

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003
DateRun: 12/29/2003
Experimenters: Dave Hout
ClientType: Lab
ProjectNumber: Project #1
Substrates: Stainless Steel
PartType: Coupon
Contaminants: Greases
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. Four products were heated to 130 F on a hot plate and two products were used at full strength. Eighteen preweighed coupons were coated with Grease - CRC Industries Multipurpose Super White Grease (647-41-96-4, 7620-77-1, 1314-13-2, 57885-77-3, 13463-67-7) 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. Effeciencies were calculated.

Results:

Summary:

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|------------------------------|--|----------------------|---------------|--------------------|-------------------------------------|----------------------|
| Substrates: | | Stainless Steel | | | | |
| Contaminants: | | Greases | | | | |
| Company Name: | | Product Name: | Conc.: | Efficiency: | Effective: | Observations: |
| Nensco | | DT 600 Press Wash | 100 | 86.00 | <input checked="" type="checkbox"/> | |
| Nensco | | USA Wash | 100 | 84.32 | <input type="checkbox"/> | |
| Quaker Chemical | | Formula 625 XL | 5 | 98.67 | <input checked="" type="checkbox"/> | |
| SOQ Environmental Technology | | Ecomate FN | 5 | 97.44 | <input checked="" type="checkbox"/> | |
| Valtech Corporation | | Valtron SP 2500 | 5 | 98.11 | <input checked="" type="checkbox"/> | |
| Watson Technical Associates | | Watson Formula 9000 | 5 | 97.41 | <input checked="" type="checkbox"/> | |

Conclusion: Seven out of the eight products were effective at removing the contaminant at an efficiency rate of over 86%