

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2000  
 DateRun: 04/07/2000  
 Experimenters: John Brunelle  
 ClientType: Lab  
 ProjectNumber: Project #1  
 Substrates: Aluminum, Brass, Copper, Nickel, Stainless Steel, Steel  
 PartType: Coupon  
 Contaminants: Adhesive, Fluxes, Greases, Lubricating/Lapping Oils, Dirt, Oil  
 Cleaning Methods: Immersion/Soak  
 Analytical Methods: Gravimetric  
 Purpose: Laboratory evaluations of alternative cleaning products  
 Experimental Procedure: Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning.  
 Laboratory evaluation.  
 Contaminant: Oil, CAS: 64741-89-5, 8052-42-4  
 Grease, CAS: 64742-47-8  
 Flux, RMA  
 Lubricant, CAS: 8052-42-4, 64742-57-0, 64742-62-7  
 Adhesive, ACR Sealer 5504  
 Sludge

## Results:

### Summary:

|                      |  |               |                    |                                     |                      |
|----------------------|--|---------------|--------------------|-------------------------------------|----------------------|
| <b>Substrates:</b>   | Aluminum, Brass, Copper, Nickel, Stainless Steel, Steel        |               |                    |                                     |                      |
| <b>Contaminants:</b> | Adhesive, Fluxes, Greases, Lubricating/Lapping Oils, Dirt, Oil |               |                    |                                     |                      |
| <b>Company Name:</b> | <b>Product Name:</b>   | <b>Conc.:</b> | <b>Efficiency:</b> | <b>Effective:</b>                   | <b>Observations:</b> |
| Bio Chem Systems     | Bio T Parts Washer NR  | 100           | 73.70              | <input type="checkbox"/>            | oil                  |
| Bio Chem Systems     | Bio T Parts Washer NR  | 100           | 95.67              | <input checked="" type="checkbox"/> | grease               |
| Bio Chem Systems     | Bio T Parts Washer NR  | 100           | 95.37              | <input checked="" type="checkbox"/> | flux                 |
| Bio Chem Systems     | Bio T Parts Washer NR  | 100           | 97.56              | <input checked="" type="checkbox"/> | lubricant            |
| Tower Products Inc   | Tower 270 Cleaner Concentrate                                  | 5             | 98.20              | <input checked="" type="checkbox"/> | oil                  |
| Tower Products Inc   | Tower 270 Cleaner Concentrate                                  | 5             | 6.72               | <input type="checkbox"/>            | grease               |
| Tower Products Inc   | Tower 270 Cleaner Concentrate                                  | 5             | 206.90             | <input type="checkbox"/>            | flux                 |
| Heatbath Corporation | Multi-Kleen 1568   | 5             | 141.20             | <input type="checkbox"/>            | oil                  |
| Heatbath Corporation | Multi-Kleen 1568   | 5             | 26.60              | <input type="checkbox"/>            | grease               |
| Heatbath Corporation | Multi-Kleen 1568   | 5             | 97.90              | <input type="checkbox"/>            | Flux                 |
| Smart Sonic Corp     | 440 R SMT Detergent  | 5             | -0.70              | <input type="checkbox"/>            | oil                  |
| Smart Sonic Corp     | 440 R SMT Detergent  | 5             | 98.40              | <input checked="" type="checkbox"/> | grease               |

### Conclusion: