CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2008
DateRun:	09/08/2008
Experimenters:	Jason Marshall
ClientType:	Nano manufacturing
ProjectNumber:	Project #1
Substrates:	Stainless Steel
PartType:	Part
Contaminants:	Dirt, Clay
Cleaning Methods:	Ultrasonics
Analytical Methods:	Photography, Visual
Purpose:	To evaluate selected product on cleaning supplied stainless steel filter

Experimental Procedure:

One product was selected from the previous trial based on performance. The product was used at 10% diluted with DI water and was used at room temperature. The solution was used in a 40 kHz Branson 3510 ultrasonic unit after being degassed for 5 minutes.

The filter was totally immersed into the ultrasonic tank and cleaned for 20 minutes. Observations were made at five-minute intervals. Following cleaning, parts were rinsed with a DI water spray for 2 minutes at room temperature. The cleaned part was dried with compressed air at room temperature for 3 minutes.

Parts were photographed before and after cleaning. The cleaning solution also was photographed to help determine if the filter was being cleaned.

Results:

Signs of effective cleaning were made within the first 5 minutes of cleaning. The part looked clean after the 20 minutes and the cleaning bath was very dark. Observations are listed in the table.

Time	Observation
5 min	Solution turned cloudy and had a slight grey tinge to it.
10 min	Solution turned darker. The part still had a fine film on the outer surface. It could be easily wiped off or removed with a spray rinse.
15 min	Most of the observed film was removed
20 min	Part looked clean. Bath water was very cloudy and the bottom of the tank could not be seen.

Summary:

Substrates:	Stainless Steel				
Contaminants:	Dirt, Clay				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Valtech Corporation	Valtron SP 2700 KB	10	0.00	☑	

Conclusion:

The Valtron SP 2700 kb appeared to have good cleaning ability of the contaminant using ultrasonic cleaning. The part will be sent to client for final inspection and pressure testing.