CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2006

DateRun: 11/05/2006

Experimenters: Jason Marshall, Heidi Wilcox

ClientType: Metal Working

ProjectNumber: Project #1

Substrates: Nickel, Chrome

PartType: Part

Contaminants: Buffing/Polishing Compounds

Cleaning Methods: Ultrasonics

Analytical Methods: Visual

Purpose: To evaluate products on supplied parts using ultrasonic cleaning

Experimental Procedure: Three products were selected based past testing. Each product was diluted to 5% in 1000 ml beakers using DI water and heated to 130 F on a hot plate. Each beaker was immersed into a Branson 3510 ultrasonic tank and degassed for 5 minutes. Three parts were immersed into the 40 kHz ultrasonic cleaning and cleaned for 5 minutes. Parts were rinsed for 15 seconds in a tap water bath at 120 F and dried using a dry compressed air for 30 seconds. Once dry, parts were inspected visually and compared to the other products.

Results:

Cleaner	Observation	Rank Top	Rank Bottom	Overall Rank
MC 132	Some residue left	1	2	1.5
790 XS	Some residue left	2	3	2.5
Det 8	Front not clean	3	1	2

Summary:

Substrates:	Nickel, Chrome				
Contaminants:	Buffing/Polishing Compounds				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Matchless Metal Polish Company	MC 132	5	0.00	☑	
US Polychem Corporation	Polyspray Jet 790 XS	5	0.00	☑	
Alconox Inc	Detergent 8	5	0.00	☑	

Conclusion: Under the lab conditions, the parts all had some residue remaining on them after cleaning. Longer cleaning times, increased concentration or increased temperature would improve the effectiveness of the three cleaners.