CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2001

DateRun: 09/11/2001

Experimenters: Jason Marshall

ClientType: Metal

ProjectNumber: Project #1

Substrates: Steel

PartType: Part

Contaminants: Coatings

Cleaning Methods: Immersion/Soak

Analytical Methods: Wipe

Purpose: To compare alternative cleaners with two current client supplied cleaners

Experimental Procedure: Eight cleaners were selected based on the lab's database of effective cleaning trials and vendor supplied information. Two additional cleaners were used based on client's current cleaning practices. Each product was diluted to 5% with DI water in a 100 ml beaker. A small piece of each type of steel was immersed into each solution and allowed to soak for 5 minutes at room temperature. At the end of the 5 minutes, each piece of metal was rinsed in DI water and dried with a heat gun for 1 minute. Observations were made and each piece was wiped with a white tissue to determine the extent of cleaning. The 8 laboratory selected cleaners were compared to the 2 client supplied cleaners.
Substrates: Steel (Theis and Hitachi)

Contaminants: Rust Preventatives: Castrol Industrial, Inc Rustilo DW 924 HF (64742-53-6, 61790-48-5, 64742-47-8); Theis metal Esso Sekiyo K.K. Anti Rust ND 33 (64742-48-8, 64742-01-4); Hitachi metal

Results: Each of the cleaners selected were as effective or better than the current cleaners for removing the Rustilo DW 924 HF rust preventative from the Theis metal. Inproclean 3800 and SC Aircraft & Metal Cleaner appeared to be the more effective cleaning solutions in the removal of the Anti Rust ND 33 from the Hitachi metal.

Summary:

Substrates:	Steel				
Contaminants:	Coatings				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Abatement Technologies	Bio Might 100 Cleaner - Degreaser	5	0.00	☑	Hitachi
Ensolve Biosystems Inc	Grease Feast Plus	5	0.00	☑	Theis
Gemtek Products	SC Aircraft & Metal Cleaner Super Concentrate	5	0.00	☑	Theis, Hitachi
Heatbath Corporation	Multi-Kleen 1568	5	0.00	☑	Theis
Oakite Products	Inproclean 3800	5	0.00	☑	Theis, Hitachi
Safe CleanUp Solutions	Super Neutral	5	0.00	☑	Hitachi
Today & Beyond	Beyond 2001	5	0.00	☑	Theis
Warren Chemical Company	Sea Wash 700 New	5	0.00	☑	Theis

Conclusion: The laboratory selected products all were at least as successful in cleaning two of the rust preventative coatings from the steel pieces. A more in depth test will be conducted using gravimetric analysis when samples of the fluids are available.