CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2001

DateRun: 11/18/2001

Experimenters: Ravi Krishnappa

ClientType: Lab

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Coupon

Contaminants: Lubricating/Lapping Oils

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: Laboratory evaluations of alternative cleaning products

Experimental Procedure: Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning.
(i) 5 minute immersion cleaning with stir bar agitation @ 120 degree F.
(ii) 30 sec manual rinse with water @120 degree F.
(iii) air drying for about 24 hours.
CONTAMINANT INFO: Quench Oil

Results:

Product	Company	Conc.	Avg % Removal
Solution 2000	Clean Safe Solutions	10%	66.9

Summary:

Substrates:	Stainless Steel
Contaminants:	Lubricating/Lapping Oils

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
EnviroSan Products Ltd	Solution 2000	10	66.90	☐	
LPS Laboratories	Precision Clean Concentrate	10	96.50	☐	
EcoLink	Heavy Weight Non Butyl Detergent	10	61.10	☐	
Cleaning Systems	Release	10	90.80	☑	
Ardrox Inc	6333	25	96.40	☑	
Baum's Castorine Company Inc	EZE Oil-Grease Cleaner	25	97.40	☑	

Conclusion: Ultrasonic tests on precision clean and heavyweight are necessary to further support their effectiveness. Unlike all other cleaners used in this test, these two cleaners are reported to be aqueous and non-alkaline, non butyl cleaners, respectively.