CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004

DateRun: 05/11/2004

Experimenters: Jason Marshall

ClientType: Tool Manufacturer

ProjectNumber: Project #1

Substrates: Steel

PartType: Coupon

Contaminants: Paints

Cleaning Methods: Vapor Degreasing

Analytical Methods: Gravimetric

Purpose: To evaluate three products on varnish using vapor degreasing

Experimental Procedure: Three products were selected based on results from previous trials. All products were used heated to 160 F on a hot plate in 250 ml beakers. Nine preweighed steel coupons were coated with a varnish mix containing Cooper's Creek Chemicals, Cooper Black Tank Paint No 739 (64742-89-8, 8052-42-4, 108-88-3); Sherwin Williams Company, V74B2 Black Asphaltum coating (64742-89-8, 64742-88-7, 8052-42-4) using a hand held swab. The oil was 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 15 minutes in the bench top vapor degreaser. After cooling, coupons were weighed a final time to determine the cleaning efficiency of each product.

Results: All three products removed over 97% of the varnish in 15 minutes. Two of the three removed over 99%. The table lists the amount of soil added, the amount remaining and the efficiency for each coupon.

Product	Initial wt	Final wt	% Removal
Solvon PB	0.0845	0.0008	99.05
	0.1243	0.0035	97.18
	0.0718	0.0032	95.54
Ensolv A	0.0701	0.0001	99.86
	0.0538	-0.0001	100.19
	0.0694	0.0019	97.26
Metalnox M6960	0.1238	0.0003	99.76
	0.0596	-0.0001	100.17
	0.0844	0.0007	99.17

Summary:

Substrates:	Steel				
Contaminants:	Paints				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Poly Systems USA Inc	Solvon Kreussler PB	100	97.26	☑	
Enviro Tech International Inc	Ensolv A	100	99.10	☑	
Kyzen Corporation	Metalnox M6960	100	99.70	☑	

Conclusion: Remaining parts will be cleaned using the three products and vapor degreasing.