CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003

DateRun: 09/15/2003

Experimenters: Jason Marshall

ClientType: Tool Manufacturer

ProjectNumber: Project #1

Substrates: Steel

PartType: Coupon

Contaminants: Coatings

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To retest four products utilizing longer cleaning time

Experimental Procedure: Three products were used at full strength and one product (Oakite Products) was used at 10%, diluted with DI water. Five products were used at room temperaturel. Cleaning took place in 250 ml beakers with no agitation. The process utilized no water rinse and only used compressed air to dry/rinse the parts. Twelve preweighed steel coupons were coated with Rochester Midland Corp RI 780 (8052-41-3, 95-63-6) using a hand held swab. The coating then heated with a Master Appliance Heat gun at 300 F for 10 minutes. After cooling to room temperature, a second weighing was performed to determine the amount of soil that was added. Three coupons were cleaned in each solution for 10 minutes with no agitation. After drying with the air blow off, coupons were weighed a final time to determine the cleaning efficiencies of each product.

Results: All four products removed over 90% of the coating with an increase in cleaning time. Three of the four removed over 96%. Only AW Chesterton had no improvement with the additional cleaning time. The table below lists the amount of soil added and the amount remaining after cleaning for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
DS 108	0.0437	0.0008	98.17
	0.1148	0.0002	99.83
	0.1388	0.0012	99.14
Beyond 2008	0.0642	0.0010	98.44
	0.0769	0.0031	95.97
	0.0867	0.0026	97.00
278 Super Solv	0.0853	0.0076	91.09
	0.1313	0.0071	94.59
	0.0656	0.0101	84.60
Inproclean 3800	0.0591	0.0018	96.95
	0.0725	0.0019	97.38
	0.0611	0.0028	95.42

Summary:

Substrates:	Steel				
Contaminants:	Coatings				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Dysol	DS 108 Wipe Solvent	100	99.04	☑	92.98 at 5 minutes
Today & Beyond	Beyond 2008	100	97.14	☑	88.11 at 5 minutes
AW Chesterton	278 Super Solv	100	90.10	☑	92.64 at 5 minutes
Oakite Products	Inproclean 3800	100	96.58	☑	89.22 at 5 minutes

Conclusion: All eight products will be used to clean the third contaminant under similar conditions.