CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2005
DateRun:	08/15/2005
Experimenters:	Jason Marshall
ClientType:	Metal
ProjectNumber:	Project #1
Substrates:	Carbon Fiber
PartType:	Part
Contaminants:	Mold Releases, Graphite
Cleaning Methods:	Ultrasonics
Analytical Methods:	Photography, Visual, Wipe
Purpose:	To evaluate new product on supplied graphite mold parts using ultrasonic cleaning.
Experimental Procedure:	One product was diluted to 10% concentration. The heated (120 F) solution was poured into a Branson 200 ultrasonic 40 kHz tank and heated . The solution was degassed for five minutes. One presoiled unbaked molds were received 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). One part was 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. A second 5 minute cleaning cycle was performed. Photographs were taken after each cleaning.
Results:	Wiping the mold following the final cleaning cycle resulted in a similar amount of contamination as the Coil Bright wiped mold. Photographs show the before and after mold.

Summary:

Substrates:	Carbon Fiber				
Contaminants:	Mold Releases, Graphite				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Green Power	Metal Bright	10		☑	

Conclusion: Metal Bright performed as well as Coil Bright and will be included in the lab-pilot testing with the client.