CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	1997
DateRun:	07/28/1997
Experimenters:	Jason Marshall, Prashant Trivedi
ClientType:	Biomedical Device Manufacturer
ProjectNumber:	Project #1
Substrates:	Stainless Steel
PartType:	Part
Contaminants:	Lubricating/Lapping Oils, Resins/Rosins, Plastic
Cleaning Methods:	Ultrasonics
Analytical Methods:	Visual, Wipe
Purpose:	Clean supplied parts with new system.
Experimental Procedure:	The parts supplied by the client were cleaned using the best cleaners from the previous trials and using the 48 KHz ultrasonic unit at 120 F for ten minutes, rinsed in tap water for two minutes at 120 F and dried with a hot a gun for two minutes. Cotton swabs were used to wipe the cleaned surfaces and then visually inspected for residual contaminates. Finally, the samples were sealed in bags and set aside for visual inspection by the client. SUBSTRATE MATERIAL: Stainless Steel CONTAMINANTS: Lubri-temp Anti-Seize lubricant, Plastics
Results:	Upon visual inspection, the parts appeared to be clean. Using the cotton swabs to test the surfaces and the screw holes demonstrated that the parts were not 100% clear of contaminates; however, the samples only contained minimal amounts of the contaminates.

Summary:

Substrates:	Stainless Steel				
Contaminants:	Lubricating/Lapping Oils, Resins/Rosins, Plastic				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
US Polychem Corporation	Polychem A 2000 XS	10		☑	
Magnaflux	Daraclean 282	10		☑	
Oakite Products	Inproclean 3800	10		☑	

Conclusion:

All the part that were cleaned for C.R. Bard appeared to be very clean. The parts should be inspected by the clients in order to tell if the level of cleanliness is acceptable.

The amount of contaminate removed from the parts was very extensive and could cause the clients to use large amounts of the cleaning solutions, whichever they select. One way to combat the possible high volume of cleaner would be to filter out the contaminates from the cleaning solutions. Even after the solutions were filtered in the lab, a large amount of the contaminates remained suspended in the solutions. Perhaps a smaller filter size might help to reduce the amount of contaminates left in the cleaners by collect the minute particles floating in the solutions.