

**Industry:** Pollution Control

**Application:** Venturi Scrubber

**Product Description:** Large Capacity Flat Fan

**Situation:** A BETE customer that manufactures pollution control equipment was designing a new venturi scrubber unit. Their calculations called for a 90 degree flat fan with a flowrate that was considerably larger than any standard offering from any major nozzle manufacturer. They came to BETE with a request to design and construct a flat fan nozzle that flowed over 230 gpm (870 L/min) at 10 psi (0.68 bar).

### Technical Questions?

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**BETE's solution:** Using correlations derived from decades of experience, BETE's designers determined the correct configuration of the nozzle that would produce the desired angle and flow. The resulting nozzle was an NF464090 with a 3" NPT connection. Implementing BETE's extensive machining capabilities, the parts were produced with the same lead time as standard items. After flow testing these large nozzles to verify performance, they shipped to the customer as scheduled.

