

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004

DateRun: 03/09/2004

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 and seven products were heated to 130 F on a hot plate. Twenty-four preweighed coupons were coated with Cutting Fluid - 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:
Calgon Corporation	Geo Guard 3015	5	89.41	<input checked="" type="checkbox"/>	
Watson Technical Associates	Watson Formula 9000	5	101.57	<input checked="" type="checkbox"/>	
SOQ Environmental Technology	Ecomate FN	5	100.31	<input checked="" type="checkbox"/>	
Buckeye International	XL 100 Cleaner & Degreaser	5	98.72	<input checked="" type="checkbox"/>	
US Polychem Corporation	Polychem A 2000 P	5	96.71	<input checked="" type="checkbox"/>	
Quaker Chemical	Formula 625 XL	5	97.76	<input checked="" type="checkbox"/>	
Jet Lube Inc	Jet Lube 5000	5	98.59	<input checked="" type="checkbox"/>	
Dow Chemical Company	XUS 40571 Development Solvent	100	100.77	<input checked="" type="checkbox"/>	

Conclusion: All products were effective at removing the contaminant at an efficiency rate of >89%