

TRU TUNCARB HTC

TS METAL COATING TECHNOLOGY FOR EXTREME HI-TEMP/CORROSION

• Composition	ZrO ₂ , Y ₂ O ₃
• Macro hardness	45 Rc
• Cross-Sectional Hardness (DPH 300)	600
• Coating Density	5.1 grams/cc
• Bond Strength	7000 psi
• Thickness Limit	None
• Thermal Conductivity	0.5 BTU/Hr/Ft ² /°F/Ft

NOTE: Specific chemistry applies to **TRU TUNCARB HTC**, Zirconium Oxide application only.

TRU TUNCARB HTC metal coating protection containing Zirconium Oxide is recommended as a corrosion resistant wear facing for operation at higher temperatures where thermal insulation and thermal shock properties are of value. Yttrium stabilization enables this material to operate at temperatures above 1800°C by eliminating the likelihood of phase transformation as the coating passes through a critical temperature. These coatings have good corrosion resistance at these temperatures and are very useful in applications involving corrosive gaseous media.

TRU STEEL METALS takes its understanding of equipment parameters and component wear to achieve a successful outcome and quality parts for your specific applications. This particular composition was developed to be refractory by nature. Experience indicates that this material is unique in its insulative properties and in the retention of hardness at high temperatures. Typical applications include thermal insulation coatings for refractory heaters, thermal insulation coating and hot-press platens, heat insulation coating for transmissions and bearings, linings for equipment handling molten metals, thermal barrier coating for turbine blades, combustor liners for turbines and protective coatings for flame arrestors.

TRU TUNCARB HTC coatings have been utilized in a wide variety of applications with still many more uses to be discovered! Please contact your **TRU STEEL METALS** representative with any potential uses or inquiries you may have in relation to problem identification, selecting the appropriate coating type, field testing and implementation for your specific needs.