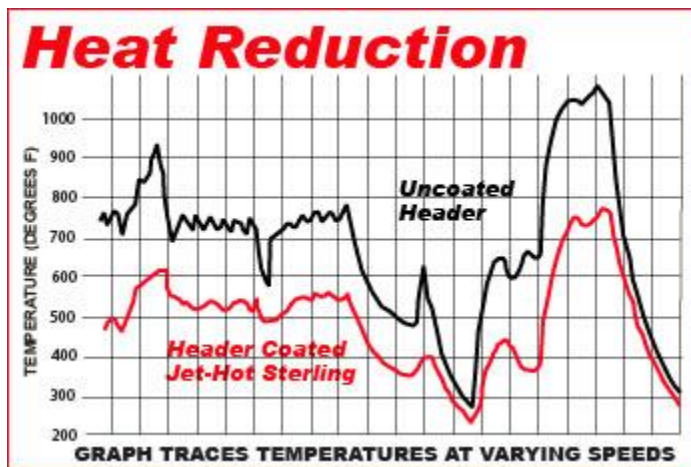




TECHNICAL INFORMATION

The test results shown are based on the performance of **JET-HOT Sterling™**. Other **JET-HOT® Coatings**, formulated for aerospace, marine and higher temperature applications exceeding 700°C (1,300°F), may have different characteristics. Please check with a Technical Representative for additional information.

Because of its low emissivity and insulating effect, **JET-HOT Sterling** creates a thermal barrier to protect headers - inside and out - while reducing heat transfer into the engine compartment. But the good news goes beyond protecting headers from thermal fatigue. Plugs, wires, fan motors, water pumps and other heat-sensitive parts get a break, too, in a cooler environment. Plus, power normally increases and safety for racers improves with lower temperatures.



The graph shown to the left, developed independently by a major US automobile manufacturer, shows just how effectively **JET-HOT Sterling** beats heat. The company's engineering team was astounded by temperature reductions exceeding 150°C (300°F) when **JET-HOT Sterling** was applied to standard exhaust components. **Car Craft** also took a cool breath, after measuring temperature reductions of over 60% on header surfaces

following the application of **JET-HOT**.

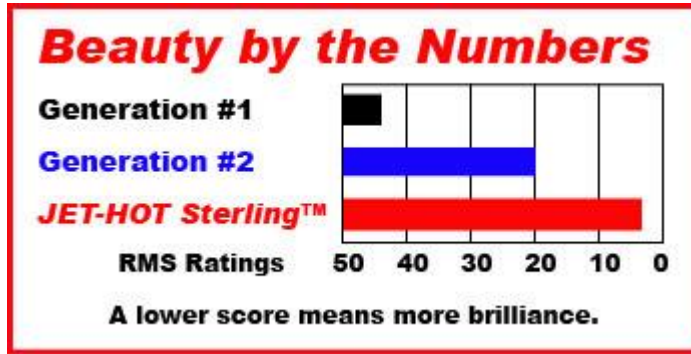


Horsepower gains depend on many variables, including engine size, type and setup; cooling system performance; ambient temperatures; and other factors.

Nevertheless, **JET-HOT Sterling** will normally boost power when applied to headers for two reasons. First, the coating promotes denser, more potent fuel/air charges by insulating the engine bay from exhaust heat. At the same time, it accelerates the pulsed-vacuum effect on "tuned" headers, resulting in more effective scavenging of cylinders. The increased velocity of exhaust gases produced by higher exit inertia not only clears each cylinder more quickly; it also draws in the next fuel/air charge more efficiently.

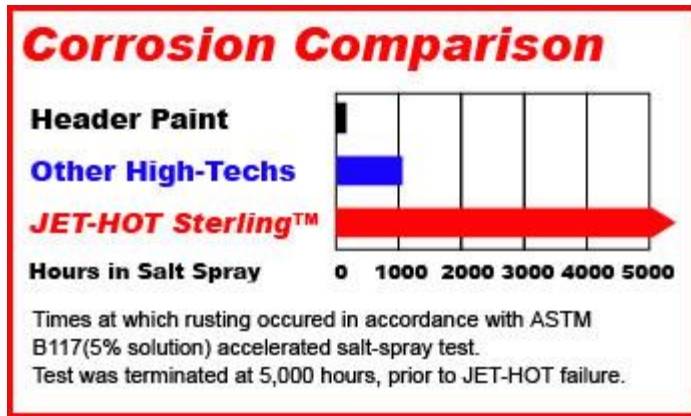


TECHNICAL INFORMATION



JET-HOT® Sterling™ provides lasting beauty. Its appearance shares the brilliance of chrome and the subtlety of nickel. Other metallic-ceramic coatings look dull in comparison. The RMS numbers (a measure of smoothness) shown to the left, demonstrate how far **JET-HOT** has jumped ahead of other coatings.

With the addition of silver powder to our exclusive formula, we have "beautified" our coatings by a factor of six on the RMS scale while improving performance.



The chart to the left provides a comparison between **JET-HOT** and alternative methods for retarding rust. Quoting *Car Craft* (August 2002): "Anyone who still runs painted headers is a flake!" The chart shows why. At the same time, some producers of "high-tech" coatings actually promote 1,000 hour survival in this salt-spray test as a benefit. In startling contrast, **JET-HOT Sterling™** withstands the same salt attack for over 5,000

hours. The testers called it quits before Sterling caved in.



JET-HOT increases the endurance limit (fatigue strength) of most alloys subjected to stress loads, such as vibration produced by an engine, after exposure to high temperatures. In addition, **JET-HOT** does not contribute to hydrogen embrittlement, a condition associated with chrome and other coatings in

which microscopic cracking can lead to premature and sudden part failure. The comparison to the left represents the average performance of 403 stainless steel, uncoated and coated with **JET-HOT**, after 10-million stress cycles. The results demonstrate how effectively **JET-HOT** protects substrates from thermal fatigue.