

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2006  
DateRun: 12/11/2006  
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:	<b>Substrates:</b>	Brass				
	<b>Contaminants:</b>	Buffing/Polishing Compounds				
	<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
	Hubbard Hall Inc	Ultrasoak 127	5		<input checked="" type="checkbox"/>	
	Hubbard Hall Inc	Ultrasoak 127	10		<input checked="" type="checkbox"/>	

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.