CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2003
DateRun:	09/25/2003
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 Sheetfed Offset Lithographic black ink 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:	Four of the five products had some effect on the ink. The five minutes used for cleaning was not long enough to remove the amount of ink applied to the coupons. In addition to increasing the cleaning time, ultrasonic or manual wiping would also improve the removal of the lithographic ink.

Summary:

Substrates:	Steel				
Contaminants:	Inks				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
AW Chesterton	278 Super Solv	100	13.63	☐	
Bio Chem Systems	Bio T Foam Plus	100	-1.42	☐	
Invista S.a.r.l	Flexisolv DBE 3 ester	100	57.30	☐	
Eastern Color and Chemical Company	Ecobrite Cleaner AK	100	45.60	☐	
Gemtek Products	SC EZ Solv Safety Solvent	100	60.75	☐	

Conclusion: No cleaners removed over 85%.