

CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2000								
DateRun:	03/29/2000								
Experimenters:	Jason Marshall, John Brunelle								
ClientType:									
ProjectNumber:	Project #1								
Substrates:	Brass								
PartType:	Part								
Contaminants:	Buffing/Polishing Compounds								
Cleaning Methods:	Ultrasonics								
Analytical Methods:	Visual								
Purpose:	To evaluate ultrasonic energy in the cleaning of supplied parts using.								
Experimental Procedure:	Four cleaners were selected based on the results of the previous trial. The chemistries were diluted to 5% in 600 ml beakers using DI water and then heated to 130 F on a hot plate. Beakers were then suspended in an ultrasonic tank filled with DI water heated to 130 F and degassed for five minutes. Table 1 lists the cleaner used. Three small round pars and one long thin part were cleaned in one solution for five minutes, rinsed in tap water at 120 F for 30 seconds and dried using a Master Appliance Corp, Hot-air gun model HG-301A at 500 F for one minute. After coupons returned to room temperature, final clean appearances were observed. SUBSTRATE MATERIAL: Brass Parts CONTAMINANTS: Buffing compound CONTAMINATING PROCESS USED: Parts received contaminated								
Results:	Using ultrasonic energy was moderately successful in removing large amounts of the buffing compound inside the round parts. It was noted that the remaining contaminant was situated at the bottom of the parts as well as in the threaded portion of the long thin parts. Table 2 lists the cleaner specific observations. Table 2. Cleaning Comments								
	Cleaner	Observa	tion						
	MICRO 90	One end buffing d Two of tl compou	of the long th compound in tl he small balls nd inside.	he threads. had buffing					
	InproClean 3800	One end buffing o Two of tl compou	l of the long th compound in tl ne small balls nd inside.	iin part had he threads. had buffing					
	Polyspray Jet 790 P	Long thi compou round pa compou cleaners	n part had no nd in the threa arts had less b nd than the ot 5. Best cleane	buffing ads. The puffing her r evaluated.					
	Daraclean 282 GF	in part had he threads. ls had de.							
Summary:	Substrates: Brass								
	Contaminants: Buffing/Polish			ng Compounds					
	Company Name:			Product Name:		Conc.:	Efficiency:	Effective:	Observations:
	International Products Corporation			Micro 90 Conc		5			
	Uakite Products			Inproclean 3800		5			
	Magnaflux			Daraclean 28	2 GF	כ 5			
Conclusion:	Having observed a trend in the location of the buffing compound in the round parts, cleaning results may be improved by adding rotational energy to the ultrasonic bath. An additional test will be performed using the U.S. Polychem product utilizing this proposed cleaning method.								