CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008

DateRun: 05/19/2008

Experimenters: Jason Marshall, Shweta Bansal

ClientType: Machining Company

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Coupon

Contaminants: Coatings

Cleaning Methods: Mechanical Agitation

Analytical Methods: Gravimetric

Purpose: To evaluate additional products on third supplied metal working fluid

Experimental Procedure: Preweighed coupons were coated with the supplied rust preventative (WA Wood FPS Rustnot) coating using a handheld swab and weighed a second time to determine the amount of soil added.

Three cleaners from the previous trial and three newly selected products were put in a bowl and three coupons were dunked into the solution at a constant rate for 30 seconds of cleaning. Products were diluted to 20% except for one (Bio T 300B). The coupons were then put on a tray and when done and allowed to air dry. There was no rinse. The process was done to as closely replicate the process used on site as possible. Once dry, final weights were recorded, and efficiency calculated for each coupon cleaned.

Results: All six products were fairly successful, removing more than 68% of the rust preventative from the aluminum coupons in 30 seconds of agitation. The table lists the amount of soil added, the amount remaining and the efficiency for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
SC Aircraft Cleaner	0.1140	0.0553	51.49
	0.1233	0.0355	71.21
	0.1482	0.0348	76.52
Inproclean 3800	0.1783	0.0574	67.81
	0.1790	0.0430	75.98
	0.2280	0.0200	91.23
Bio T 300 B	0.2033	0.0663	67.39
	0.1668	0.0688	58.75
	0.2221	0.0477	78.52
Aquavantage 1400GD	0.1936	0.0420	78.31
	0.1725	0.0295	82.90
	0.1919	0.0293	84.73
Shopmaster LPH	0.1231	0.0272	77.90
	0.2042	0.0658	67.78
	0.2029	0.0339	83.29
Shopmaster HP	0.1607	0.0332	79.34
	0.1588	0.0385	75.76
	0.1414	0.0316	77.65

Summary:

Substrates:	Aluminum				
Contaminants:	Coatings				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Gemtek Products	SC Aircraft & Metal Cleaner Super Concentrate	20	68.41	☑	
Oakite Products	Inproclean 3800	20	78.34	☑	
Bio Chem Systems	Bio T 300 B	5	68.22	☑	
Brulin Corporation	Aquavantage 1400	20	81.98	☑	
Buckeye International	Shopmaster LPH	20	76.32	☑	

CLEANING LABORATORY EVALUATION SUMMARY

	Buckeye International	Shopmaster HP	20	77.58	☑	

Conclusion: With the success of all six products at the higher concentrations, follow testing will be conducted on the other two soils.