

# Hyperion Grade DZ05

## TUNGSTEN CARBIDE GRADE DZ05 FOR OIL & GAS APPLICATIONS

### High Velocity Fluid Flow in Dry and Wet Applications

#### Hyperion Grade DZ05 Benefits

- Best in class erosion and impact resistance
- Combined with high corrosion resistance.

#### Applications for Grade DZ05

Grade DZ05 has been successfully deployed in the following applications:

- Flow control choke trim assemblies
- Completion autonomous inflow control devices (AICDs)
- Completion flow trims
- Directional drilling tools such as measurement while drilling (MWD) components.



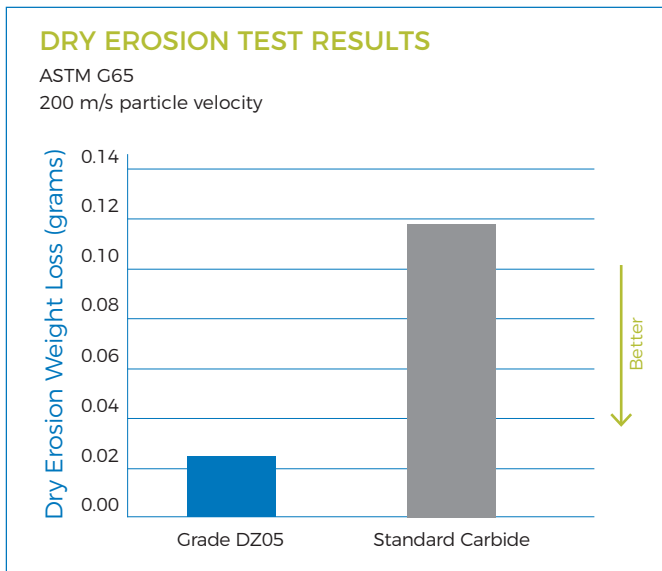
#### PHYSICAL AND MECHANICAL PROPERTIES

Hyperion Grade	Composition % by Weight		Average Carbide Grain Size ( $\mu\text{m}$ )	Density ( $\text{g}/\text{cm}^3$ )	Hardness at 20°C		Toughness	
	WC	Binder			HV30	HRA	$K_{1C}$ [Palmqvist] ( $\text{MPa}\cdot\text{m}^{1/2}$ )	TRS [3 point] (MPa)
DZ05	95	5	0.8	15.00	1950	93.5	9.5	3800

All data shown are typical values.

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### EROSION



### CORROSION

