

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2006

DateRun: 11/20/2006

Experimenters: Jason Marshall

ClientType: Metal Finishing

ProjectNumber: Project #1

Substrates: Aluminum, Plastic

PartType: Part

Contaminants: Buffing/Polishing Compounds

Cleaning Methods: Low Pressure Spray

Analytical Methods: Visual

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

Experimental Procedure: Two cleaning products were diluted to 5% and 2.5% using room temperature tap water (68 F) in 1000 ml beakers. Supplied parts that were received already contaminated were cleaned in the immersion solution for one minute and then cleaned in the spray system for one minute. One part was cleaned in each solution. Following cleaning in the low-pressure spray system parts were rinsed for 15 seconds in a tap water spray at 68 F and dried using dry compressed air at room temperature. Parts were analyzed visually. Cleaned parts were packaged and sent to the client.

Results: Both products removed the buffing compound at the higher concentration (5%). The Detergent 8 appeared to work at the lower concentration (2.5%) as well.

| Cleaner | Concentration | Observation |
|-------------|---------------|---|
| Detergent 8 | 5 | Part looked clean. The cleaning solution appeared dirty after cleaning. |
| Jet 790 XS | 5 | Part not as clean as Det 8 @ 5%. |
| Detergent 8 | 2.5 | Part not as clean as Det 8 @ 5% but as clean as Jet 790 XS @ 5.0% |
| Jet 790 XS | 2.5 | Water retention inside small opening, required slightly longer drying time to remove. |

Summary:

| Substrates: | | Aluminum, Plastic | | | |
|-------------------------|----------------------|-----------------------------|-------------|-------------------------------------|---------------|
| Contaminants: | | Buffing/Polishing Compounds | | | |
| Company Name: | Product Name: | Conc.: | Efficiency: | Effective: | Observations: |
| Alconox Inc | Detergent 8 | 5 | | <input checked="" type="checkbox"/> | |
| US Polychem Corporation | Polyspray Jet 790 XS | 5 | | <input checked="" type="checkbox"/> | |
| Alconox Inc | Detergent 8 | 2.5 | | <input checked="" type="checkbox"/> | |
| US Polychem Corporation | Polyspray Jet 790 XS | 2.5 | | <input type="checkbox"/> | |

Conclusion: Both solutions at the lower concentration appeared to remove the buffing compound using 1 minute of immersion and 1 minute of spray cleaning. Parts have been sent back for client inspection.