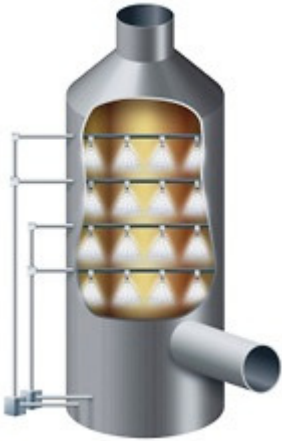


TOWNLEY

Engineering & Manufacturing Co., Inc.

TOWNIPRENE

FGD NOZZLE SHEET



1998

FGD Engineering Report

"Great strides have been made in the development of silicon carbide FGD absorber nozzles to improve wear in abrasive lime slurry, reducing the maintenance in wet FGD scrubber modules



TRUE BUT?

Maintenance crews report the following about "ceramic" nozzles:

- *We expect several years service, but the majority never make it due to breakage or plugging*
- *Slurry adheres to ceramic reducing port size and altering spray patterns*
- *Rubber lining and debris catches in nozzle and slurry builds-up blocking flow*
- *Over torquing of flanges often fracture nozzles*
- *Ceramic nozzles sometimes arrive damaged from shipping*
- *10 to 12 week deliveries normal*
- *Solidified slurry cakes drop from upper manifolds onto lower tiered nozzles, breaking them*
- *Maintenance scaffolding resting on manifolds and nozzles, fracture the ceramic*
- *Ceramic nozzles can be pricey*
- *Cannot clear slurry plugs, must replace nozzle*
- *Reduced efficiency at the stack discharge due to plugging*
- *Plugging can raise slurry temperature degrading some materials of construction in unit*

You might ask!

"Is there a modern solution to this old stubborn problem?"

You bet..... call TOWNLEY!

At Townley we scan the exact dimensions from your existing new ceramic nozzles and transfer to 3D CAD files allowing us to machine precise CNC molds to cast durable Towniprene™ nozzles that fit and perform exactly as the originals.



Unique Features of Towniprene™ Urethane Nozzles:

- Long lasting wear-resistant polymer
- Slurry is non-adherent to Towniprene™
- Blockage can be dislodged without damage to nozzle
- Won't be damaged by dropping even from the manifold level
- Can't over-torque
- Exact porting dimensions results in same spray pattern as original
- Time to produce from original.....6-8 weeks
- We will maintain inventory, ready to ship from stock
- Will not break or distort in use
- Metal inserts ensure urethane integrity with higher slurry pressures
- Now featuring Victaulic* style flanges along with bolted flanges
- Competitively priced

Try this mallet-whack procedure with your ceramic nozzles



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* Victaulic is a registered trademark of Victaulic Company