

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2006
 DateRun: 08/24/2006
 Experimenters: Jason Marshall
 ClientType: Metal Working
 ProjectNumber: Project #1
 Substrates: Brass
 PartType: Coupon
 Contaminants: Buffing/Polishing Compounds
 Cleaning Methods: Immersion/Soak
 Analytical Methods: Gravimetric

Purpose: To evaluate successful products on second supplied buffing compound.

Experimental Procedure: The top four products from the previous trial were diluted to 5% in 250 ml beakers using DI water and heated to 130 F.

Twelve preweighed coupons were coated with the red buffing compound using a handheld swab after heating. Coupons were weighed a second time to determine the amount of buffing compound added. Three coupons were cleaned in each solution for five minutes minimal agitation in an immersion tank. Coupons 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 coupons were weighed a final time and product efficiencies were calculated.

Results: All four products removed over 70% of the buffing compound with immersion cleaning. One product, Polyspray Jet 790 XS, removed over 95%. The following table lists the amount of buffing compound applied, the amount remaining and the efficiency for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
XL 100	0.2979	0.0883	70.36
	0.3582	0.1140	68.17
	0.2243	0.0537	76.06
MC 132	0.2596	0.0469	81.93
	0.2944	0.0255	91.34
	0.3574	0.0712	80.08
Inproclean 3800	0.3939	0.1331	66.21
	0.1723	0.0383	77.77
	0.1669	0.0540	67.65
Polyspray Jet 790 XS	0.1423	0.0033	97.68
	0.1444	0.0024	98.34
	0.1938	0.0100	94.84

Summary:

Substrates:	Brass				
Contaminants:	Buffing/Polishing Compounds				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Buckeye International	XL 100 Cleaner & Degreaser	5	71.53	<input checked="" type="checkbox"/>	
Matchless Metal Polish Company	MC 132	5	84.45	<input checked="" type="checkbox"/>	
Oakite Products	Inproclean 3800	5	70.54	<input checked="" type="checkbox"/>	
US Polychem Corporation	Polyspray Jet 790 XS	5	96.95	<input checked="" type="checkbox"/>	

Conclusion: The same four products will be used to clean the third contaminant.