

**Industry:** Food Processing

**Application:** Coating Candy

**Product Descriptions:** Steam-jacketed SA nozzle

**Situation:** A BETE customer wanted to spray several gallons a minute of molten coating chocolate on to a bed of candy or nuts in a large rotating kettle. The customer's requirements: the nozzles needed to have a steam jacket to keep the chocolate molten and be air atomizing due to the high viscosity of the chocolate.

### Technical Questions?

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**BETE's solution:** Several modifications by BETE engineers were incorporated to a stock SA nozzle to convert a portion of the atomizing air passageway into a steam jacket. This initial model was tested by the customer, but found unacceptable due to both too many exposed threads (food application) and to difficulty in disassembling the nozzle for cleaning. After taking this feedback into consideration, a completely new nozzle body was designed for the customer using straight threads with O-rings to avoid exposed threads and an all-new front removable fluid delivery tube and primary atomization spiral to allow for easy disassembly. Thus, the chocolate stayed molten and the nozzle was easy to disassemble for cleaning.

