CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2005
DateRun:	07/31/2005
Experimenters:	Jason Marshall
ClientType:	Metal
ProjectNumber:	Project #1
Substrates:	Aluminum
PartType:	Part
Contaminants:	Mold Releases, Graphite
Cleaning Methods:	Ultrasonics
Analytical Methods:	Photography, Visual
Purpose:	To evaluate successful products on supplied unbaked parts using ultrasonic cleaning.
Experimental Procedure:	Two products were selected from the previous trial and used at the same concentrations. Each product was suspended in water heated to 120 in a Crest Ultrasonic 40 kHz tank. The solutions were degassed for five minutes. Two presoiled unbaked coupons coated with the Acheson Colloids Co Aquadag M mold release agent (CAS#: 7782-42-5, 84122-50-6, 70131-67-8, 1333-86-4, 107-21-1, 9002-84-0) were suspended in each solution and cleaned for 5 minutes using ultrasonic energy. Parts were then rinsed with tap water at 120 F for 15 seconds and dried using compressed air at room temperature for 30 seconds. Cleaned parts were then visually inspected and compared to each other. In addition, the parts were also compared to the client supplied cleaned parts.
Results:	Coil Bright removed the unbaked contaminant from the part in the five minutes of ultrasonic cleaning. The Micro 90 removed some of the contamination, but not as much as the Coil Bright. The Micro 90 cleaned coupons were then run for another 5 minutes. Observations are listed below in the table. Photos are also provided.

Cleaner	Observations
Micro 90	5 min - Some removal - less than the acid washed parts
	10min - More removal - still less than the acid washed parts
Coil Bright	5 min - Good removal - cleaner than the acid washed parts

Summary:

Substrates:	Aluminum				
Contaminants:	Mold Releases, Graphite				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
International Products Corporation	Micro 90 Conc.	5	0.00	☐	
Watson Technical Associates	Coil Bright	20	0.00	☑	

Conclusion: Coil Bright from Watson Technical Associates worked very well on the unbaked coupon in five minutes of ultrasonic cleaning.