CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2003
DateRun:	09/21/2003
Experimenters:	Jason Marshall
ClientType:	Lab
ProjectNumber:	Project #1
Substrates:	Steel
PartType:	Coupon
Contaminants:	Inks
Cleaning Methods:	Immersion/Soak
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. Five products were used at full strength, heated to 120 F on a hot plate. Fifteen preweighed coupons were coated with Cerdec Magenta (119-64-2, 65997-18-4, 1345-24-0, 20667-12-3) and allowed to dry for three days and reweighed. Three coupons were cleaned in each solution for 5 minutes using stir-bar-agitation, rinsed in a tap water bath for 15 seconds at 120 F and dried using air blow off for 30 seconds at 68 F. Coupons were allowed to dry overnight and then reweighed a final time. Efficiencies were calculated. Note: Bio T Foam Plus was sprayed onto coupons at room temperature and allowed to sit for 5 minutes. The cleaner was then rinsed off.
Results:	No cleaners removed over 85% of the ink. No cleaners removed over 50% of the ink.

Summary:

Substrates:	Steel				
Contaminants:	Inks				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
AW Chesterton	278 Super Solv	100	3.11	☐	
Bio Chem Systems	Bio T Foam Plus	100	0.12	☐	
Invista S.a.r.l	Flexisolv DBE 3 ester	100	1.16	☐	
Eastern Color and Chemical Company	Ecobrite Cleaner AK	100	34.29	☐	
Gemtek Products	SC EZ Solv Safety Solvent	100	44.91	☐	

Conclusion: The addition of mechanical energy, either ultrasonics or manual wiping would improve efficiencies.