

Test Profile & Summary

TCB – 107 - Ceramic Metallic Coating

An Independent test was performed comparing Zoofactory's TCB-107 to another major manufacturer's similar advertised product. Both coatings were applied using the same application methods. Traditionally, salt spray tests for metallic ceramic coatings have been terminated at 5000 hours. TCB-107 has passed this test at 5000 hours several times. In this test the purpose was to run the test until one of the products failed. The photos on the following page show each coating at 1000, 2000, 4000 and 6524 hours (test terminated), respectively. The test plate identified as "A2" is the competitive material and the plate identified as "C2" is TCB-107. The competitive product started failing at 4000 hours.

- Salt Spray testing was conducted using ASTM Standard B 117 this consists of a continuous spray of saltwater at a 5% concentration. The water is heated to 100F. The test coupons are cold rolled steel and have had a line scratched through the coating to bare metal. The coated test coupons are evaluated periodically to see if any rust is penetrating the coating, developing in the scratched area or is creeping in from the exposed edges of the test coupons.
- Red rust is the culprit and is evident in the photos as a brown/red stain. The white areas on the coupons are areas of the surface that oxidized. This is typical for an aluminum filled coatings such as these and is not an area of concern. Red rust is the problem, as any significant amount indicates a failure of the coating to protect the substrate.

PRODUCT DESCRIPTION:

TCB-107 is a metallic ceramic coating capable of providing extremely high levels of corrosion and chemical protection in very thin films. (The better the shine the better the corrosion resistance) When applied directly on an exhaust system TCB-107 will withstand substrate temperatures of over 1300F. With the addition of a base coat applied under TCB-107 the product can handle temperatures over 1600F. Additionally, direct flame will not cause delaminating as long as substrate temperatures do not exceed this temperature. Due to its unique ceramic nature, the coating also functions as a very effective thermal barrier, with reduced thermal radiation characteristics. Often a reduction up to 30% in surface temperature is achieved over non-coated exhaust systems. TCB-107 can be applied to all metals except Magnesium.

TCB-107 when applied by Zoofactory Coatings will not chip, crack or peel. Because of an exceptionally hard near chrome-like "HyperShine" coated surface. A full description of Standards used as base line tests performed on TCB-107 and all other Zoofactory Coatings can be found by requesting a copy of SPEC2005.

***Qualified to Ford Motor Co. Specification WSA-M2P170**

Test Profile & Summary – cont.



A2

E
X
C
E
L
L
E
N
T



C2

E
X
C
E
L
L
E
N
T



A2

G
O
O
D



C2

E
X
C
E
L
L
E
N
T



A2

P
O
O
R



C2

E
X
C
E
L
L
E
N
T



A2

F
A
I
L
E
D



C2

E
X
C
E
L
L
E
N
T