CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008

DateRun: 04/01/2008

Experimenters: Jason Marshall, Heidi Wilcox

ClientType: Machining Company

ProjectNumber: Project #1

Substrates: Stainless Steel, Steel

PartType: Coupon

Contaminants: Greases, Oil

Cleaning Methods: Immersion/Soak

Analytical Methods: Visual

Purpose: To evaluate selected nPB alternatives for drop-in replacement to TCE for removing oil and grease from various metals.

Experimental Procedure: Two products were selected from the lab's on-line database, www.cleanersolutions.org, based on client supplied information for a drop-in solvent replacement to TCE. Each product was used at room temperature.

Six dirty parts, coated with various oils were cleaned using immersion cleaning with no agitation. Larger parts were cleaned for less than 1 minute and the small gear pieces were cleaned in under 20 seconds. Two parts were cleaned in one solvent and four in the second.

Results: Cleaning observations were made to determine the amount of cleaning that took place.

Cleaner	Part	Observation
M6960	Large gear	Outside surface was clean as needed
		Some grease still in the interior hole
		Dried quickly
	Small gear	Cleaned quickly and effectively
Lenium CP	Large gear	Outside surface was clean as needed
		Some grease still in the interior hole
		Dried quickly
	Small gear	Cleaned quickly and effectively

Summary:

Substrates:	Stainless Steel, Steel				
Contaminants:	Greases, Oil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Kyzen Corporation	Metalnox M6960	100	0.00	☑	
Petroferm Inc	Lenium CP (no longer available)	100	0.00	☑	

Conclusion: Both products were very effective on the smaller gears. The addition of heat and ultrasonics will help to improve overall performance on the more difficult parts and soils.