

Industry: Chemical Processing

Application: Material Injection

Product Description: Full Cone, Modified XAAD Air Cap

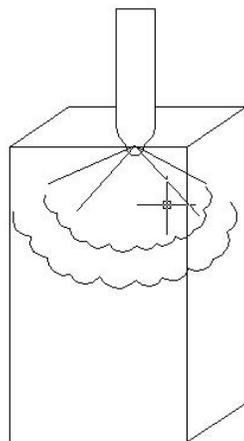
Situation: A customer approached BETE, asking if there was any way to improve the coverage out of an XA-type nozzle. They needed a very full cone spray in order to sanitize a container roughly the size of a ½ gallon (2 liter) milk carton. They had been offered several catalog solutions from competitors, but nothing was working.

Technical Questions?

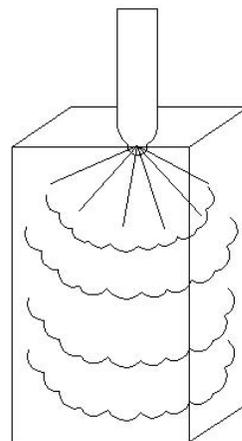
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BETE's solution: Full cone spray patterns are very difficult to generate with air atomizing nozzles. The droplet-laden air being ejected from an orifice can only expand so much after exiting. After this, the air will simply continue moving forward in a cloud without expanding further. This is why the BETE XAPR is a low angle (10-20°) spray.

The BETE XAAD nozzle addresses this limitation by using six separate holes to create a wider pattern, although the spray is a hollow cone. To create a full cone pattern, BETE's Application Engineers added three additional holes inside the standard six-hole pattern of an XAAD Air Cap 1602. Doing this created an air cap that performed similarly to the XAAD AC1603, but was much fuller. In addition, by modifying an existing in stock product, BETE was able to keep costs down and ship a test nozzle to the customer in 1 week!



Standard XAAD Air Cap



Modified XAAD Air Cap

