

CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2005							
DateRun:	08/02/2005							
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 one product at two dilutions on supplied parts using ultrasonic cleaning							
Experimental Procedure:	One product was diluted to 10% and 5% concentrations. Each solution was suspended in water heated to 120 in a Crest Ultrasonic 40 kHz tank. The solutions were degassed for five minutes.							
Results:	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 clien supplied cleaned parts. Both diluted products did remove the unbaked graphite mold release agent. Both dilutions required more time for sufficient level of removal.							
	Cleaner Observations							
	Coil Bright 10%		al, better than					
	10%	acid washed parts. Some soil 10min Complete removal						
	Coil Bright 5%	5 min Some removal, not as good as acid washed parts						
		10min Improved cleaning, still not at acid washed clean						
	15min At acid wash level of clean							
Summary:	Substrates: Aluminu		n					
	Contaminants: Mold Rel		leases, Graphite					
	Company Name:		Product Name:	Conc.:	Efficiency:	Effective:	Observations:	
	Watson Technical Associates			Coil Bright	10	0.00	V	10 minutes
	Watson Technical Associates		Coil Bright	5	0.00	V	15 minutes	
Conclusion:	The 10% dilution of Coil Bright may provide enough cleaning with 5 minutes of ultrasonic energy. The 5%							

solution also provides enough cleaning after 15 minutes of ultrasonic energy.