

To: Top Flight Supplies

7839 S. Peoria Street Englewood, CO 80112

From: Aerospace Testing Services

a Division of Taylor Technology Company LLC

3450 N. Rock Rd., #302 Wichita, KS 67226

Subject: Project ATS00400_oo: Boeing D6-17487T Testing Results of Platinum Ceramic Coating

To whom it may concern,

Attached hereto are the results for the aforementioned project for which ATS tested Platinum Ceramic Coating for requirements of specification furnished to ATS. The results pertain to the articles provided to ATS for testing and do not constitute batch-to-batch results.

The material met the requirements, specified and supplied by the customer, contained in Boeing D6-17487T for which it was evaluated. The material supplied, Platinum Ceramic Coating, performed well in all tests and results are given in Appendix A.

Please advise if you have any questions or need additional information that is not provided in this report. You can reach me at 316.461.1274 cell, 316.440.9998 office, or email at the following address info@aero-testing-services.com.

Warmest Regards,

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J. Marc Taylor, Manager Aerospace Testing Services



Appendix A: Test Results
Platinum Ceramic Coating – Customer Supplied Sample



Sandwich Corrosion Test per ASTM F1110 -

Criteria - no more than 5% of the surface area shall be corroded.

Sandwich Material A – Clad 7075-T6 Aluminum (AMS 4049)

Control

Specimen #1 – F1110 Rating 4 – discoloration and >25% Corrosion Specimen #2 – F1110 Rating 4 - discoloration and >25% Corrosion

Test Material

Specimen #1 – F1110 Rating 1 – discoloration, no corrosion Specimen #2 – F1110 Rating 1 – discoloration, no corrosion

Sandwich Material B - Bare 7075-T6 Aluminum (AMS 4045) Anodized BAC 5019 TY 3 Seal

Control

Specimen #1 – F1110 Rating 1 – discoloration, no corrosion Specimen #2 – F1110 Rating 1 – discoloration, no corrosion

Test Material

Specimen #1 – F1110 Rating 1 – discoloration, no corrosion Specimen #2 – F1110 Rating 1 – discoloration, no corrosion

Acrylic Crazing Test per ATSM F484

Criteria - shall nor craze or crack acrylic test specimens when under load for 8 hours.

Stretched Acrylic Plastic IAW Mil-P-25690 Stressed to 4 500 psi

Specimen #1 – No Crazing, cracking, of loaded acrylic plastic during 8 hr. duration. Specimen #2 – No Crazing, cracking, of loaded acrylic plastic during 8 hr. duration

Paint Softening Test per ASTM F502 (pencils)

Criteria – exposed specimen shall not have a pencil rating less than unexposed specimen.

BMS 10-79 Specimens

Pencil Hardness prior to Application - HB/F

Pencil Hardness post Exposure – HB/F – no change

BMS 10-60 Specimens

Pencil Hardness prior to Application – HB/F

Pencil Hardness post Exposure - HB/F - no change

Hydrogen Embrittlement Test per ASTM F519 Type 1C (ref. 72316)

 ${\it Criteria-no\ rupture\ of\ specimen\ under\ load\ of\ 45\%\ NFS\ load\ for\ 150\ hours.}$

Specimen #1 – no failure

Specimen #2 – no failure

Specimen #3 – no failure

Specimen #4 – no failure