

## THERMAL BARRIER RESULTS FOR HIGH TEMP BROWN TESTING

Customer: N/A

Material: CERAKOTE HIGH TEMP BROWN

Date: 07/25/12

## **Test Summary:**

The exhaust system simulator was operated to simulate how a Cerakote High Temp Brown would perform on a fully automatic suppressor. In order to determine the performance, NIC Industries, Inc, tested 2 panels fastened to the top of the exhaust system (Figure 1), noting surface temperature and any coating or color changes. To simulate performance, the exhaust system was to be held at temperatures between 800 - 1000 °F. The panels were blasted using 100 grit garnet sand. Next, the panels were coated with a Cerakote High Temp Brown, and then cured in accordance with application guide specifications. The exhaust simulation was conducted in a semi - enclosed area with little external air influence, with ambient temperatures of 90 °F.

## **Test Results:**

During the simulation the panels were heated from the inside out at temperatures between 950 - 1050 °F. The surface of the coating was measured to be between 220 - 250 °F during the simulation. Absolutely no coating degradation or color change was noted (Figure 2 and 3).

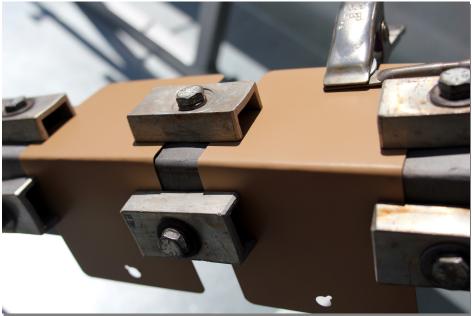


Figure 1. High Temp Brown before going through the exhaust system simulator.



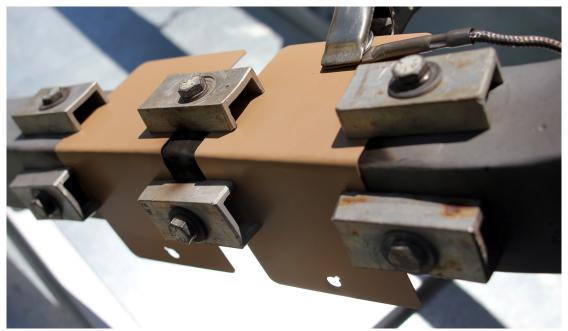


Figure 2. High Temp Brown after going through the exhaust system simulator.



Figure 3. High Temp Brown, comparing before and after going through the exhaust system simulator.

**Divisions of NIC:** Prismatic Powders, Cerakote<sup>™</sup>, Prismatic Liquids, Thermo Dyne