

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1998
DateRun: 05/07/1998
Experimenters: Jason Marshall
ClientType: Manufactures parts for Semi-Conductor Industry
ProjectNumber: Project #1
Substrates: Plastic, Stainless Steel
PartType: Part
Contaminants: Adhesive
Cleaning Methods: Ultrasonics
Analytical Methods: Visual
Purpose: Find cleaner to remove adhesvie

Experimental Procedure: The intent of the experiment was to find a cleaning solution that could remove the adhesive bond between the two substrates.

Two solutions were selected from the Laboratory's database based on substrate compatibility and the cleaner's ability to remove adhesives. Full strength solutions were used in a beaker. The solutions were heated to 130 F and placed into a Crest 40 kHz ultrasonic tank. The sample was placed into the cleaning solutions and observed every five minutes up. After each interval, the sample's position in the beaker was changed to aid the ultrasonic cleaning. At the end of 15 minutes, the part was removed from the cleaning solution and rinsed in tap water at 120 F for 30 seconds. The part was dried using air blow off and a Master Heat Gun Model HG 301A with a temp range of 300-500 F for 30 seconds. The part was observed to determine if separation was achieved.

SUBSTRATE MATERIAL: Stainless Steel & Plastic
CONTAMINANTS: Adhesive

Results: Neither product showed any signs of aiding in the separation of the two substrates. More samples are needed in order to test more cleaning solutions.

Summary:

Substrates:		Plastic, Stainless Steel				
Contaminants:		Adhesive				
Company Name:		Product Name:	Conc.:	Efficiency:	Effective:	Observations:
MacDermid Industrial Products		ND Supreme	10		<input type="checkbox"/>	
Chrisal USA Inc		Super CMF 240	100		<input type="checkbox"/>	

Conclusion: The two products tested were not effective in removing the adhesive between the two surfaces. In the next test, semi-aqueous products will be tested along with other aqueous cleaners.