

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2002  
 DateRun: 01/15/2002  
 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:	<b>Substrates:</b> Stainless Steel					
	<b>Contaminants:</b> Inks					
Company Name:		Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Kleer Flo Company		Grease Off 2	5	91.17	<input checked="" type="checkbox"/>	
Valtech Corporation		Valtron SP 2201	5	18.39	<input type="checkbox"/>	
Valtech Corporation		Valtron SP 2200	5	47.86	<input type="checkbox"/>	
Permatex Industrial Corporation		Natural Blue	5	75.69	<input type="checkbox"/>	
International Products Corporation		LF 2100 (Liquid Foam Cleaner)	5	26.15	<input type="checkbox"/>	
US Polychem Corporation		Polychem PW 147	5	120.07	<input type="checkbox"/>	

Conclusion: