

# 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:

<b>Substrates:</b>	Stainless Steel				
<b>Contaminants:</b>	Cutting/Tapping Fluids				
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
Man Gill Chemical Company	Gillite 1156	100	91.05	<input checked="" type="checkbox"/>	
Hurri Kleen Corportion	HurriSafe - Hot Immersion Degreaser	5	99.59	<input checked="" type="checkbox"/>	
Hubbard Hall Inc	Ram Charger	5	96.86	<input checked="" type="checkbox"/>	
Heatbath Corporation	MultiKleen LX 1573	5	97.56	<input checked="" type="checkbox"/>	
Chemkleen International Inc.	CT 1 Multipurpose Cleaner	5	99.25	<input checked="" type="checkbox"/>	
Buckeye International	Work Out	5	100.04	<input checked="" type="checkbox"/>	
Delta Omega Technologies Ltd	Attar D(R3)	5	101.44	<input checked="" type="checkbox"/>	
Equinox Products	Natural Solutions	5	98.39	<input checked="" type="checkbox"/>	

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