

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004  
 DateRun: 07/22/2004  
 Experimenters: Jason Marshall, Heidi Wilcox, Andy Harris  
 ClientType: Metal Finishing  
 ProjectNumber: Project #2  
 Substrates: Steel  
 PartType: Part  
 Contaminants: Coatings  
 Cleaning Methods: Ultrasonics  
 Analytical Methods: Visual

Purpose: To clean supplied parts using the six effective products and ultrasonic energy.

Experimental Procedure: The six products that were found to be effective on all three soils were used at 120 F in a Crest Ultrasonic 40 KHz tank. Five products were used at 5% dilutions in 600 ml beakers and the sixth was used as received from the client in a 400 ml beaker. Each beaker was submersed in the tank filled with water at 120 F and degassed for 5 minutes. Four to five parts were cleaned in each product for five minutes with ultrasonic energy. The parts were rinsed in tap water at 120 F for 30 seconds and dried using air blow off at room temperature for 30 seconds. Parts were visually inspected and then packaged. Parts were sent back to client to determine effectiveness.

Possible soils: Castrol Industries Rustilo 4163 (64742-46-7, 8002-74-2, 34590-94-8); Castrol Industries Rustilo DW 924 (64742-88-7, 64742-95-6, 64741-89-5, 64741-97-5, 64742-53-6, 95-63-6)

Results: Most of the parts appeared to be cleaned well. Two rings, one cleaned in M-Aero and the other in Alkalume LN had some visual signs of soil on the outside of the rings.

Summary:

<b>Substrates:</b>		Steel			
<b>Contaminants:</b>		Coatings			
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Today & Beyond	Beyond 2004	5	0.00	<input checked="" type="checkbox"/>	
Buckeye International	Aeromaster	5	0.00	<input checked="" type="checkbox"/>	
Bruhin Corporation	Aquavantage 1400	5	0.00	<input checked="" type="checkbox"/>	
Church & Dwight Co Inc.	Armakleen M Aero NS	5	0.00	<input type="checkbox"/>	Some soil/marks on one ring
Bruhin Corporation	815 QR	5	0.00	<input checked="" type="checkbox"/>	
McGean Rohco Inc	Alkalume LN	100	0.00	<input type="checkbox"/>	Some soil/marks on one ring

Conclusion: Parts will be tested at client for final effectiveness.