CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2009

DateRun: 03/11/2009

Experimenters: Johanna Oviedo

ClientType: Lab

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Coupon

Contaminants: Resins/Rosins

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To remove resin from stainless steel using immersion cleaning.

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 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
Shopmaster	0.3863	0.478	-23.74
	0.3291	0.317	3.68
	0.1508	0.1678	-11.27
Citranox	0.1035	0.1057	-2.13
	0.0734	0.0725	1.23
	0.3246	0.2238	31.05
Coil Bright	0.6307	0.4101	34.98
	0.6348	0.5705	10.13
	0.0632	0.0332	47.47
Soy Strong	0.0296	0.0326	-10.14
	0.0423	0.0435	-2.84
	0.0459	0.0451	1.74
Inproclean 3800	0.0430	0.0320	25.58
	0.0285	0.0289	-1.4
	0.0441	0.0387	12.24
Graffiti Remover	0.0492	0.0536	-8.94
	0.4053	0.2944	27.36
	0.1364	0.1273	6.67
Metal Bright	0.0898	0.0765	14.81
	0.0692	0.0431	37.72
	0.2278	0.0446	80.42
Phosphoric Acid Cleaner #1	0.0800	0.0841	-5.12
	0.1087	0.1079	0.74
	0.2675	0.2524	5.64

Summary:

Substrates:	Stainless Steel				
Contaminants:	Resins/Rosins				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Buckeye International	Shopmaster	10	-10.44	☐	
Alconox Inc	Citranox	10	10.05	☐	
Watson Technical Associates	Coil Bright	10	30.86	☐	
Spartan Chemical Company	Soy Strong	10	-3.74	☐	

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Oakite Products	Inproclean 3800	10	12.14	☐	
Twin Rivers Technologies	Graffiti Remover	10	8.36	☐	
Green Power	Metal Bright	10	44.32	☐	
Chemspec	Phosphoric Acid Cleaner #1	10	0.42	☐	

Conclusion: No product removed over 85% of the resin from stainless steel using immersion cleaning.