

General Description:

This is an improved version of HVOF Chromium Carbide coating than MOGAS standard HVOF Chrome Carbide coating for severe service when higher hardness is desired. Its higher hardness is derived from higher Chromium Carbide content and lower Nickel-Chromium binder content. Hardness is generally maintained at elevated temperature. Porosity is typically $\frac{1}{2}$ %, which serves to provide some corrosion protection for the base metal. However, long-term corrosion resistance requires a corrosion resistant base metal be selected. Although the mechanical bond of this coating is suitable for extremely high temperature, its thermal shock resistance is sacrificed compared with MOGAS standard HVOF Chrome Carbide due to reduced binder content in the coating.

Application Method:

High Velocity, Oxygen Fueled

Typical Chemistry:

Carbon	10%
Chromium	Balance
Nickel	17%

Typical Mechanical Properties:

Hardness	>850 HV average
Finished Thickness	0.003" to 0.008"
Porosity	1% maximum
Useful Temperature	> 1450°F (788°C)
Bond Strength	> 10,000 psi



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