

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2000  
DateRun: 03/29/2000  
Experimenters: Jason Marshall, John Brunelle  
ClientType:  
ProjectNumber: Project #1  
Substrates: Brass  
PartType: Part  
Contaminants: Buffing/Polishing Compounds  
Cleaning Methods: Ultrasonics  
Analytical Methods: Visual

Purpose: To evaluate rotational energy in conjunction with ultrasonic energy.

Experimental Procedure: One cleaner was selected based on the results of the previous trial. The chemistry was diluted to 5% in 600 ml beakers using DI water and then heated to 130 F on a hot plate. The solution was then poured into a 250 glass bottle with three small round parts. The bottle was capped and placed in an ultrasonic tank filled with water at 130 F. Cleaning consisted of rotating the bottle from end to end and side to side throughout the five minutes of cleaning. Parts were removed from the bottle and rinsed in tap water at 120 F for 30 seconds and dried using a Master Appliance Corp. Hot-air gun model HG-301A at 500 F for one minute. After coupons returned to room temperature, final clean appearances were observed.

SUBSTRATE MATERIAL: Brass Parts

CONTAMINANTS: Buffing compound

CONTAMINATING PROCESS USED: Parts received contaminated

Results: Using ultrasonic and rotational energy was proved to be very successful in removing the buffing compound inside the round parts.

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> |
| US Polychem Corporation | Polyspray Jet 790 P         | 5             |                    | <input checked="" type="checkbox"/> |                      |

Conclusion: U.S. Polychem Polyspray Jet 790 P removed nearly all the buffing compound from the brass parts using ultrasonic and rotational energy.