

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008

DateRun: 10/02/2008

Experimenters: Jason Marshall, Heidi Wilcox

ClientType: Electronics Manufacturer

ProjectNumber: Project #1

Substrates: Ceramics

PartType: Part

Contaminants: Carbon Deposits, Oxides

Cleaning Methods: Media Blasting

Analytical Methods: Visual

Purpose: To further evaluate baking soda blasting for removing oxides and carbon deposits from ceramic part.

Experimental Procedure: A self-contained blast cabinet was used to deliver the baking soda media to clean the supplied part. Cleaning took place at a pressure between 40 and 80 psi. Half of the supplied part was subjected to the blast cleaning. The part was cleaned for about 20 minutes. Visual observations were made to determine the effectiveness of the cleaning process.

Results: The baking soda blasting system was able to remove some of the oxide/carbon deposit from the inner half of the ring, near the edges of the part. The center portion of the part did not appear to be cleaner following media blasting.

Summary:

Substrates:	Ceramics					
Contaminants:	Carbon Deposits, Oxides					
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:	
Armex Cleaning and Coating Removal Systems	Sodium Bicarbonate	100		<input checked="" type="checkbox"/>		

Conclusion:

Baking soda blasting may be an effective method to remove the contaminants from the ceramic parts. No visual damage was observed on the surface of the part. Under optimized conditions, the process may be further improved. The partially cleaned part will be used in the next evaluation process that will investigate the potential of using laser ablation.