

# Fox Ceramic-Lined Eductors for Conveying Abrasives

CASE STUDY No.

43

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## Applications of Fox Venturi Eductors

CONVEYING WITH: NO MOVING PARTS - NO BLOWBACK - NO MAINTENANCE

### PRODUCT

Foundry Casting Sand reclaim, very abrasive, very dense - 95 lbs/ft

### PROBLEM

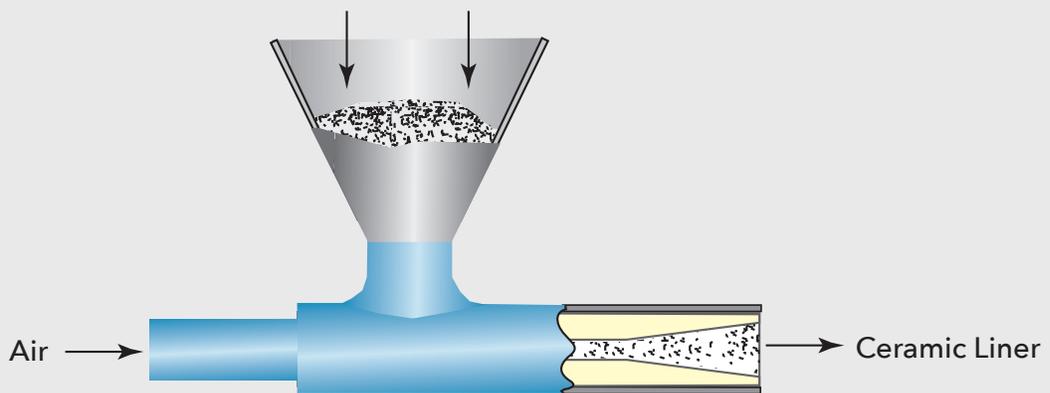
A specialist foundry equipment manufacturer had been using Fox Wear Resistant Eductors for years, with air supplied by quiet, reliable Rotron blowers. Service life of hardened steel 1-1/2" eductors was a respectable 8 to 12 months, continuously conveying reclaim foundry casting sand. Nevertheless it was still felt that the service life should be improved if possible.

### SOLUTION

A Fox Ceramic-Lined Eductor was installed next to a new hardened steel eductor in identical applications, in order to quantify any difference in service life.

Eight months (and about forty tons) later, both eductors were removed from the systems and examined: The hardened steel eductor showed signs of significant internal wear, and needed to be repaired or replaced soon. The Ceramic-Lined Eductor, on the other hand, had "no detectable wear on the insides". This is a direct quotation.

This customer is planning to standardize on Fox Ceramic-Lined Eductors for all future installations.



**Heat-Treated carbon/alloy steel**  
In abrasive application conveying foundry sand, displayed signs of wear after 8 months service. How long would an airlock have lasted?

**Ceramic-Lined Eductor**  
Installed in identical service, conveying foundry sand. After 8 months in service customer reports - and we quote - "no detectable wear on the insides".

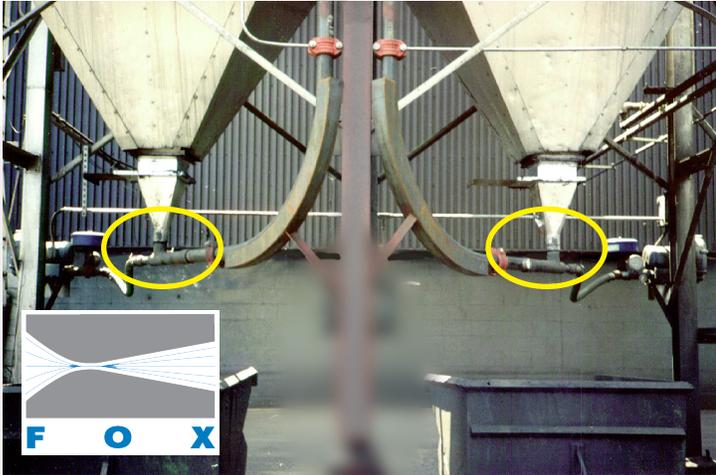
#### FOR MORE INFORMATION:

Video: Eductor Replaces Rotary Valve  
<https://www.youtube.com/watch?v=bBFAvZSG5ml>  
Visit our Minerals and Abrasives Page  
[http://foxvalve.com/l2\\_solid\\_ce\\_abrasives.aspx](http://foxvalve.com/l2_solid_ce_abrasives.aspx)  
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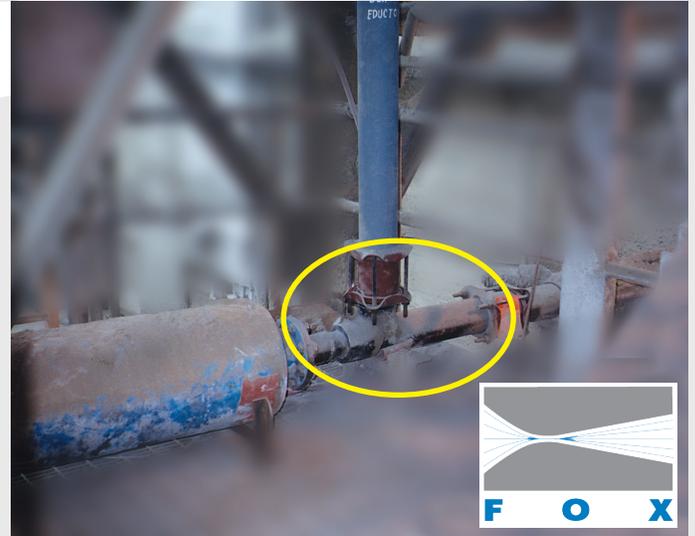
**FOX VENTURI EDUCTORS**  
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# Fox Ceramic Lined Venturi Eductors for Conveying Abrasives such as Foundry Sand, CKD, etc.



Two ceramic lined Fox Eductors are installed under dust collectors at a foundry in the Midwest. The previously used totes are still visible.



A ceramic lined Eductor conveys CAD at a cement plant.



Three ceramic lined eductors with stainless steel housings. The ceramic liners are partially removed at the discharge to show how they are replaced in the field.



Fox maintains a large inventory of carbon steel and stainless ceramic lined eductors suitable for conveying extremely abrasive powders.