

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1996

DateRun: 05/21/1996

Experimenters: Jay Jankauskas

ClientType: Aircraft Parts Manufacturer

ProjectNumber: Project #1

Substrates: Aluminum

PartType: Part

Contaminants: Cutting/Tapping Fluids, Lubricating/Lapping Oils, Oil

Cleaning Methods:

Analytical Methods: Visual

Purpose: Update on testing results

Experimental Procedure: I have just finished a round of tests to find an effective aqueous cleaner that could be substituted for your current mineral spirits usage. Seven different aqueous chemistries was tested along with the Chemstation Green Stuff II and the Hubbard-Hall Ram Charger. Out of all the chemistries tested, two were superior to the rest; W.R. Grace Daraclean 282 and Brulin Corp. 815GD process detergent.

Results: I recommend that for either of these chemistries you start out a concentration of 8% and then reduce if the cleaning holds up to your standards. These two chemistries also worked very well at a lower temperature of 120 F (even better soil removal than the Chemstation Green Stuff II at 150 F). The efficiency of rinsing will depend on the cleanliness of your rinsewater. Both the Daraclean and the 815 GD are free rinsing but staining may occur if your rinse water contains too much drag-out cleaning solution. To effectively rinse your parts, a two-stage rinsing technique should be considered. The Daraclean can also be used in conjunction with the Daraguard 416 rinse aid which will greatly increase rinsing efficiency and reduce drying time.

Summary:

<b>Substrates:</b>	Aluminum				
<b>Contaminants:</b>	Cutting/Tapping Fluids, Lubricating/Lapping Oils, Oil				
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
Magnaflux	Daraclean 282 GF	8		<input checked="" type="checkbox"/>	
Brulin Corporation	Formula 815 GD	8		<input checked="" type="checkbox"/>	

Conclusion: Enclosed you will find a test report sheet, MSDS's and technical data sheets for the Brulin 815GD, Daraclean 282 and Daraguard 416. I will also contact you within a few days in case you have any questions about the testing performed or if there is anything else you would like us to look at for you.