CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1998

DateRun: 10/01/1998

Experimenters: Jason Marshall

ClientType: Name Plate Mfg-Etching

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Abrasive, Paints, Dirt, Soaps

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: Previously successful products were used again in this trial with the addition of one sample.

Experimental Procedure: Products which were previously tested for the client and found to have some success, were used again in this trial with the addition of one sample.
Preweighed coupons were immersed into the contaminant solution. Coupons were removed and allowed to dry overnight at room temperature. Contaminated weights were recorded. Three coupons were placed into each cleaning chemistry for 5 minutes using stir bar agitation at 130 F. Coupons were rinsed with tap water at 120 F for 30 seconds. Coupons were allowed to air dry. After drying, clean weights were recorded and efficiencies were calculated.

SUBSTRATE MATERIAL: Aluminum 3003
CONTAMINANTS: Dirty cleaning solution-D-Greeze 500 w/ residual paint chips and pumice sludge

Results: The two Soy Gold products were effective in removing the contaminant solution from the coupons. Both required less than the five minutes used for cleaning. After the parts were rinsed, it was evident that the SG 2000 looked cleaner than the SG 1000. The rinsing ability of SG 2000 aided in removing most of the slick feeling associated with SG 1000. Despite the decrease in the residue left behind, the cleaning efficiencies of both were fairly consistent with each other. Table 1 lists the cleaning efficiencies of all four cleaning chemistries.

Table 1. Cleaning Efficiencies

	SG 1000	SG 2000	Simple	Star
Coupon 1	81.79	91.98	8.9	13.46
Coupon 2	79.88	91.09	10.34	16.82
Coupon 3	84.87	87.57	8.79	11.59
Ave	82.18	90.21	9.34	14.00
Std Dev	2.52	2.33	0.86	2.65

Summary:

Substrates:	Aluminum				
Contaminants:	Abrasive, Paints, Dirt, Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
By Pas and Star Products	Star Cleaning Miracle # 50	5	14.00	☐	
Simple Green	Concentrated Industrial Strength Cleaner and Degreaser	5	9.34	☐	
AG Environmental Products	Soy Gold 1000	100	82.18	☐	
AG Environmental Products	Soy Gold 2000	100	90.21	☑	

Conclusion: Soy Gold 2000 showed excellent removal of the D-Greeze 500 contaminant solution. With the cleaning solution's ability to be rinsed, the efficiency was slightly better than the non-rinsable solution of Soy Gold 1000. Both solutions removed the majority of the contaminant in about three minutes of cleaning.