

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1995

DateRun: 03/21/1995

Experimenters: Donald Garlotta

ClientType: Electrical Manufacturer

ProjectNumber: Project #1

Substrates: Brass

PartType: Part

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

Cleaning Methods: Low Pressure Spray

Analytical Methods: Goniometry

Purpose: To clean 3 brass conical connectors

Experimental Procedure: After the cleaning trial was performed, the parts were subject to contact angle goniometry. Their contact angle was compared to the contact angle of several dirty parts. Twenty-three readings were taken of the clean parts.

Results: T&D Finishing Co. TD-110
An average value of 45.043 + 7.081 degrees. Fourteen readings were taken of the dirty parts with an average value of 58.357 + 8.776 degrees.
Valtech Corp. Valtron SP2275
After the parts were subjected to the cleaning trial, they were then subjected to a comparative analysis to dirty parts, using contact angle goniometry. Fourteen readings of the dirty parts were taken, and they had an average contact angle of 58.357 + 8.776 degrees. Twenty-nine readings of the ultrasonically cleaned parts were taken, and they had an average contact angle of 70.828 + 8.414 degrees. This value is unexpectedly higher than that of the dirty parts, suggesting that the clean parts are not as clean as the dirty parts.

Summary:

Substrates:		Brass			
Contaminants:		Cutting/Tapping Fluids, Lubricating/Lapping Oils, Fingerprints, Oil			
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Valtech Corporation	Valtron SP 2275	5		<input type="checkbox"/>	
T & D Finishing Company	TD 110	4		<input type="checkbox"/>	

Conclusion: