CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2002

DateRun: 01/14/2002

Experimenters: Heidi Wilcox

ClientType: Lab

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Coupon

Contaminants: Inks

Cleaning Methods: Ultrasonics

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.

Degasing :Degasing the solution by keeping solutions in ultrasonic crest for 5 min at 120 F.
Cleaning : Ultrasonic for 2 min. at 120 F.
Rinsing : 1/2 min. manual with water at 120 F.
Contaminant: ITW, Dykem Corp, Ink, Steel Blue - DX - 100

Results: Only Grease Off 2 was found to be effective, but the ultrasonic cleaning increases the efficiency or the % contaminant removed significantly. For the PW 147, which was the most effective at ~15% removal for immersion cleaning, the ultrasonics increased the efficiency.

PW: This number is high, but I conclude this cleaner is effective and not reacting with the stainless. (Coupons have been used in numerous trial and have background contaminants. Ultrasonics cleaned coupons, these 3, to near first trial weight (trial 131)

Summary:

Substrates:	Stainless Steel				
Contaminants:	Inks				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Kleer Flo Company	Grease Off 2	5	91.17	☑	
Valtech Corporation	Valtron SP 2201	5	18.39	☐	
Valtech Corporation	Valtron SP 2200	5	47.86	☐	
Permatex Industrial Corporation	Natural Blue	5	75.69	☐	
International Products Corporation	LF 2100 (Liquid Foam Cleaner)	5	26.15	☐	
US Polychem Corporation	Polychem PW 147	5	120.07	☐	

Conclusion: