

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1996

DateRun: 04/23/1996

Experimenters: Jay Jankauskas

ClientType: Steel Collar Clamp Manufacturer

ProjectNumber: Project #1

Substrates: Steel

PartType: Part

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

Cleaning Methods: Mechanical Agitation

Analytical Methods: FTIR, OSEE

Purpose: Completed tests on parts sent to lab

Experimental Procedure: I've just completed a round of tests on the parts that you have sent to us, and I have found some interesting results. First, I analyzed the parts from the three different cleaning systems.

Results: I found no traces of organic contamination (residual cutting oil). It does appear that the clamp collars that were cleaned in the degrease only and the vibrate and degrease systems contained some inorganic contamination which is most likely residual Chemtrol 328. The Clamp collar that was cleaned in the vibrate and bead blast system was the cleanest and blackened the best when heat-treated. I also tested out several alkaline aqueous chemistries which remove shop soils and are free rinsing. Out of the eight chemistries tested against the Chemtrol 328, the one chemistry that performed better in removing the cutting oil and in heat-treating was Oakite Products Inproclean 1300. The following pages contain actual testing procedures used and more in-depth results. I have also enclosed some information on the Oakite Products Inproclean 1300.

Summary:

Substrates:		Steel			
Contaminants:		Cutting/Tapping Fluids, Lubricating/Lapping Oils, Oil			
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Oakite Products	Inproclean 1300			<input checked="" type="checkbox"/>	

Conclusion: