

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008

DateRun: 07/09/2008

Experimenters: Jason Marshall, Heidi Wilcox, Shweta Bansal

ClientType: Tool Manufacturer

ProjectNumber: Project #1

Substrates: Steel

PartType: Part

Contaminants: Cutting/Tapping Fluids, Metal fines

Cleaning Methods: Ultrasonics

Analytical Methods: Visual

Purpose: To evaluate top three products under conditions closely matching current cleaning practice.

Experimental Procedure: The top two lab tested products were diluted to 3% using DI water in 300 ml glass beakers. The beakers were immersed in a Branson 40 kHz ultrasonic tank and heated to 130 F. The products were degassed for five minutes. A second set of parts were cleaned for 10 minutes.

A set of three soiled steel parts coated with steel grit and three coated with cutting fluids were immersed into the ultrasonic tank and cleaned for 5 minutes. Following cleaning, coupons were observed for cleanliness.

Results: For both sets of parts and both cleaning times the Polyspray Jet 790xs resulted in cleaner parts. However, at 10 minutes of cleaning both cleaners were nearly the same.

Summary:

Substrates:	Steel				
Contaminants:	Cutting/Tapping Fluids, Metal fines				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Magnaflux	Daraclean 282 GF	3		<input checked="" type="checkbox"/>	
US Polychem Corporation	Polyspray Jet 790 XS	3		<input checked="" type="checkbox"/>	

Conclusion: Both products appear to work well at the lower concentration.