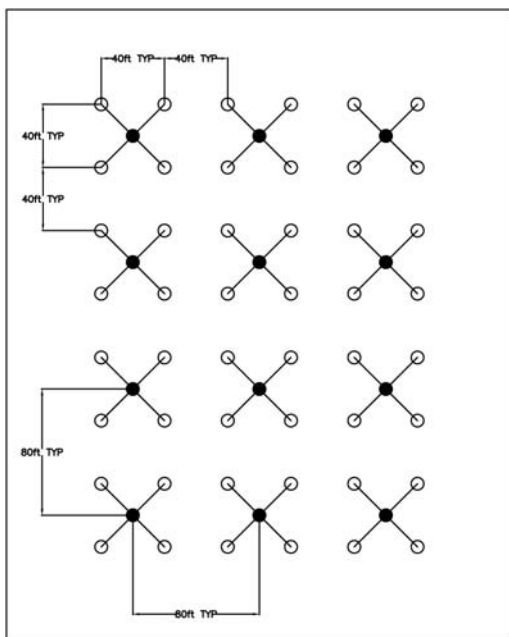


Figure 2. Proposed layout

