

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008  
 DateRun: 07/11/2008  
 Experimenters: Jason Marshall, Heidi Wilcox, Shweta Bansal  
 ClientType: Tool Manufacturer  
 ProjectNumber: Project #1  
 Substrates: Steel  
 PartType: Part  
 Contaminants: Metal fines  
 Cleaning Methods: Ultrasonics  
 Analytical Methods: Visual

Purpose: To evaluate three products on supplied parts using ultrasonic cleaning while parts are tightly packed

Experimental Procedure: Three supplied products were diluted to 3% using DI water in a 1510 Branson 40 kHz ultrasonic tank and heated to 130 F. The products were degassed for five minutes.

A set of seven soiled steel parts coated with steel grit were tied tightly together to simulate client cleaning process. The parts were immersed into the ultrasonic tank and cleaned for 5 minutes. Following cleaning, coupons were observed for cleanliness.

Results: After five minutes of ultrasonic cleaning, the Daraclean 282 GF cleaned parts were the cleanest followed by the Polyspray Jet 790xs and Green Soak Cleaner 19 AC. Even with the parts tightly packed during cleaning, nearly all of the metal grit was removed from the parts.

Summary:

<b>Substrates:</b>	Steel				
<b>Contaminants:</b>	Metal fines				
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
Magnaflux	Daraclean 282 GF	3		<input checked="" type="checkbox"/>	
US Polychem Corporation	Polyspray Jet 790 XS	3		<input checked="" type="checkbox"/>	
BCS Company	Green Spray 400	3		<input checked="" type="checkbox"/>	

Conclusion: Using ultrasonic cleaning with any of the three tested products should result in removal of the steel grit from the surface of the parts.