

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2006
DateRun: 10/17/2006
Experimenters: Jason Marshall
ClientType: Metal Finishing
ProjectNumber: Project #1
Substrates: Brass, Copper, Sterling/Silver
PartType: Part
Contaminants: Buffing/Polishing Compounds
Cleaning Methods: Immersion/Soak
Analytical Methods: Visual

Purpose: To evaluate selected cleaners on supplied parts using immersion cleaning.

Experimental Procedure: Two alternative products were selected from the previous trial based on effectiveness. Each product was diluted to 10% in 250 ml beakers using DI water and heated to 130 F on a hot plate.

Several silver, brass and copper parts were received coated with various buffing compounds. Six parts were cleaned in each solution for five minutes using minimal stir bar agitation. 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, a final observation was made to assess cleanliness.

Results:

Cleaner	Part	Observation
Polyspray Jet 790 XS	Silver Broach	Not completely clean
	Silver Bracelet	Looked clean
	Silver container	Not completely clean
	Silver dolphins	Mostly clean
	Silver "coin"	Mostly clean
	Brass Jesus	Not completely clean
Detergent 8	Silver money clip	Not completely clean
	Silver Marine pin	Looked clean
	Silver Ornament	Looked clean
	Silver Jesus	Looked clean
	Copper fixture	Mostly clean
	Brass medal	Not completely clean

Summary:

Substrates:		Brass, Copper, Sterling/Silver			
Contaminants:		Buffing/Polishing Compounds			
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
US Polychem Corporation	Polyspray Jet 790 XS	10		<input checked="" type="checkbox"/>	On some parts
Alconox Inc	Detergent 8	10		<input checked="" type="checkbox"/>	On some parts

Conclusion: Both cleaning solutions had some success in cleaning the supplied parts. However, not all parts were completely cleaned. Parts have been sent back to the client for analysis.