CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2004
DateRun:	01/21/2004
Experimenters:	Jason Marshall
ClientType:	Tool Manufacturer
ProjectNumber:	Project #1
Substrates:	Steel
PartType:	Part
Contaminants:	Oil
Cleaning Methods:	Immersion/Soak
Analytical Methods:	Photography, Visual
Purpose:	To evaluate cleaners on second supplied parts using immersion cleaning
Experimental Procedure:	Four products from the previous trials were selected to clean the first set of supplied parts using immersion cleaning. A fifth, untested product was added. Three products were used at full strength. One product was diluted to 10% using DI water in a 600 ml beaker. The last product was diluted to 12.5% using DI water, based on vendor recommendations. Two products were used at room temperature and the other three were heated to 120 F on a hot plate. The dirty parts were photographed in groups of two and immersed into a beaker with cleaning solution and allowed to soak for 10 minutes. Following the cleaning, the parts were dried using air blow off at room temperature. The cleaned parts were then photographed again for comparison to the dirty pictures. Observations during cleaning were recorded and products were ranked based on how effective the products were. Contaminant: Quench oil.
Results:	All five products appeared to remove the excess quench oil on the supplied arbor parts. The 278 Super Solv and DS 108 looked to be the more effective products, followed by SC Aircraft & Metal Cleaner.

Summary:

Substrates:	Steel				
Contaminants:	Oil				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
AW Chesterton	278 Super Solv	100	0.00	☑	Rank = 1
Dysol	DS 108 Wipe Solvent	100	0.00	☑	Rank = 1
Metabolix Inc	Metabolix E3HB	100	0.00	☑	Rank = 4
Gemtek Products	SC Aircraft & Metal Cleaner Super Concentrate	10	0.00	☑	Rank = 3
Lifetime Solutions Ltd	Commercial All Purpose Colloidal Cleaner	12	0.00	☑	Rank = 5

Conclusion: Cleaned parts have been packaged up to be sent back to client for analysis. One part will be cleaned using ultrasonic energy.