# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003

DateRun: 10/21/2003

Experimenters: Dave Hout

ClientType: Lab

ProjectNumber: Project #1

Substrates: Stainless Steel

PartType: Coupon

Contaminants: Cutting/Tapping Fluids

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.

One product was used at full strength at room temperature and seven others were heated to 130 F on a hot plate. Twenty-four preweighed coupons were coated with Monroe Fluid Tech Cool Tool II and allowed to dry for a half an hour and reweighed. Three coupons were cleaned in each solution for 5 minutes using stir-bar-agitation, rinsed in a tap water bath for 15 seconds at 120 F and dried using air blow off for 30 seconds at 68 F. Coupons were allowed to dry for a half an hour and then reweighed a final time. Efficiencies were calculated.

Results:

Summary:

| **Substrates:** | Stainless Steel | | | | |
|---|---|---|---|---|---|
| **Contaminants:** | Cutting/Tapping Fluids | | | | |
| **Company Name:** | **Product Name:** | **Conc.:** | **Efficiency:** | **Effective:** | **Observations:** |
| AW Chesterton | 217 Pressure wash | 5 | 82.03 | ☐ | |
| Alconox Inc | Liquinox | 5 | 87.98 | ☑ | |
| Bio Chem Systems | Bio T Parts Washer NR | 5 | 98.76 | ☑ | |
| Dow Chemical Company | PnB Glycol Ether | 5 | 99.66 | ☑ | |
| Hubbard Hall Inc | Aquasonic 201 | 5 | 88.27 | ☑ | |
| Magnaflux | Daraclean 235 | 5 | 71.27 | ☐ | |
| Man Gill Chemical Company | Gillite 0650 Cl | 5 | 98.12 | ☑ | |
| Finger Lakes Chemical | Safer Stuff | 100 | 98.50 | ☑ | |

Conclusion: 6 out of 8 products were effective at removing the contaminant at an efficiency rate of over 85%.