CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2008
DateRun:	07/10/2008
Experimenters:	Jason Marshall, Heidi Wilcox, Shweta Bansal
ClientType:	Tool Manufacturer
ProjectNumber:	Project #1
Substrates:	Steel
PartType:	Part
Contaminants:	Metal fines
Cleaning Methods:	Ultrasonics
Analytical Methods:	Visual
Purpose:	To evaluate three products on supplied parts using ultrasonic cleaning while parts are tightly packed
Experimental Procedure:	Three supplied products were diluted to 3% using DI water in a 1510 Branson 40 kHz ultrasonic tank and heated to 130 F. The products were degassed for five minutes. A set of seven soiled steel parts coated with steel grit were tied tightly together to simulate client cleaning process. The parts were immersed into the ultrasonic tank and cleaned for 5 minutes. Following cleaning, coupons were observed for cleanliness.
Results:	After five minutes of ultrasonic cleaning, the Daraclean 282 GF cleaned parts were the cleanest followed by the Polyspray Jet 790xs and Green Soak Cleaner 19 AC. Even with the parts tightly packed during cleaning, nearly all of the metal grit was removed from the parts.

Summary:

Substrates:	Steel				
Contaminants:	Metal fines				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Magnaflux	Daraclean 282 GF	3	0.00	☑	
US Polychem Corporation	Polyspray Jet 790 XS	3	0.00	☑	
BCS Company	Green Spray 400	3	0.00	☑	

Conclusion: Using ultrasonic cleaning with any of the three tested products should result in removal of the steel grit from the surface of the parts.