CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2022

DateRun: 09/30/2022

Experimenters: Alicia McCarthy, Marlen Galan

ClientType: Tool Manufacturer

ProjectNumber: Project #1

Substrates: Steel

PartType: Coupon

Contaminants: Inks, Paints

Cleaning Methods: Ultrasonics

Analytical Methods: Visual

Purpose: To evaluate selected products for UV ink removal using heated ultrasonics with various dilutions of SC Supersolv

Experimental Procedure: Sc Supersolv was diluted to a 75% concentration in an unheated ultrasonic bath at a common parts cleaning frequency of 40kHz. Each solution was degassed (removal of any excess bubbles to improve energy transmission) for 10 minutes. A saw blade was immersed into a solution and cleaned for 9-10 minutes. At the end of each cleaning cycle parts were observed for paint removal and wiped once with a wypall paper towel. Testing completed after a total 30 minutes.

Results:

Ink Color	Minutes	Visual Observations	
		After Cleaning	After Wiping
Blue	10	No removal	No removal
	20	No removal	No removal
	30	No removal	No removal
White	10	No removal	No removal
	20	No removal	No removal
	30	No removal	No removal

The ink on both parts did not have any removal after each cleaning cycle or with the addition of a Wypall wipe step. Vigorous wiping after testing only removed some flakes. A heated immersion and ultrasonics can be explored next to see if the temperature could improve the removal.

Summary:

Substrates:	Steel				
Contaminants:	Inks, Paints				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Gemtek Products	SC Supersolve Safety Solvent	75%	0.00	☐	No removal on either ink, blue and white, on a saw tool part.

Conclusion: Unheated ultrasonics using a 75% concentration of SC Supersolv was not effective.