CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2009
DateRun:	03/22/2009
Experimenters:	Johanna Oviedo
ClientType:	Lab
ProjectNumber:	Project #1
Substrates:	Stainless Steel
PartType:	Coupon
Contaminants:	Oil
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Gravimetric
Purpose:	To remove oil from painted steel surface
Experimental Procedure:	Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning. Products were selected based on the compatibility of substrate and for removal of the contaminant. Ten percent concentrations were used and heated the samples at 130F. The coupons were immersed in a product for 5 minutes, rinsed in tap water at 120 F and dried using compressed air at room temperature. Coupons were coated with the oil contaminant using a handheld swab and allowed to dry for 120 minutes at room temperature. The contaminated coupons were weighed again to determine the amount of soil added. After cleaning process, the final weights were recorded, efficiencies were calculated and recorded.

Results:

Cleaner	Initial Wt.	Final Wt.	% Removed
HD 34 Degreaser	0.2692	0.2143	20.39
	0.3242	0.1649	49.14
	0.3099	0.2940	5.13
Phosphoric Acid Cleaner #1	0.1317	0.0208	84.21
	0.1085	0.0069	93.64
	0.0841	0.0011	98.69
Metal Bright	0.0744	0.0109	85.35
	0.1095	0.0381	65.21
	0.2479	0.0455	81.65
Super Bio Wash	0.1903	0.0509	73.25
	0.2402	0.0847	64.74
	0.1060	0.0436	58.87
Tarksol HTF 50	0.5900	0.0725	87.71
	0.4158	0.0720	82.68
	0.3244	0.1057	67.42
Safety First	0.2648	0.0327	87.65
	1.2514	0.0658	94.74
	0.4097	0.1183	71.13
Element	0.0936	0.0623	33.44
	0.0464	0.0384	17.24
	0.2644	0.1648	37.67
Inproclean 2500	0.0321	0.0142	55.76
	0.1875	0.0354	81.12
	0.1565	0.0090	94.25

Summary:

Substrates:	Stainless Steel				
Contaminants:	Oil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Savogran Company	HD-34 Cleaner Degreaser	10	24.89	☐	
Chemspec	Phosphoric Acid Cleaner #1	10	92.18	☑	
Green Power	Metal Bright	10	77.40	☐	
Chemtronics Inc	Super Bio Wash	10	65.62	☐	

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Tarksol Inc	Tarksol HTF-50	10	79.27	☐	
Amax Corporation	Safety First	10	84.51	☐	
Phase III Inc	Eliminator	10	29.45	☐	
Oakite Products	Inproclean 2500	10	77.04	☐	

Conclusion: One product removed more than 85% of the oil (92.18%) from stainless steel using immersion cleaning.