



**EXE0007**

## **TECHNICAL DATA SHEET**

<b>APPLICATION;</b>	<i>Ceramic Coating especially developed for Medium Temperature Environments with Excellent Fouling and Chemical Resistance.</i>
<b>COATING THICKNESS</b>	<i>Recommended; 100-150 Microns (4.90-5.90 Mils)</i>
<b>TEMPERATURE ENVIRONMENTS;</b>	<i>&lt; 450°C (850°F)</i>
<b>COLOR;</b>	<i>Black - Grey</i>
<b>COMPOSITION;</b>	<i>Boron Silicate</i>
<b>DATE;</b>	<i>21/02/2018</i>



	<b>Standard</b>	<b>Physical and Thermal Properties</b>
<b>Surface</b>		<b>Substrate; Carbon Steel and Austenitic Steel</b> <b>Good</b>
<b>Adherence</b>	<b>EN10209</b>	<b>Substrate; Carbon Steel and Austenitic Steel - Level 1</b>
<b>Coefficient of Thermal Conductivity</b>		<b>1,17 watt/m. deg. (at 40°C – 104°F)</b>
<b>Roughness</b>	<b>ISO4288</b>	<b>Ra – 0,35 µm // Rz – 1.84 µm.</b>
<b>Hardness</b>	<b>ASTM C 1327-03</b>	<b>680 HV ± 45 HV (59 HRC)</b> <b>Applying a force of 500mN load within 20 seconds.</b>
<b>Abrasion Test</b>	<b>EN ISO 5470-1</b>	<b>TABER - 10,000 Cycles – CS17 :</b> <b>2 mg.</b>
<b>Inner microstructure</b>		
<b>Water Pressure Cleaning Test</b>		<b>Pressure – 1.500 bar (21,755,00 psi)</b> <b><u>Nozzle – Rotating</u></b> <b>Result: NO DAMAGE on Ceramic Coating</b>
<b>Maximum Substrate Working Temperature</b>		<b>450°C // 842°F</b>
<b>Thermal Shock</b>	<b>Water quench from T<sup>a</sup> to water at 20°C</b>	<b>450°C - 842°F</b> <b>NO DAMAGE AFTER 100 CYCLES</b>

**Good Chemical resistance to Acids and Alkalis Compounds, excepted HF and (OH)Na.**  
**Specific chemical test can be carried out upon request.**