

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2000  
 DateRun: 09/07/2000  
 Experimenters: Jason Marshall  
 ClientType: Metal Finishing  
 ProjectNumber: Project #1  
 Substrates: Steel  
 PartType: Part  
 Contaminants: Cutting/Tapping Fluids, Lubricating/Lapping Oils, Dirt, Films, Oil  
 Cleaning Methods: Ultrasonics  
 Analytical Methods: Visual, Wipe

Purpose: To evaluate the effective cleaner at higher temperature and longer cleaning times.

Experimental Procedure: One chemistry, listed in Table 1, was selected based on the previous test 00-8142-01-2. The aqueous product was diluted to 5% in a VWR Scientific Products Aquasonic 150 HT ultrasonic tank using tap water at 115 F. One dirty part was cleaned in the solutions for 15 minutes, followed by a 30 second tap water spray at 120 F. The clean parts were then dried using a Master Appliance Corp, Hot-air gun model HG-301A at 500 F for one minute. Parts were then visually compared to the supplied cleaned parts and the other cleaners. The solution was then heated to 140 F and parts were cleaned for 5, 10 and 15 minutes. Each part was rinsed, dried and analyzed as mentioned previously.

SUBSTRATE MATERIAL: Steel  
 CONTAMINANTS: Oil, dirt, smut

Results: The part cleaned at 115 F was comparable in cleanliness to the part cleaned at 140 F at 5 minutes. The part cleaned for 15 minutes at 140 F was looked the cleanest of all the parts followed by the 10 minute cleaning. Table 2 lists the ranking of the parts and any observations made.

Table 2. Observations

Temp F	Time (min)	Observations
115	15	good
140	5	good
140	10	good/excellent
140	15	excellent

Excellent > Good > Okay > Fair > Poor

Summary:

<b>Substrates:</b>	Steel				
<b>Contaminants:</b>	Cutting/Tapping Fluids, Lubricating/Lapping Oils, Dirt, Films, Oil				
<b>Company Name:</b>	<b>Product Name:</b>	<b>Conc.:</b>	<b>Efficiency:</b>	<b>Effective:</b>	<b>Observations:</b>
Oakite Products	Inproclean 3800	5		<input checked="" type="checkbox"/>	

Conclusion: