

# Hyperion Grade DZ07

## TUNGSTEN CARBIDE GRADE DZ07 FOR OIL & GAS APPLICATIONS

### New High Performance Grade

#### Hyperion Grade DZ07 Benefits

- High erosion resistance and toughness combination
- Exceptional corrosion resistance
- Best cavitation resistance.

#### Potential Applications for Grade DZ07

- Flowback choke valve components
- Completion autonomous inflow control devices (AICDs)
- Intelligent completion sleeves
- Rotary steerable systems (RSS) bearing and bushing components
- Artificial lift bushings and sleeves
- Directional drilling tools such as measurement while drilling (MWD) components.



#### PHYSICAL AND MECHANICAL PROPERTIES

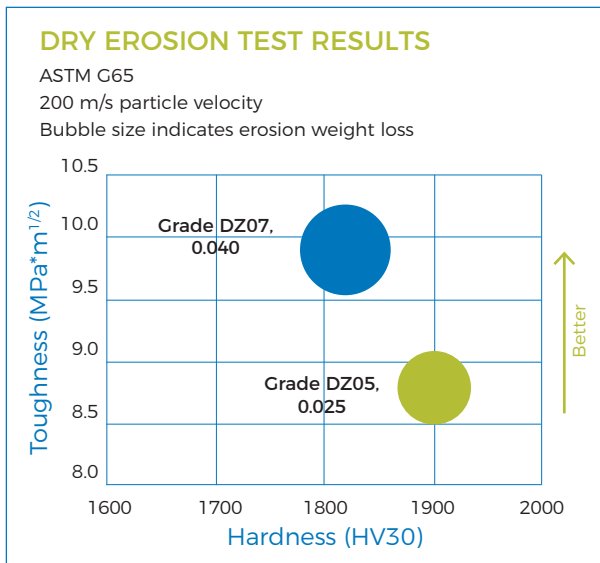
Hyperion Grade	Composition % by Weight		Average Carbide Grain Size (μm)	Density (g/cm <sup>3</sup> )	Hardness at 20°C		Toughness	
	WC	Binder			HV30	HRA	K <sub>1C</sub> [Palmqvist] (MPa*m <sup>1/2</sup> )	TRS [3 point] (MPa)
DZ07	93	7	1.0	14.7	1825	92.9	10	>3500

All data shown are typical values.

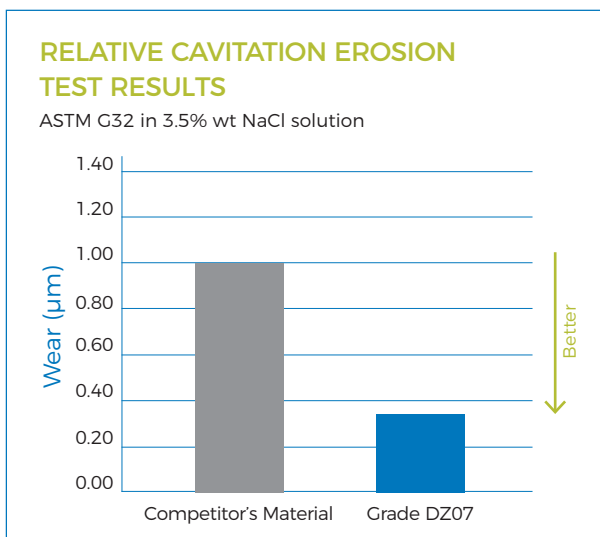
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### TOUGHNESS/EROSION COMBINATION



### CORROSION/EROSION COMBINATION



### CORROSION

