ThermaSiC
Silicon Carbide based powder for the thermal spray industry
- thermal spray of SiC made possible!
ThermaSiC – Silicon Carbide based powder for thermal spray

Seram Coating’s product ThermaSiC enables silicon carbide to be applied as a coating on a broad range of base materials for the very first time.

ThermaSiC provides superior coating performance in both highly corrosive and abrasive environments while operating at highly elevated temperatures in both atmosphere or vacuum. SiC is one of the worlds hardest materials and possesses a far lower density than any competing solutions such as WC (tungsten carbide).

Compared to vacuum deposition methods (PVD or CVD), the thermal spraying of ThermaSiC provides faster deposition rates with higher efficiency while significantly lowering application costs. ThermaSiC has been especially designed to be used with standard atmospheric thermal spray systems removing entirely the need for expensive vacuum chambers.

ThermaSiC is patent pending and owned by Seram Coatings AS it is currently being proven in pilot projects across several technologies and industries.

We are ready to supply material for tests and pilots and welcome a discussion based on your application needs.

Key properties of ThermaSiC thermal spray coatings:

- Superior corrosion and abrasion protection
- Superior performance at high temperatures
- Very high hardness
- Low weight
- High deposit efficiency (80%)
- Very dense (< 1%)
- Low surface roughness (< 4μ Ra as sprayed)
- Thin or Thick coatings (<50um to >5000um)

Seram Coatings is the only supplier of SiC-based thermal spray coatings.