



Custom Solutions Bulletin

Industry: Food Processing

Application: Area Misting

Product Description: Special Geometry P Nozzle

Situation: A BETE customer had created a misting machine for spraying water onto vegetables on a conveyor. The system was intended to use plant water pressure, 40-80 psi (3-5 bar), to eliminate the need for a special pump. They needed the nozzles to fit through holes in a sheet of plastic covering the conveyor, with minimal protrusion below the sheet. The flow needed to be about 5 GPM (19 L/min) over a 4 ft (1.2 m) wide and 10 ft (3.0 m) long area along the conveyor. The customer had 6 inches of space above the product in which to spray.

BETE's solution: For low pressure misting, BETE's P/PJ nozzles are ideal. Even at pressures as low as 40 psi (3 bar), they create a very fine spray that cannot be matched by whirl type misting nozzles at this pressure.

To accommodate the customer's need for a round section, BETE created special body geometry for the customer. This allowed the nozzles to be easily inserted into the plastic sheet. The tight fit allowed the nozzles to be quickly and easily inserted with no chance of the nozzle slipping out.

BETE's Application Engineers selected the P24 nozzle, since the flow per nozzle was about 0.1 GPM (0.38 L/min) per nozzle. By creating a 5 by 10 nozzle array, complete coverage could be obtained over the entire area of interest.

Technical Questions?

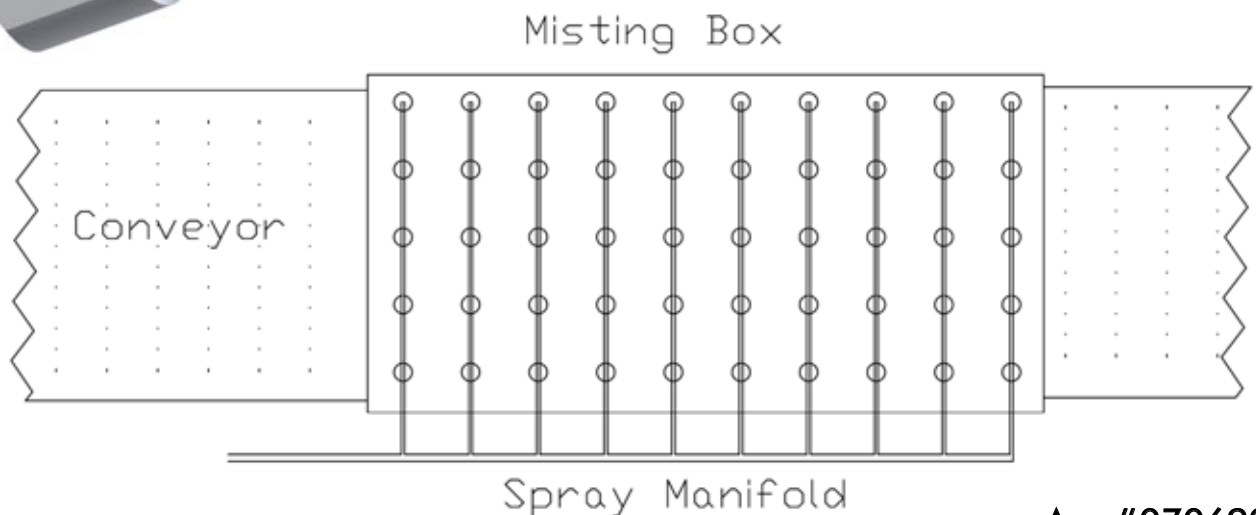
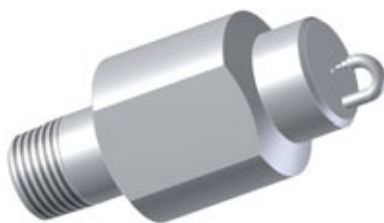
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