The media met all specification requirements for Nano-composite (Type VIII) media, as provided in MIL-P-85891A Appendix 3, with exception of ash content, extract content, conductivity and media retained on the 25 mesh. Ash content was 2.33 percent by weight compared to a maximum allowable of 2.00 percent. Extract content was 8.1 percent by weight with a maximum alllowable of 1.0 percent. Conductivity was 217.5 umho/cm compared to a maximum allowable of 100 umho/cm. The amount of media retained on the 25 mesh sieve was 1.39 compared to a maximum allowable of 0.1 percent.

The infrared spectrogram obtained from the sample was similar to that presented in Figure 8 of the specification for Type VIII (Nano-Composite). All band locations are present however intensity ratios differ from those found in the a reference spectrum provided by U.S. Technology.

Strip rate, consumptin rate, aggressiveness and surface residue were determined using a standard 1/4-inch diameter nozzle, a 10-inch standoff distance, an 80 degree impingement angle, a nozzle pressure of 30 psi and a flow rate adequate to provide a strip rate in excess of 0.15 ft^2/min.

The media provided and tested was specified as a media having a 30/60 mesh size. Appendix A provides particle size distribution requirements for a 30/60 mesh size as provided in MIL-P-85891A Amendment 3.

Appendix B provides MIL-P-85891 media requirements plus those for Type VIII as provided in MIL-P-85891A Amendment 3.

Information provided by these tests will remain confidential unless directed otherwise by the U.S. Technology Corporation. A copy of this report will be sent to respective U. S. Navy and Air Force offices for review and approval upon your request. If there are questions regarding these test results, please contact me at (740) 862-2615.

Sincerely yours;

Ron D. Galliher, P.E.
President

RDG/jrg
Enclosure

FIRST ARTICLE INSPECTION TEST RESULTS
MILITARY SPECIFICATION MIL-P-85891A

U.S. TECHNOLOGY CORPORATION
NANO-COMPOSITE (TYPE VIII)
30-60 MESH SIZE

LOT NUMBER MGII-031008

By

AERO-TECH COATINGS REMOVAL, INC.
9682 Heimberger Road
Baltimore, Ohio 43105

June 17, 2008

FIRST ARTICLE INSPECTION SUMMARY

Test Specification	MIL-P-85891A dated 1 April 1992 with Amendment 2 dated June 26, 1998		
Media Designation:	TYPE: VIII (Nano-composite), 30-60 mesh		
Lot Number:	MGII-031008		
Manufacturer:	U.S. Technology Corporation 220 Seventh Street, S.E. Canton, Ohio 44702		
Contact:	Ray Williams/Dan Kinsinger	Phone:	330-455-1181
Report Date:	June 17, 2008	Email:	ray@ustechnology.com

Characteristic	Require-ment	Test Value	Meets Spec. Spec.
Material Type	VIII	VIII	Yes
Barcol Hardness (plastic stock)	54 to 62	58	Yes
Color	- - -	Multicolored	Yes
Infrared spectrogram material type	VIII	VIII	Yes
Chlorine (maximum)	Trace	Trace	Yes
Ash Content (Grade A, maximum % by weight)	2.00	2.33	No
Iron content (maximum % by weight)	0.1	0.00	Yes
Specific gravity	1.36 to 1.46	1.38	Yes
Extract content (minimum % by weight)	0 to 1.0	8.1	No
pH of water extract	4 to 8	5.0	Yes
Conductivity (maximum umho/cm)	100	217.5	No
Water absorption (maximum % by weight)	10.0	8.4	Yes
Heavy particulate (max. % by weight)	0.02	0.01	Yes
Light particulate (max. % by weight)	1.0	0.0	Yes
Particle size (20-50 mesh)			
25 mesh (max. percent retained)	0.1	1.4	No
20 mesh (max. percent retained)	15	10.7	Yes
60 mesh (max. percent passed)	20	1.6	Yes
100 mesh (max. percent passed)	5.0	0.6	Yes
Paint stripping rate (sq. ft/min, minimum)	0.15	0.17	Yes
Aggressiveness (mg/sq cm, maximum)	0.25	0.04	Yes
Product Consumption (% for four cycles)	24	12	Yes
Product consumption (avg. % per cycle, max.)	6	3	Yes
Surface residue	(1)	(1)	Yes
Anti-static behavior	(2)	(2)	Yes
Storage stability	(3)	(3)	Yes
Workmanship	(4)	(4)	Yes

FIRST ARTICLE INSPECTION SUMMARY (CONTINUED)

Requirements and Test Value Notes

(1) The product shall not produce a surface residue which interferes with the application of MIL-C-81706.

(2) The finished product shall not cling to the interior walls of a well grounded blast booth or glove box during the stripping test.

(3) The finished product shall meet all the requirements of Military Specification MIL-P-85891A after storage for one (1) year under normal storage conditions.

(4) The finished product shall be manufactured in accordance with the best commercial practice for this type of product and shall be free from any foreign matter detectable with the naked eye.

(5) Starch-g-Acrylic partially dissolved in the specific gravity test solution used by Aero-Tech and a reliable test was not obtained. The current MIL-P-85891A heavy and light particulate test procedure is faulty and does not provide a solution adequate for heavy and light particulate testing. A test solution adequate for other media types may not be applicable for the Wheat-g-Acrylic.

(6) Shore D hardness tests were performed on cylindrical pellets having a 5/16-inch (8 mm) diameter and random lengths. Many pellets had indications of internal fractures prior to testing and readings were difficult to obtain due to the small sample size and tendency for the pellets to fracture during the hardness tests. Approximately two out of three samples would fracture during the test.

(7) Note that all band locations are present, however intensity ratios differ from those found in the reference spectrum.

The information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost of these services.

The above is a true copy of our records signed for Aero-Tech Coatings Removal, Inc. by:

Ron D. Galliher, P.E.
President

FIRST ARTICLE INSPECTION TEST RESULTS

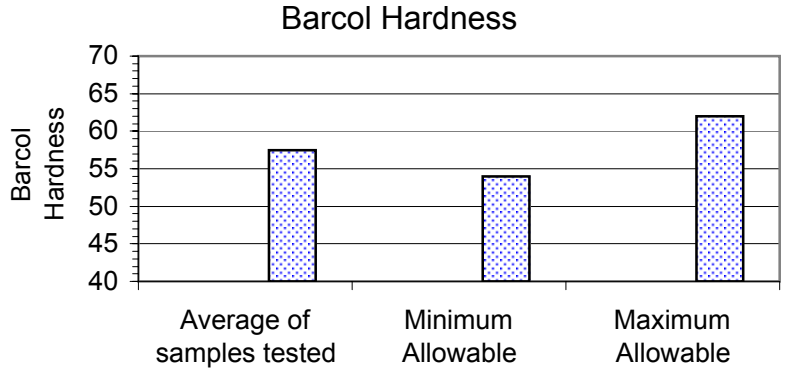
Test Specification	MIL-P-85891A dated 1 April 1992 with Amendment 2 dated June 26, 1998
Media Designation:	TYPE: VIII (Nano-composite), 30-60 mesh
Lot Number:	MGII-031008
Manufacturer:	U.S. Technology Corporation 220 Seventh Street, S.E. Canton, Ohio 44702
Report Date:	June 17, 2008

Material.

The finished product was tested to MIL-P-85891A paragraph 4.5.2. The infrared spectrogram obtained from the sample was similar to that presented in Figure 8 of the specification for Type VIII (Nano-Composite). All band locations are present however intensity ratios differ from those found in the a reference spectrum provided by U.S. Technology.

Hardness of Plastic Stock - MIL-P-85891A test paragraph 4.5.1.

Barcol hardness test per ASTM D 2583.							
Sample #1		Sample #2		Sample #3		Sample #4	
Test Number	Barcol Hardness	Test Number	Barcol Hardness	Test Number	Barcol Hardness	Test Number	Barcol Hardness
1	53	11	65	21	61	31	57
2	53	12	62	22	60	32	60
3	53	13	61	23	58	33	60
4	52	14	61	24	57	34	58
5	52	15	60	25	60	35	58
6	53	16	62	26	59	36	57
7	53	17	60	27	55	37	57
8	53	18	61	28	59	38	54
9	52	19	62	29	57	39	55
10	52	20	64	30	58	40	56
Average	53		62		58		57
Average of samples tested							58
Minimum Allowable							54
Maximum Allowable							62



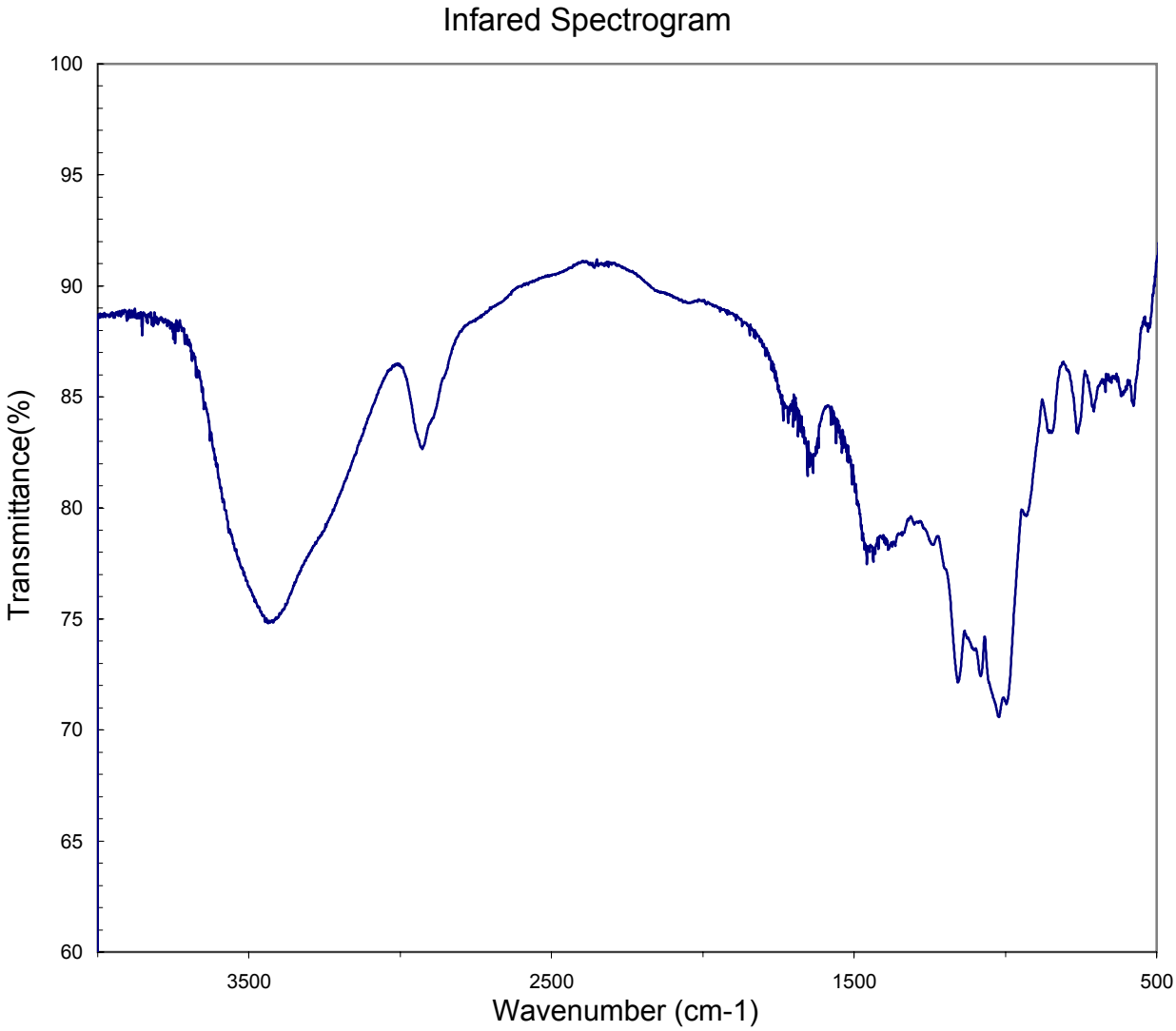
FIRST ARTICLE INSPECTION TEST RESULTS (CONTINUED)

Color (visual observation).

Plastic media was observed to be multicolored, primarily darker colors, including black, white, red, green, blue, tan, orange, brown and other.

Infrared spectrogram - MIL-P-85891A test paragraph 4.5.2.

The finished product was tested to MIL-P-85891A paragraph 4.5.2. The infrared spectrogram obtained from the sample and presented below was similar to an iinfrared spectrogram provided by U.S. Technology for Type VIII (Nano-composite). All band locations are present however intensity ratios differ from those found in the reference spectrum provided by U.S. Technology.



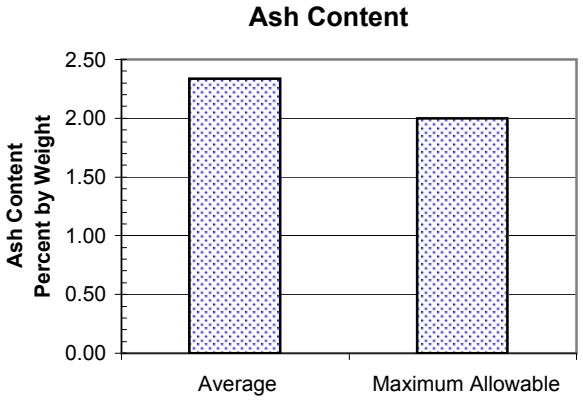
FIRST ARTICLE INSPECTION TEST RESULTS (CONTINUED)

Chlorine - MIL-P-85891A test paragraph 4.5.3.

Test Result: Trace
Requirement: Trace

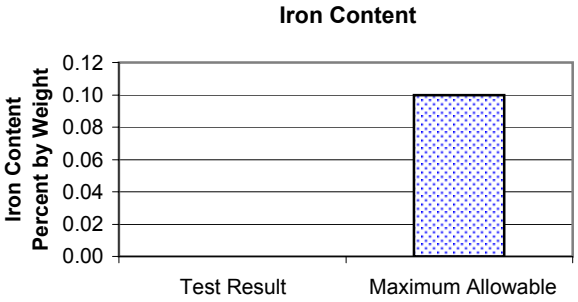
Ash Content - MIL-P-85891A test paragraph 4.5.4.

Weight				Percent
Initial Crucible	Media	Crucible + Ash	Ash	Ash
9.2208	3.6748	9.3065	0.0857	2.33
9.8256	3.5882	9.9107	0.0851	2.37
9.0185	3.7839	9.1055	0.0870	2.30
Average				2.33
Maximum Allowable				2.00



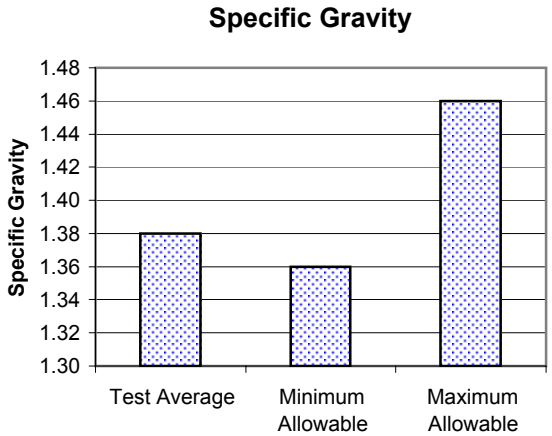
Iron Content - MIL-P-85891A test paragraph 4.5.4.1.

Test Result 0.00 percent by weight
Maximum Allowable 0.1 percent by weight
Iron measured at 62.4 ppm.



Specific Gravity - MIL-P-85891A test paragraph 4.5.5.

Specimen Number	Weight, gm (a) in Air	(b) in Butyl	(w) in Butyl	Specific Gravity
UST-VIII-1	21.08	6.76	0.00	1.19
UST-VIII-2	67.65	27.27	0.00	1.36
UST-VIII-4	25.49	11.57	0.00	1.48
UST-VIII-5	22.83	10.40	0.00	1.49
			Test	1.38
			Minimum Allowable	1.36
			Maximum Allowable	1.46

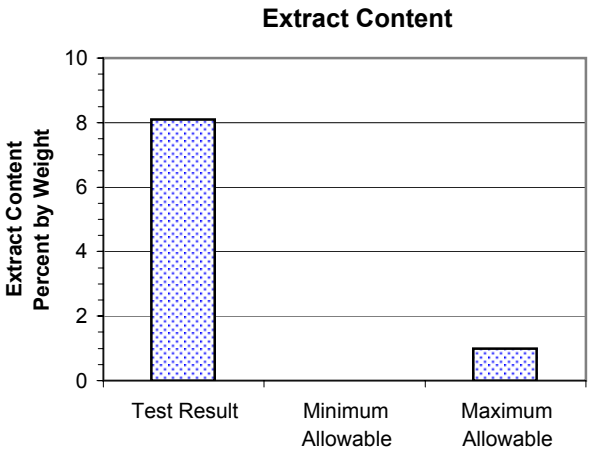


a = Apparent weight of specimen without wire or sinker in air.
b = Apparent weight of specimen (and sinker if used) completely immersed and of the wire partially immersed in liquid.
d = Specific gravity of immersion liquid at 23 +/- 0.5 °C (73.4 +/-1.0 °F). Butyl alcohol specific gravity = 0.81.
w = Apparent weight of totally immersed sinker (if used) and of partially immersed wire.
Specific Gravity = (a x d) / (a + w - b).

FIRST ARTICLE INSPECTION TEST RESULTS (CONTINUED)

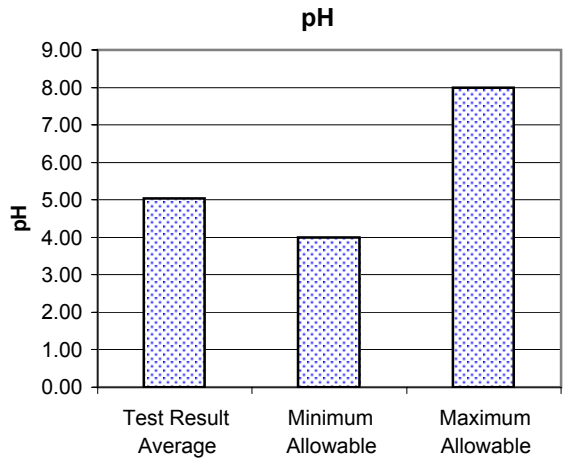
Extract Content - MIL-P-85891A test paragraph 4.5.6.

Test Result	8.1	percent by weight
Minimum Allowable	0.0	percent by weight
Maximum Allowable	1.0	percent by weight



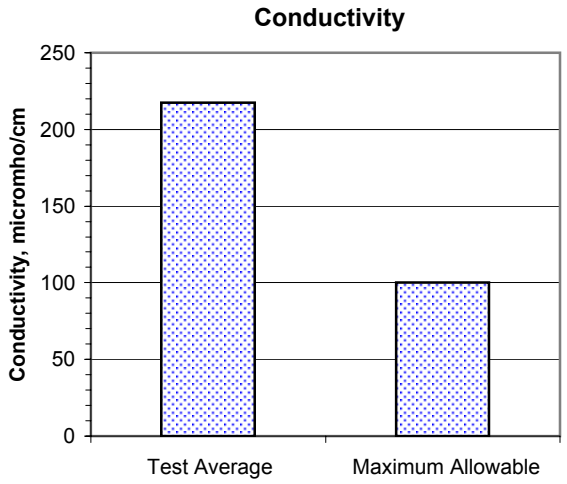
pH - MIL-P-85891A test paragraph 4.5.7.

Test Result #1	5.13
Test Result #2	4.96
Test Result Average	5.05
Minimum Allowable	4
Maximum Allowable	8



Conductivity - MIL-P-85891A test paragraph 4.5.7.

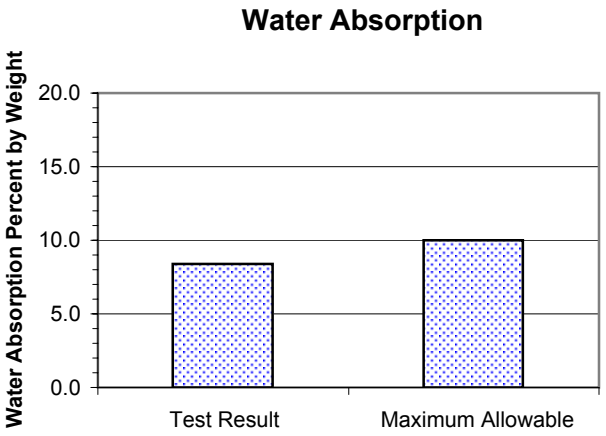
Test Number 1	200	micromho/centimeter
Test Number 2	235	micromho/centimeter
Test Average	217.5	micromho/centimeter
Maximum Allowable	100.0	micromho/centimeter



FIRST ARTICLE INSPECTION TEST RESULTS (CONTINUED)

Water Absorption - MIL-P-85891A test paragraph 4.5.8.

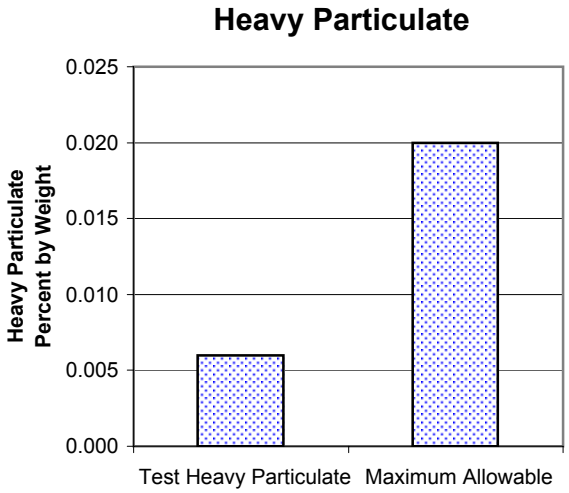
Test Result	8.4	percent by weight
Maximum Allowable	10.0	percent by weight



Heavy Particulate - MIL-P-85891A test paragraph 4.5.9.

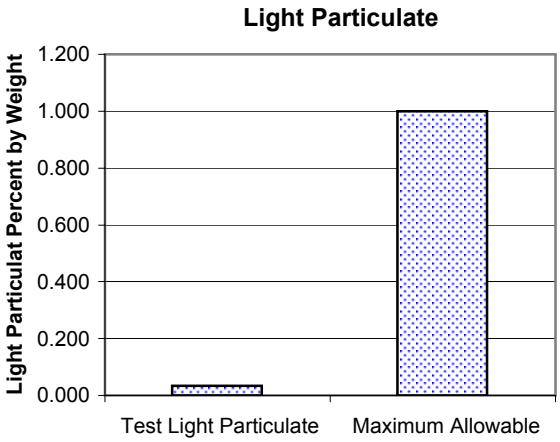
Solution Specific Gravity	1.62	
Initial Sample Weight	100.0	gm
Test Heavy Particulate Weight	0.006	gm
Test Heavy Particulate	0.006	percent
Maximum Allowable	0.02	percent

Heavy particulates were similar in appearance to media and were white and tan colored.



Light Particulate - MIL-P-85891A test paragraph 4.5.9.

Solution Specific Gravity	1.00	
Initial Sample Weight	100.0	gm
Test Light Particulate Weight	0.0340	gm
Test Light Particulate	0.034	percent
Maximum Allowable	1.00	percent

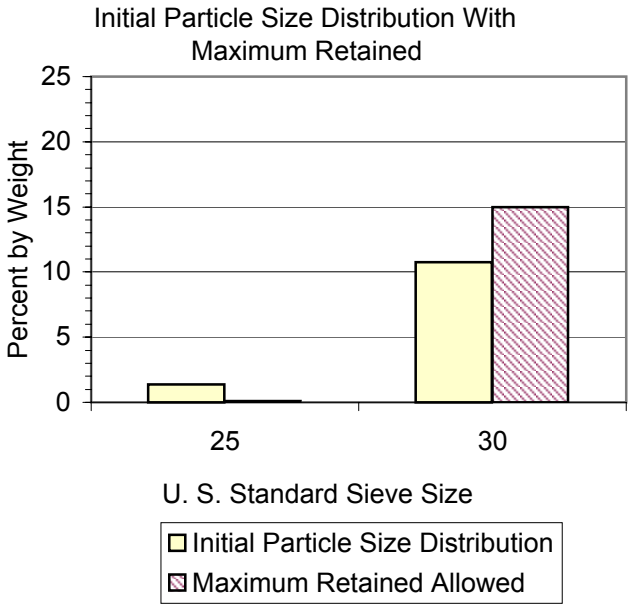


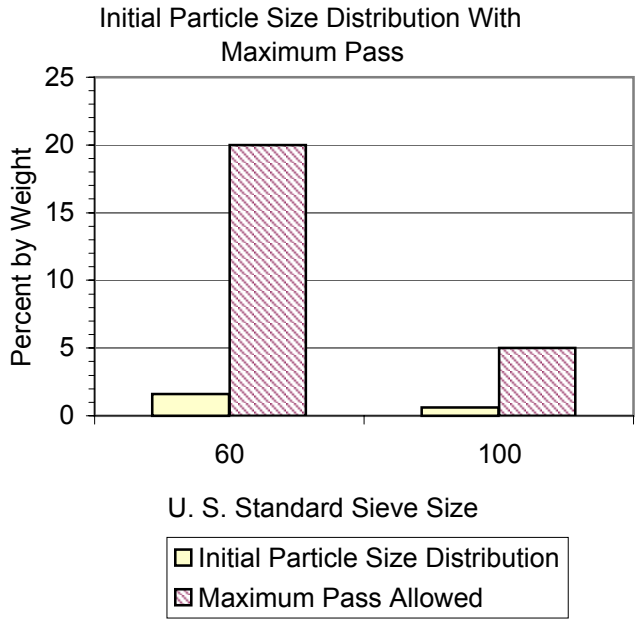
FIRST ARTICLE INSPECTION TEST RESULTS (CONTINUED)

Initial Particle Size Distribution - MIL-P-85891A Test Paragraph 4.5.10.

Sieve Mesh Size1	Weight, gm: Sieve or Pan With Media1	Weight, gm: Empty Sieve or or Pan1	Weight, gm: Media	Percent by Weight
16	435.9	435.9	0.0	0.0
20	398.9	398.9	0.0	0.0
25	448.9	447.5	1.4	1.4
30	403.5	392.7	10.8	10.7
40	445.2	377.5	67.7	67.3
60	374.7	356.2	18.5	18.4
100	361.5	359.9	1.6	1.6
Pan	372.5	371.9	0.6	0.6
		Total	100.6	100.0

1. U. S. Standard Screen Size.

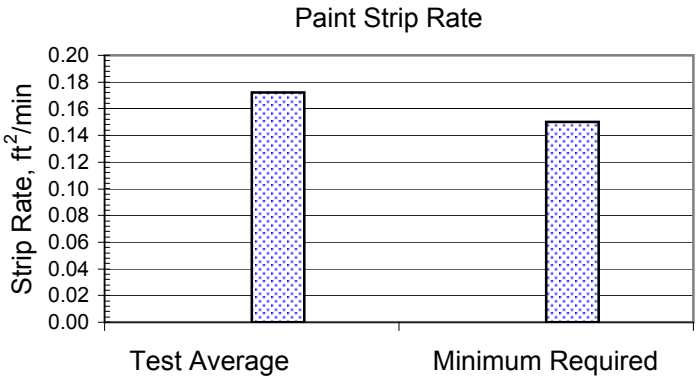




FIRST ARTICLE INSPECTION TEST RESULTS (CONTINUED)

Paint Strip Rate - MIL-P-85891A test paragraph 4.5.11.1.

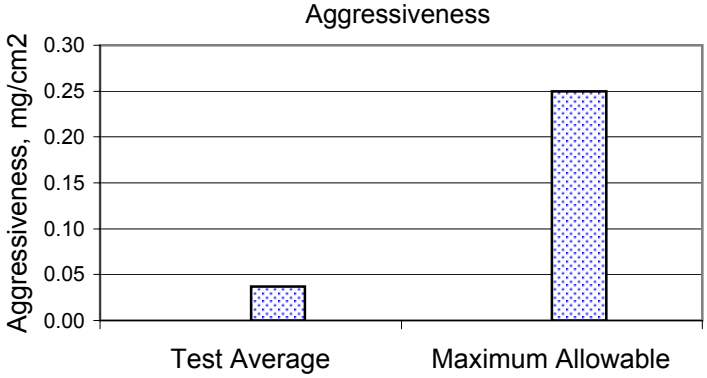
Test Panel Number	Paint Removal Area, ft^2	Removal Time, sec	Paint Removal Rate, ft^2/min
UST-VIII-1	0.5	165	0.18
UST-VIII-2	0.5	185	0.16
		Test Average	0.17
		Minimum Required	0.15



Aggressiveness - MIL-P-85891A test paragraph 4.5.11.2.

Specimen Number	Weight, gm			Aggressiveness mg/cm^2
	Initial	After 4 Cycles	Loss	
UST-VIII-1	2.0197	2.0194	0.0003	0.04
UST-VIII-2	2.0402	2.0399	0.0003	0.04
UST-VIII-3	2.0269	2.0267	0.0002	0.03
		Test Average		0.04
		Maximum Allowable		0.25

Test specimen surface area = 0.75 in X 1.5 in = 1.125 in^2 = 7.258 cm^2
Aggressiveness = Weight loss(mg) / surface area(cm^2)



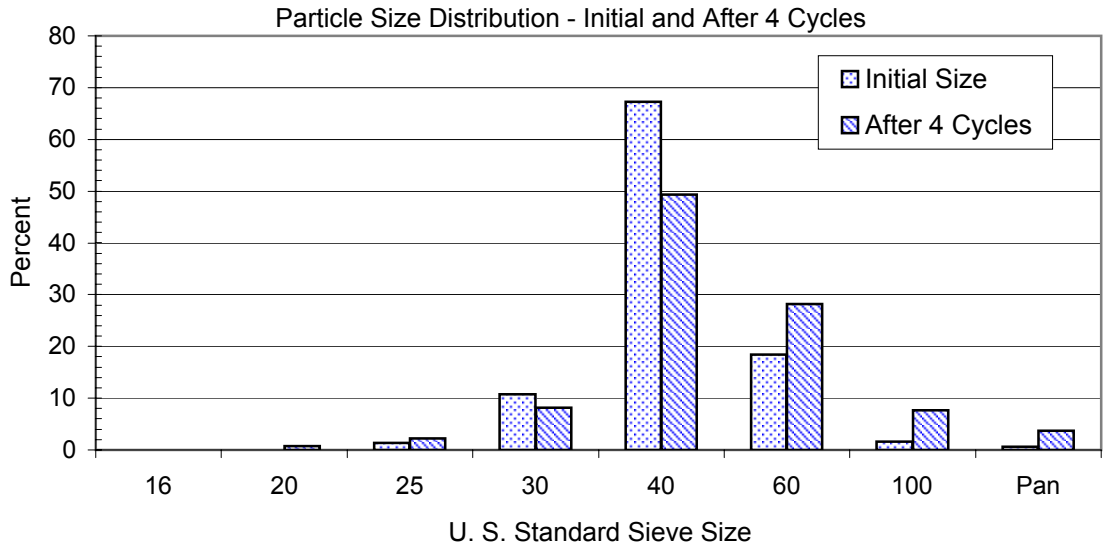
FIRST ARTICLE INSPECTION TEST RESULTS (CONTINUED)

Product Consumption - MIL-P-85891A test paragraph 4.5.11.3

Test Parameters:			
	Nozzle Pressure =	30	psi
	Nozzle Distance from Substrate =	10	in.
	Nozzle Angle (from horizontal) =	80	degrees
	Nozzle Diameter =	1/4	in.
	Metering Orifice Diameter =	9/16	in.
	First Cycle Blast Time =	102	sec
	Media Recovered After Second Cycle =	9.56	lb.
	Media Flow Rate =	337	lb/hr

Particle Size After 4 Blast Cycles				
	Weight, gm			
Sieve Mesh Size1	Sieve or Pan With Media1	Empty Sieve or or Pan1	Media	Percent by Weight
16	435.9	435.9	0.0	0.0
20	399.6	398.9	0.7	0.8
25	449.5	447.5	2.0	2.2
30	400.0	392.7	7.3	8.1
40	421.9	377.5	44.4	49.4
60	381.5	356.2	25.3	28.1
100	366.8	359.9	6.9	7.7
Pan	375.2	371.9	3.3	3.7
		Total	89.9	100.0

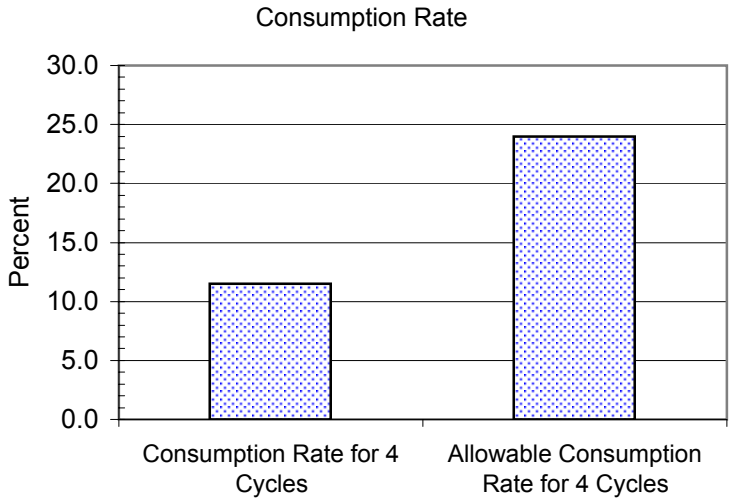
1. U. S. Standard Screen Size.



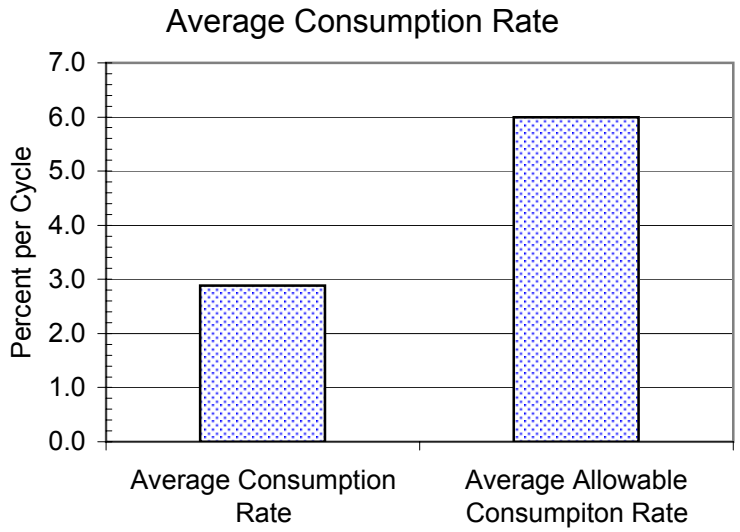
FIRST ARTICLE INSPECTION TEST RESULTS (CONTINUED)

PRODUCT CONSUMPTION CALCULATION
(Product Rretained on 50 Mesh Sieve)

C = Initial Media Sample Size =	10.00	lb
R = Media Recovered After 4th Cycle =	9.76	lb
a = Percent Media Retained on 50 Mesh Sieve =	97.8	percent
b = Percent Media Retained on 50 Mesh Sieve After 4 Cycles =	88.7	percent
Consumption Rate for 4 Cycles = (1 - R x b / (C x a)) x 100 =	11.5	percent
Allowable Consumption Rate for 4 Cycles =	24	percent



Average Consumption Rate = (C x a - R x b) / (4 x C x a) x 100 =	2.9	percent/cycle
Average Allowable Consumption Rate =	6	percent/cycle



Particle Size Allowables

Reference MIL-P-85891A, Table II
(Amendment 3)

Sieve Size1	Maximum Allowable Retain
- - -	- - -
20	- - -
25	0.1
30	15
40	- - -
60	- - -
80	- - -
100	- - -
Pan	- - -

Sieve Size1	Maximum Allowable Pass
- - -	- - -
20	- - -
25	- - -
30	- - -
40	- - -
60	20
80	- - -
100	5.0
Pan	- - -

MIL-P-85891A Plastic Media Physical and Chemical Property Allowables (Amendment 3)

Physical or Chemical Property	I Polyester	II Urea Formaldehyde	III Melamine Formaldehyde	IV Phenol Formaldehyde	V Acrylic Thermoplastic	VI Poly Allyl Diglycol Carbonate Thermoset	VII Starch-g-Acrylic	VIII Nano-Composite
Barcol Hardness Range	34 to 42	54 to 62	64 to 72	54 to 62	46 to 54	30 to 40	- - -	54 to 62
Barcol Hardness (Minimum)	34	54	64	54	46	30	- - -	54
Barcol Hardness (Maximum)	42	62	72	62	54	40	- - -	62
Shore D Hardness Range	- - -	- - -	- - -	- - -	- - -	- - -	72 to 79	- - -
Shore D Hardness (Minimum)	- - -	- - -	- - -	- - -	- - -	- - -	72	- - -
Shore D Hardness (Maximum)	- - -	- - -	- - -	- - -	- - -	- - -	79	- - -
Chlorine	Trace	Trace	Trace	Trace	Trace	Trace	Trace	Trace
Ash Content (Max.% by weight)	1.0	2.0	2.0	2.0	0.5	0.5	1.0	2.0
Iron Content (Max. % by weight)	0.05	0.10	0.10	0.10	0.05	0.05	0.05	0.10
Specific Gravity Range	1.15 to 1.25	1.47 to 1.52	1.47 to 1.52	1.47 to 1.52	1.10 to 1.20	1.28 to 1.33	1.38 to 1.43	1.36 to 1.46
Specific Gravity (Minimum)	1.15	1.47	1.47	1.47	1.10	1.28	1.38	1.36
Specific Gravity (Maximum)	1.25	1.52	1.52	1.52	1.20	1.33	1.43	1.46
Extract Content Range (% by weight)	0.0 to 5.0	0.0 to 1.0	0.0 to 1.0	0.0 to 1.0	95.0 to 100.0	0.0 to 1.0	5.0 to 10.0	0 to 1.0
Extract Content (Min. % by weight)	0.0	0.0	0.0	0.0	95.0	0.0	5.0	0.0
Extract Content (Max. % by weight)	5.0	1.0	1.0	1.0	100.0	1.0	10.0	1.0
ph of water extract range	4 to 8	4 to 8	4 to 8	4 to 8	4 to 8	4 to 8	4 to 8	4 to 8
pH of water extract (Minimum)	4	4	4	4	4	4	4	4
pH of water extract (Maximum)	8	8	8	8	8	8	8	8
Conductivity (umho/cm. Maximum)	100	100	100	100	100	100	100	100
Water Absorption (Max.% by weight)	2.0	10.0	10.0	10.0	2.0	2.0	15.0	10.0
Heavy Particulates (Max. % by weight)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Light Particulates (Max. % by weight)	0.1	1.0	1.0	1.0	0.1	0.1	1.0	1.0
Paint Sripping Rate, ft^2/min	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Aggressiveness, mg/cm^2 (Maximum)	0.20	0.50	3.00	0.50	0.20	0.75	0.25	0.25
Consumption Rate, Avg. %cycle (Max.)	20	13	13	13	6	15	18	6
Consumption Rate, %/4 cycles (Max.)	80	52	52	52	24	60	70	24

MIL-P-85891A Plastic Media Blast Parameters

Physical or Chemical Property	I Polyester	II Urea Formaldehyde	III Melamine Formaldehyde	IV Phenol Formaldehyde	V Acrylic Thermoplastic	VI Poly Allyl Diglycol Carbonate Thermoset	VII Starch-g-Acrylic	VIII Nano-Composite
Nozzle Pressure, psi	50	25	25	25	30	25	45	30
Feed Rate, lb/hr	215 to 245	140 to 170	125 to 155	140 to 170	140 to 170	130 to 160	400 to 450	320 to 350
Feed Rate (Minimum), lb/hr	215	140	125	140	140	130	400	320
Feed Rate (Maximum), lb/hr	245	170	155	170	170	160	450	350

Type VIII test feed rate was determined based on a 30 psi nozzle pressure and flow rate providing a strip rate greater than or equal to 0.15 ft^2/min. Minimum and maximum feed rate to be determined.