



주식회사 세원하드페이싱

SEWON HARDFACING

Global Leader in Thermal Spray Coating

Machine
Tech.

Powder
Tech.



Coating
Tech.



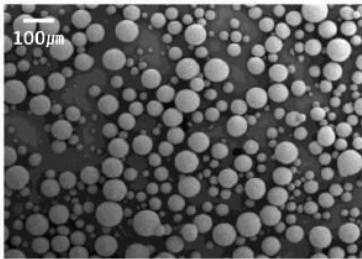
전라북도 전주시 덕진구 서귀로 183(여의동)

TEL 063-211-0828 / FAX 063-211-0829

Homepage www.sewon-hf.com

Thermal spray coating powder

YSZ



Properties

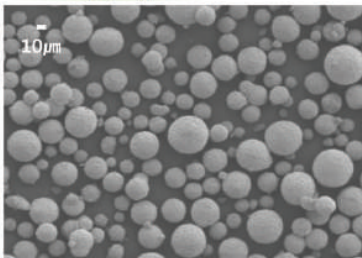
- Thermal barrier
- High thermal-shock resistance

Application



Gas turbines, Rocket

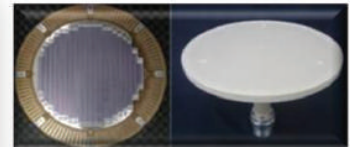
Al₂O₃



Properties

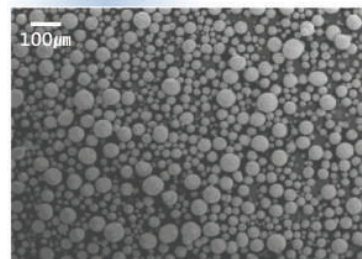
- High dielectric constant
- High thermal conductivity

Application



Electrostatic Chuck

YAG



Properties

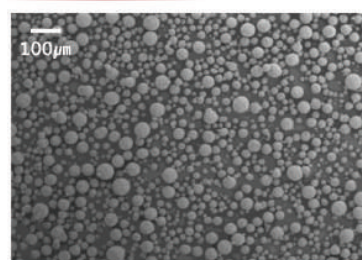
- Amorphous phase
- High adhesion strength

Application



Solar cells

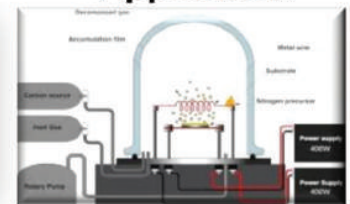
Y₂O₃



Properties

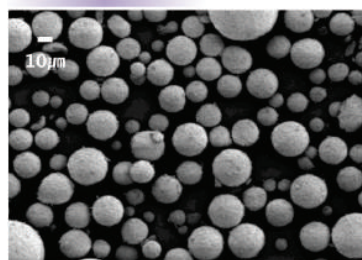
- High plasma etching resistance

Application



CVD, Etching

Mullite



Properties

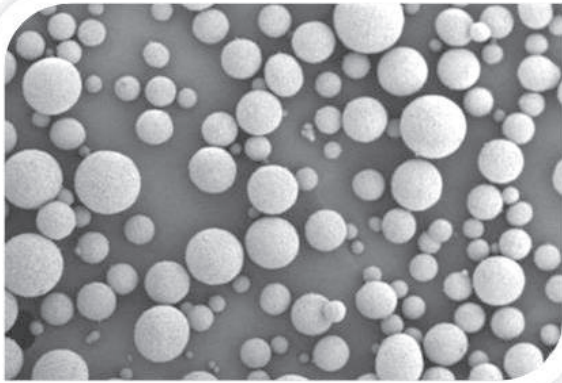
- Low coefficient of expansion

Application



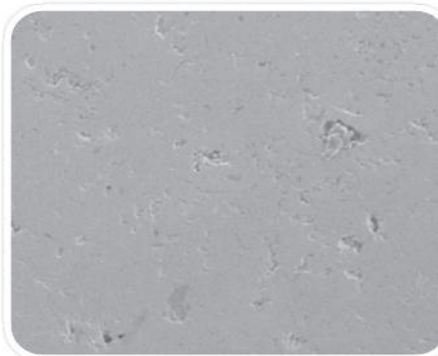
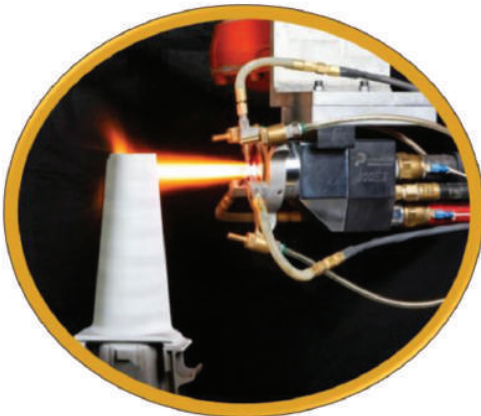
Solar cells

YSZ Thermal spray coating powder

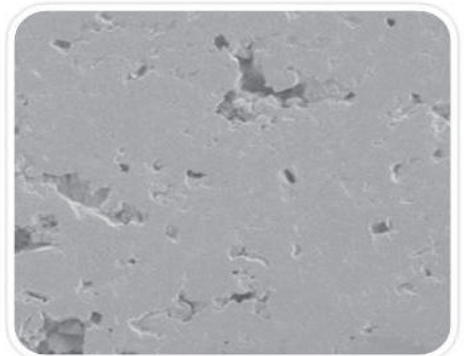


	Material	Size, (μm)	Purity, %
SW-ZT60	YSZ (8wt% Y_2O_3)	25~60	99.9
SW-ZT90	YSZ (8wt% Y_2O_3)	45~90	99.9

Characteristics



Densed Coating Structure



Porous Coating Structure

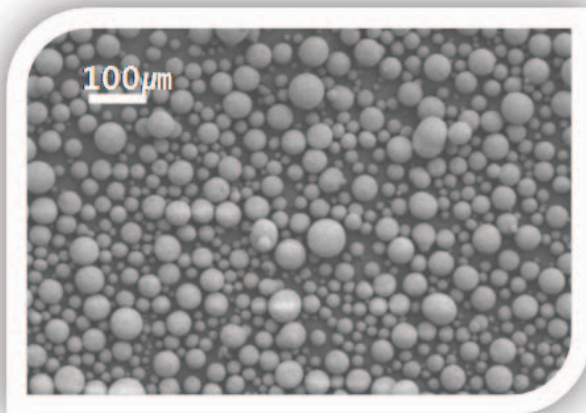
Material Characteristics : Low Thermal Conductivity, High Thermal Shock Resistance

Application

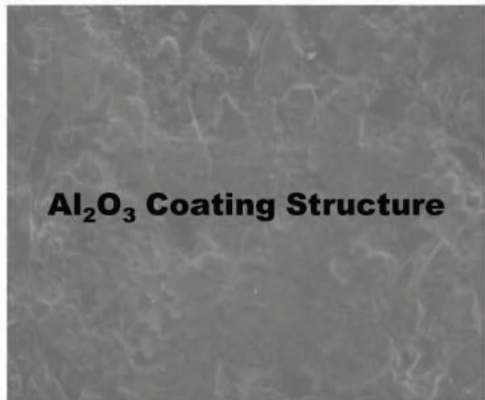
- **Thermal Barrier Coating for a Gas turbine components**
- **Automobile Cylinder Heads /Exhaust-manifold**



Al_2O_3 Thermal spray coating powder

**SW-AT60****Material** **Al_2O_3** **Size, (μm)****25~60****Purity, %****99.95**

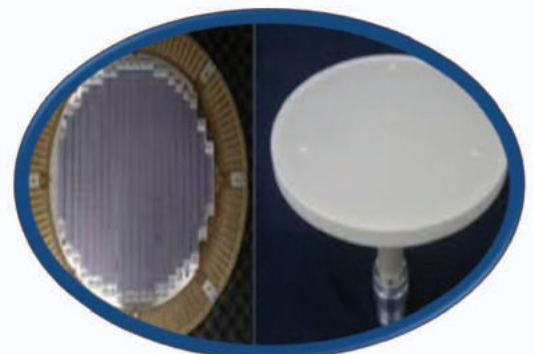
Characteristics

 **Al_2O_3 Coating Structure**

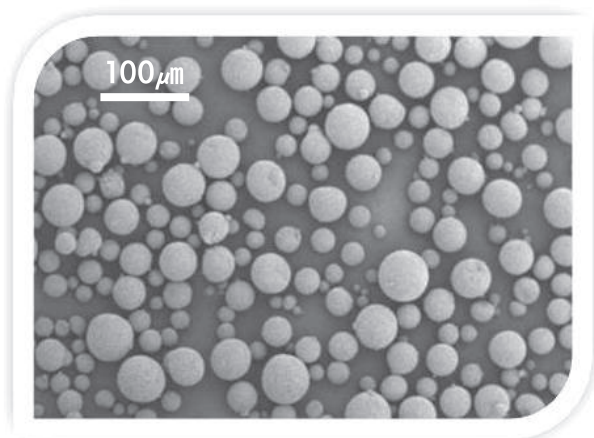
Material Characteristics : High Thermal Conductivity, High Electrical Insulation

Application

- **Electrical insulators**
- **Electrostatic chucks and Capacitors**
- **Electrical/Electric components**

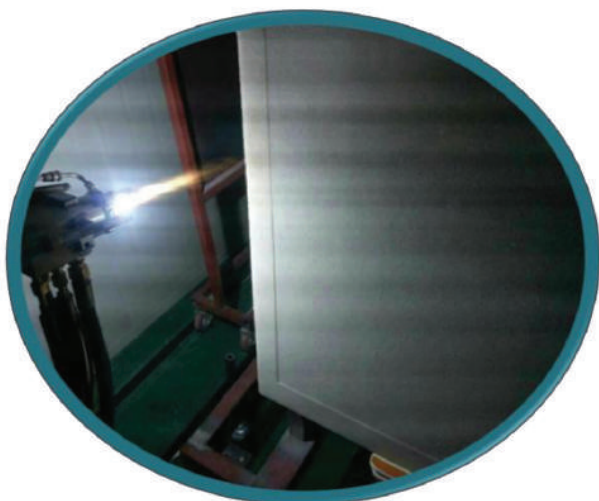


YAG Thermal spray coating powder

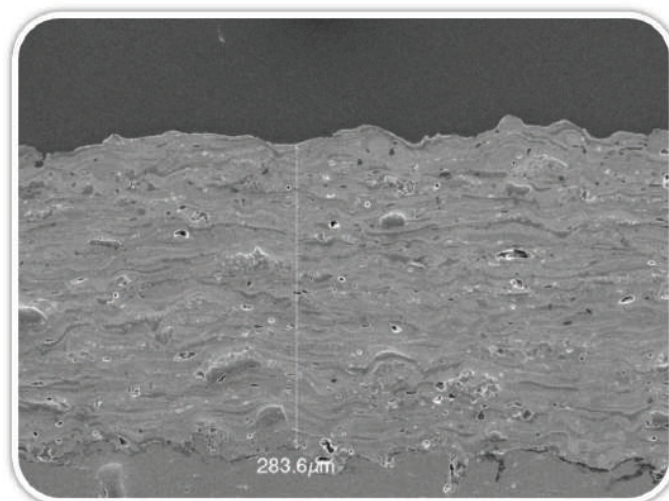


	Material	Size, (μm)	Purity, %
SW-YAT60	YAG	25~60	99

Characteristics



Atmospheric Plasma Spray



Amorphous Phase Coating

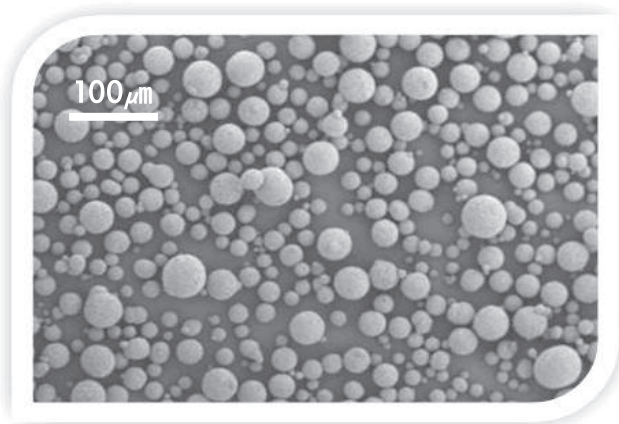
**Material Characteristics : High Adhesion Strength, Amorphous Phase
High Plasma Etching Resistance**

Application

- Tray for a solar cell process
- PE-CVD/ETCH Components

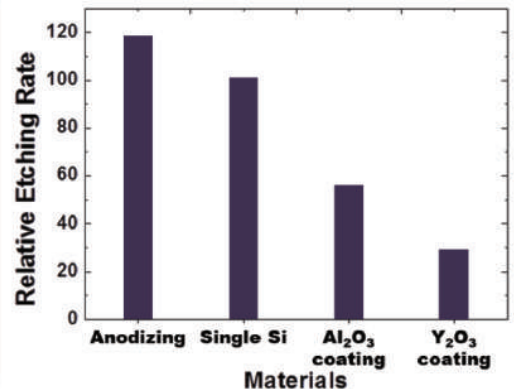
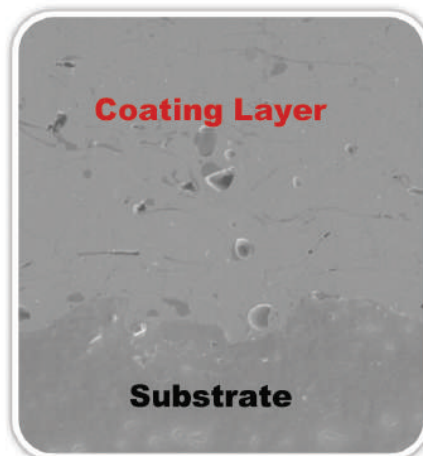


Y_2O_3 Thermal spray coating powder



	Material	Size, (μm)	Purity, %
SW-YT60	Y_2O_3	25~60	99.9

Characteristics



**Material Characteristics : Low reactivity with a radical of fluorine
(High Plasma Etching Resistance)**

Application

- Top Ring/Top Liner for a PE-CVD
- Focus Ring /LID/Confinement Ring for a ETCH
- Mold Coating for a Titanium Alloy Casting

