

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008  
 DateRun: 10/15/2008  
 Experimenters: Daniel Pina  
 ClientType: Lab  
 ProjectNumber: Project #1  
 Substrates: Stainless Steel  
 PartType: Coupon  
 Contaminants: Greases  
 Cleaning Methods: Immersion/Soak  
 Analytical Methods: Gravimetric

Purpose: To test nontoxic industrial cleaning solutions for oil removal.

Experimental Procedure: Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning. products were based on the compatibility of substrate and removal of foreign substance. Used 5% concentration and heated the samples at 135F. The coupons were immersed in a product for 5 minutes, rinsed for 30 seconds in tap water at 120F and dried in 30 seconds using compressed air is room temperature. Coupons were coated with used grease. Using a handheld swab and allowed to dry for 144 hours 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.

BiogeneCleaner	Initial wt	Final wt	% Removed
Biogenesis enterprise inc. BG Clean 648.00			
	3.5943	3.5941	0.01
	1.0285	1.0047	2.31
	1.3704	1.4696	-7.24
A1 Hydro Park Hill Chemical			
	3.5030	3.4841	0.54
	2.5121	2.5218	-0.39
	1.4214	1.4298	-0.59

<b>Substrates:</b>		Stainless Steel			
<b>Contaminants:</b>		Greases			
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
BioGenesis Enterprises Inc	BG Clean 648	20	-1.64	<input type="checkbox"/>	did not take out the grease applied to the stainless steel coupon.
A 1 Hydro Parke Hill Chemical	SW Wash 10 Aircraft Cleaner	20	-0.15	<input type="checkbox"/>	Did not take out the grease from the stainless steel coupons.

Conclusion: None of the products tested passed our pass rate of 85 percent.