

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2002
DateRun: 02/27/2002
Experimenters: Jason Marshall
ClientType: Plating Job Shop
ProjectNumber: Project #1
Substrates: Stainless Steel
PartType: Coupon
Contaminants: Lubricating/Lapping Oils
Cleaning Methods: Immersion/Soak
Analytical Methods: Gravimetric

Purpose: To evaluate successful cleaner from previous trial on second contaminant.

Experimental Procedure: The Gemtek product was diluted to 10% using DI water in a 600 ml beaker and heated to 130 F on a hot plate. Six preweighed coupons were coated with Mobil Oil Corp Mobilarma 245 (64742-88-7) using a hand held swab. Coupons were weighed again. Three coupons were cleaned for 5 minutes and the other three were cleaned for 10 minutes. Both cleaning utilized stir-bar agitation. Coupons were rinsed in tap water at 120 F for 30 seconds and dried using a Master Appliance heat gun at 500 F for 1 minute. Final weights were measured and efficiencies were calculated for the two cleaning times.

Results: Both cleaning times resulted in complete removal of the Mobilarma 245. The table lists the efficiencies for both cleaning times.

Cleaner	Coupon 1	Coupon 2	Coupon 3	Average	Std Dev
5 Minutes	99.00	102.41	100.00	100.47	1.75
10 Minutes	104.44	102.50	102.44	103.13	1.14

Summary:

Substrates:	Stainless Steel					
Contaminants:	Lubricating/Lapping Oils					
Company Name:	Product Name:		Conc.:	Efficiency:	Effective:	Observations:
Gemtek Products	SC Aircraft & Metal Cleaner Super Concentrate		10	100.47	<input checked="" type="checkbox"/>	5 minute
Gemtek Products	SC Aircraft & Metal Cleaner Super Concentrate		10	103.13	<input checked="" type="checkbox"/>	10 minute

Conclusion: The next phase of testing will focus on cleaning supplied parts using the Gemtek SC Aircraft & Metal Cleaner.