

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2006
DateRun: 11/06/2006
Experimenters: Jason Marshall
ClientType: Metal Working
ProjectNumber: Project #1
Substrates: Steel
PartType: Coupon
Contaminants: Oil
Cleaning Methods: Immersion/Soak
Analytical Methods: Gravimetric

Purpose: To evaluate an additional product for oil removal using immersion cleaning on oil.

Experimental Procedure: An additional alternative product was selected from the lab's database of testing results based on past testing results. This product was selected based on oil removal potential and compatibility with brass, steel and stainless-steel metal substrate. The product was diluted to 5% in 250 ml beaker using DI water and heated to 130 F on a hot plate.

Three preweighed coupons were coated with the supplied quench oil using a handheld swab after. Coupons were weighed a second time to determine the amount of oil added. Three coupons were cleaned in each solution for five minutes using minimal stir bar agitation. Coupons were rinsed for 15 seconds in a tap water bath at 120 F and dried using a dry compressed air for 30 seconds. Once dry coupons were weighed a final time and product efficiencies were calculated.

Results: The additional product was found to be as successful slightly less effective than the other products previously tested on this oil. The following table lists the amount of buffing compound applied, the amount remaining and the efficiency for each coupon cleaned.

Cleaner	Initial wt	Final wt	% Removed
Detergent 8	0.2017	0.0211	89.54
	0.2843	0.0190	93.32
	0.3253	0.0176	94.59

Summary:

Substrates:	Steel				
Contaminants:	Oil				
Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
Alconox Inc	Detergent 8	5	92.48	<input checked="" type="checkbox"/>	

Conclusion: The Detergent 8 when compared to the other products had lower removal efficiency of the oil.