



## Custom Solutions Bulletin

**Industry:** Utilities

**Application:** High Impact Washing

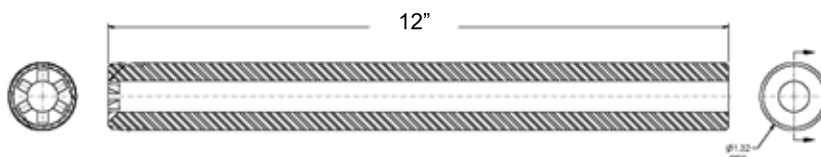
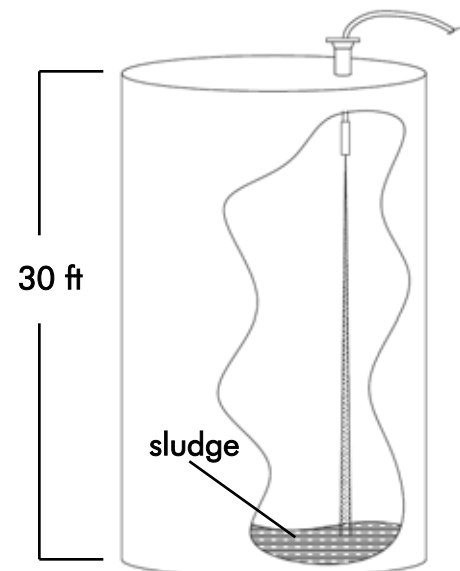
**Product Description:** Straight stream nozzle with high impact

**Situation:** A customer had a 30 ft tall tank in which sludge hardened and accumulated on the bottom. They needed some way to insert a nozzle in the top of the tank and spray a concentrated stream of water onto the sludge on the bottom (20-30 ft away) in order to break it up. The customer wanted to produce a laminar stream. They usually used a flow straightener in applications like this but didn't have the room on this one.

### Technical Questions?

Please contact:  
Applications Engineering  
([appeng@bete.com](mailto:appeng@bete.com))  
413-772-0846  
App#041130

**BETE's solution:** The customer was hoping to produce a laminar stream, but with the flow data provided, BETE Application Engineers determined that it was not physically possible. BETE was, however, able to produce a nozzle with the same flow and pressure that generated a cohesive stream. The tight stream was accomplished by milling a special geometry in the inlet of the nozzle. Utilizing our machine shop to quickly create prototypes, the flow rate and spray pattern were tuned to the customer's requirements. The final result was the correct flow rate at pressure with a straight emitting stream.



App#041130