CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2016

DateRun: 05/10/2016

Experimenters: Sabrina Apel

ClientType: Metal Working

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Coupon

Contaminants: Waxes

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: To find alternative degreasing agents

Experimental Procedure: Two cleaners were tested at room temperature (68ºF) to evaluate removal of Carnuba Wax on stainless steel coupons. Six pre-weighed coupons were coated with Carnuba Wax. Each coupon was baked in an oven at 200 ºF for ten minutes and cooled at 120 ºF for five minutes. Coupons were removed from the oven, cooled to room temperature, and weighed to determine amount of soil added. Three coupons were immersed in one of the solvents for five minutes in a beaker. The coupons were air dried for 15 minutes. There was no rinse. Once dry, final weights were measured and efficiency was calculated for each coupon cleaned.

Results: Fluosolv CX and Fluosolv NC did not clean the Carnuba Wax efficiently, Fluosolv CX had better removal gravimetrically. The coupons did not visually show removal of the soil after immersing. While air drying the coupons, the residual wax dried and turned white.

Cleaner	Initial wt of cont.	Final wt of cont.	%Cont Removed
Fluosolv CX	0.0683	0.0338	50.51
	0.0344	0.0264	23.26
	0.0453	0.0226	50.11
Fluosolv NC	0.0531	0.0388	26.93
	0.0528	0.0419	20.64
	0.0482	0.0359	25.52

Summary:

Substrates:	Stainless Steel				
Contaminants:	Waxes				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
NuGeneration Technologies, LLC	FluoSolv CX	100	41.29	☐	
NuGeneration Technologies, LLC	FluoSolv NC 786	100	24.36	☐	

Conclusion: Ecolink Fluosolv CX and Fluosolv NC did not efficiently remove Carnuba Wax on stainless steel at room temperature. The Ecolink Fluosolv CX cleaned with an efficiency of 41.29%. The Ecolink Fluosolv NC cleaned least efficiently with an efficiency of 24.36%.