CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2006
DateRun:	12/10/2006
Experimenters:	Jason Marshall
ClientType:	Metal Working
ProjectNumber:	Project #1
Substrates:	Brass
PartType:	Part
Contaminants:	Buffing/Polishing Compounds
Cleaning Methods:	Ultrasonics
Analytical Methods:	Visual
Purpose:	To evaluate a client requested product for cleaning buffing compounds from their brass parts.
Experimental Procedure:	One product was diluted to two concentrations, 5 and 10% using DI water in 250 ml beakers. Solutions were immersed in a water bath heated to 130 F and degassed using a Branson 3510 ultrasonic tank for five minutes. Six parts were immersed in each solution and cleaned with 40 kHz ultrasonic energy. Parts were rinsed in a tap water spray for 15 seconds at 120 F and dried using room temperature air for 30 seconds. Visual observations were made for both sets of cleaned parts and compared to each other.

Results:

Concentration	Observation
5%	The buckles looked very clean
	The stripes also looked very clean
	One of the bars still had some buffing compound remaining.
10%	The buckles looked very clean
	The stripes also looked very clean
	One of the bars still had some buffing compound remaining -
	less than the 5%

Summary:

Substrates:	Brass				
Contaminants:	Buffing/Polishing Compounds				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Hubbard Hall Inc	Ultrasoak 127	5	0.00	☑	
Hubbard Hall Inc	Ultrasoak 127	10	0.00	☑	

Conclusion: The Hubbard Hall Ultrasoak 127 was very effective on most of the part types cleaned. Both the 5 and 10% dilutions had some trouble removing all the buffing compound from the back of the double bars.