CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004

DateRun: 01/05/2004

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.

Seven products were heated to 130 F on a hot plate and one product was used at full strength. 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:**
Man Gill Chemical Company	Gillite 1156	100	91.05	☑	
Hurri Kleen Corportion	HurriSafe - Hot Immersion Degreaser	5	99.59	☑	
Hubbard Hall Inc	Ram Charger	5	96.86	☑	
Heatbath Corporation	MultiKleen LX 1573	5	97.56	☑	
Chemkleen International Inc.	CT 1 Multipurpose Cleaner	5	99.25	☑	
Buckeye International	Work Out	5	100.04	☑	
Delta Omega Technologies Ltd	Attar D(R3)	5	101.44	☑	
Equinox Products	Natural Solutions	5	98.39	☑	

Conclusion: All products were successful at removing the contaminant with an efficiency rate of over 91%