

Ceral 34

Ceramic Aluminum Basecoat

PRODUCT DESCRIPTION

Ceral 34 is an inorganic ceramic aluminum coating consisting of very fine aluminum powder suspended in a chromate/phosphate binder. It is used primarily as a corrosion- and erosion-resistant coating on steel parts operating in environments up to 1100° F (593° C). It is normally applied by conventional spray techniques, although brushing and dipping are also

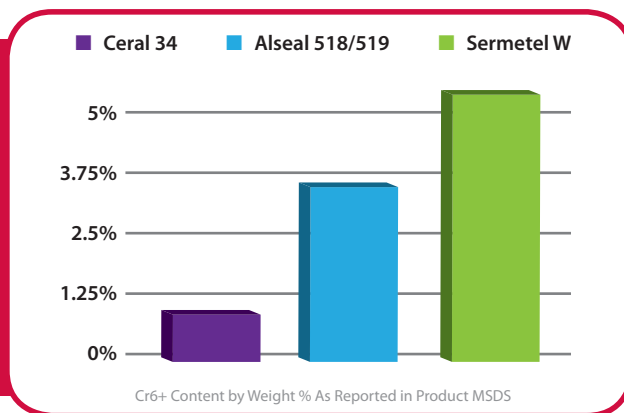
allowing the coating to be easily stripped without degradation of the substrate. It is resistant to hydraulic fluids, fuel and hot water, and is highly resistant to thermal shock and impact damage. The cured coating may be sealed by the application of a secondary product, Ceral 50, for the purpose of both improving corrosion resistance and extending the life of the

coating. (See our Ceral 50 Bulletin for additional information.)

therefore no capital expense or retraining is required.

YEARS IN SERVICE

The U.S. government embarked upon a three-year program to evaluate Ceral 34. As a result of its successful qualification in 2008, Ceral 34 has been used exclusively to coat Pratt & Whitney F-100 and TF-33 engine components as used in F-15, F-16, B-52 and E-3 aircraft.



DROP-IN REPLACEMENT

Ceramic aluminum coatings have been used for decades on steel components to maximize life and efficiency.

possible. Coated components are dried and furnace-cured in order to fuse the binder and form a homogenous coating. The coating provides a barrier between the substrate and the environment, and can be made conductive to provide galvanic and sacrificial protection. It is an overlay coating relying on physical and chemical bonding for adhesion. There is no metallurgical bond, thus

Until the invention of Ceral 34, coating systems employed high levels of chromium as a means of retarding corrosion. Ceral 34 is the first low-chromium ceramic aluminum coating proven to surpass the performance of legacy coatings. It performs equal to or better than both Sermetel W and Sermetel 5380DP. Ceral 34 is a drop-in replacement for legacy coatings,

ENVIRONMENTAL HEALTH & SAFETY

There has been a global effort to reduce worker exposure to carcinogenic hexavalent chromium. In addition to the health benefits, reducing hexavalent chromium in the workplace reduces the amount of time and expense associated with EPA, OSHA and NIOSH reporting. Ceral 34 contains a fraction of the hexavalent chromium content of its competition. Many companies mandate the minimization or elimination of the use of hexavalent chromium where proven substitutes such as Ceral 34 are available.