CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2009
DateRun:	02/02/2009
Experimenters:	Heidi Wilcox, Johanna Oviedo
ClientType:	Machine Construction Company
ProjectNumber:	Project #2
Substrates:	Steel
PartType:	Part
Contaminants:	Greases, Oil
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Visual
Purpose:	To evaluate top cleaning products without rinsing.
Experimental Procedure:	The top two products were selected from the previous trials based on success on removing tithe supplied soils using heated immersion cleaning. Both were used at full strength based on vendor recommendations. Beakers were heated to 130 F on a hot plate. Steel parts supplied by the client that had grease and oils caked on it. One or two parts were cleaned in each solution for 5, 10 and 15 minutes using stir bar agitation. Coupons were not rinsed but were dried using compressed air at room temperature for 30 seconds. Parts were visually inspected and pictures were taken.
Results:	Both products were able to remove over 85% of the three soils using immersion cleaning without rinsing. The Bean-e-doo removed over 92%. The table lists the amount of soil added, the amount remaining and the efficiency for each coupon cleaned.

Cleaner	5 minutes	10 minutes	15 minutes
Smart Solve 605	Looks best out of the three times.	One part still half caked with soil. Some paint on part and soil in groves	Better then Bean-e-doo. But soil still in grooves
Bean-e-doo	Looks best of 3 times. Some soil still on part	One part still half caked with soil	Not as good as Smart Solve. Soil still in groves

Summary:

Substrates:	Steel
Contaminants:	Greases, Oil

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
United Laboratories International	Smart Solve 605	100	0.00	☑	
Franmar Chemical	Bean-e-doo (Parts Washer Solvent)	100	0.00	☑	

Conclusion: Piloting of the two cleaning products should be arranged at the company as the next step.