

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1997

DateRun: 09/18/1997

Experimenters: Jason Marshall, Prashant Trivedi

ClientType: Gas Company

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Part

Contaminants: Rust/Scale

Cleaning Methods: Media Blasting

Analytical Methods: Visual

Purpose: Evaluate sodium bicarbonate media blasting

Experimental Procedure: Representatives from Church & Dwight Co, Inc. provided the equipment and the baking soda product to clean the mold. The valves were cleaned at a nozzle pressure of 20 psi. The system supplied for delivering the media was designed for paint removal from buildings and other large outdoor structures, thus requiring a larger nozzle than needed. The valves could definitely be cleaned-in-place as required by the client. Parts were sent back to customer for inspection.
SUBSTRATE MATERIAL: Stainless Steel (Supplied from client)
CONTAMINANTS: Salts, corrosive deposits

Results: After the initial demonstration of the cleaning capabilities of the baking soda blasting, one valve was cleaned to near completion. The valve was not 100% cleaned due to the operating conditions. The vendor cleaned the part while holding the valve in his hand. He wanted to show how effective the media could be at low pressures. The other valves were only partially cleaned on purpose in order to show a contrast between cleaned and uncleaned.

Summary:

| | | | | | | |
|--|----------------------|---------------|--------------------|-------------------------------------|----------------------|--|
| Substrates: | Stainless Steel | | | | | |
| Contaminants: | Rust/Scale | | | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: | |
| Armex Cleaning and Coating Removal Systems | Sodium Bicarbonate | 100 | | <input checked="" type="checkbox"/> | | |

Conclusion: The baking soda blasting media proved to be a very effective method for removing the contaminants from the valves. Using this system would allow the valves to be cleaned-in-place with little cleanup required. Listed below is the names of contacts and numbers of the vendor. Also enclosed is some of the product literature. Feel free to contact them if you have any further questions about this method.

Fred Schneider
Authorized Distributor for ARMEX Media
Phone #: (800)733-6243 ext. 1294