

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008

DateRun: 06/30/2008

Experimenters: Jason Marshall, Shweta Bansal

ClientType: Tool Manufacturer

ProjectNumber: Project #1

Substrates: Steel

PartType: Part

Contaminants: Cutting/Tapping Fluids, Lubricating/Lapping Oils, Metal fines

Cleaning Methods: Ultrasonics

Analytical Methods: Visual

Purpose: To evaluate supplied product on dirty parts using ultrasonic cleaning.

Experimental Procedure: The supplied product was diluted to 3% using DI water in 300 ml glass beakers and heated to 130 F. The beaker was immersed in a water bath in a Branson 40 kHz ultrasonic tank. The product was degassed for five minutes.

A set of three soiled steel parts (coated with cutting fluids and lubricants) and another three parts coated with steel grit were immersed into each beaker and cleaned for 5 minutes and another set of parts were cleaned for 10 minutes using ultrasonic agitation. Following cleaning, coupons were observed for cleanliness.

Results: The parts coated with the metal shot grit after 5 minutes of ultrasonic cleaning were comparable to the parts previously cleaned using Polyspray Jet 790 XS and Micro 90. This would place the product between second and fourth best after 5 minutes of cleaning. Following 10 minutes of cleaning, the Green Soak cleaner had parts as clean as the Daraclean 282 GF product, which was rated as being the most effective.

For the parts that were coated with the cutting fluid/lubricant, The Green Soak was comparable to the M6310 cleaned parts, or at the bottom of the ranking. At 10 minutes the Green Soak jumped up to the 2nd best, comparable to the Polyspray Jet 790 XS cleaned parts.

Summary:

<b>Substrates:</b>	Steel				
<b>Contaminants:</b>	Cutting/Tapping Fluids, Lubricating/Lapping Oils, Metal fines				
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
BCS Company	Green Spray 400	3		<input checked="" type="checkbox"/>	

Conclusion: The supplied cleaning product, Green Soak Cleaner, was found to be one of the better cleaning products when used for 10 minutes in ultrasonic cleaning.