CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2006
DateRun:	10/30/2006
Experimenters:	Jason Marshall
ClientType:	Metal Finishing
ProjectNumber:	Project #1
Substrates:	Aluminum, Plastic
PartType:	Part
Contaminants:	Buffing/Polishing Compounds
Cleaning Methods:	Low Pressure Spray
Analytical Methods:	Visual
Purpose:	To evaluate selected cleaners using spray cleaning.
Experimental Procedure:	Two cleaning products were diluted to 10% using hot tap water (120 F) in 1000 ml beakers. Supplied parts that were received already contaminated were cleaned in the solution for less than one minute. Two types of parts were cleaned. Following cleaning in the low-pressure spray system parts were rinsed for 15 seconds in a tap water bath at 120 F and dried using dry compressed air at room temperature. Parts were analyzed visually. Cleaned parts were packaged and sent to the client. Following the cleaning at 10%, the product would be diluted to a lower concentration to reduce foaming if necessary.
Results:	Both parts subjected to the low-pressure spray had a significant amount of buffing compound removed within the 1 minute of cleaning. The Polyspray Jet 790 XS at 10% had less foaming than the Detergent 8. During cleaning, the spray flow was directed into the 1000 ml beaker (filled within 0.5 inches of the top of the beaker with cleaning product). There was some bubbling of the solution but not enough to have any overflow of the beaker. There was no overflow even after 5 minutes of continual spray into the beaker.

Summary:

Substrates:	Aluminum, Plastic				
Contaminants:	Buffing/Polishing Compounds				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Alconox Inc	Detergent 8	10	0.00	☑	
US Polychem Corporation	Polyspray Jet 790 XS	10	0.00	☑	

Conclusion: Parts did not have to be completely clean to be considered successful as the spray washing was an attempt to remove excess buffing compound prior to cleaning with ultrasonic energy. The 10% solutions of Detergent 8 and Polyspray Jet 790 XS had no foaming issues and removed about half of the buffing compound with minimal spray time and pressure. Foaming levels are shown in the attached photographs.