



## Technical specifications for plasma sprayed ThermoSlik™ coating

<b>Substrate</b>	Composite materials such as carbon fibre or glass re-enforced plastic Suitable high temperature plastics
<b>Bond coat</b>	Metallised or ceramic bond coat as determined by clients requirements
<b>Thickness of bond</b>	Min 20µm Max 50µm
<b>Ceramic material</b>	Proprietary mix of zirconia based ceramics.
<b>Ceramic thickness</b>	100-150µm depending on customer requirements and substrate geometry
<b>Total coating thickness</b>	No more than 200µm unless specified
<b>Coating mass</b>	0.6 – 0.75 kg/m <sup>2</sup>
<b>Ave. coating density</b>	~3800 - 4000 kg/m <sup>3</sup>
<b>Bond coat density</b>	~2400 - 3200 kg/m <sup>3</sup>
<b>Ceramic density</b>	~4500 kg/m <sup>3</sup>
<b>Surface texture</b>	Smooth to the touch Approximately 4-6 Ra
<b>Colour</b>	White
<b>Emissivity</b>	~0.2
<b>Reflectivity</b>	~80%
<b>Thermal conductivity</b>	~1.4w/m <sup>2</sup> K
<b>Electrical properties</b>	Dielectric under normal circumstances. For non-conductive coating use ceramic based bond coat
<b>Surface hardness</b>	11 on modified mhos scale
<b>Max. coating temp.</b>	1400°C (sintering will start ~1500°C) 250°C contact on PTFE
<b>Porosity of ceramic</b>	8 – 12 %
<b>Young's modulus</b>	28 -46 GPa
<b>Poisson's ratio</b>	0.24
<b>Non-stick surface layer</b>	PTFE