

Saint-Gobain Thermal Spray Powders

Saint-Gobain #204 Yttria Stabilized Zirconia

- Hollow particles for easy melting and highest deposit efficiencies.
- Spherical morphology for the best flow characteristics.
- Yttria Stabilized, Alloyed Yttria and Zirconia.
- Highest quality and best value, buy direct from the manufacturer.
- Approved powder for PW1375, CPW673, GE A50TF278 Class C, GE P16B-AG8 Class B, GE A50A557, Westinghouse PD-83336AB, AVCO/Lycoming M3978, and Honeywell EMS 57750 and EMS 52510. This powder also meets specifications for GE A50TF278 Class-B to customer specified size.

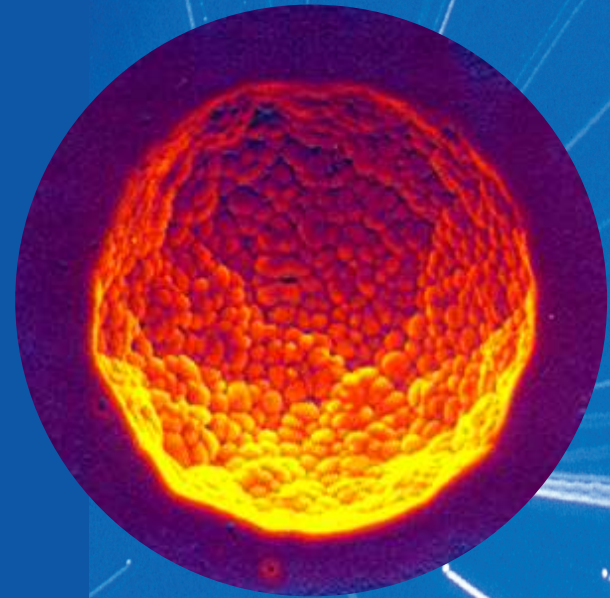
Saint-Gobain #204 Yttria Stabilized Zirconia

Torch Type:	Sulzer Metco 3MB	Sulzer Metco 7MB/9MB	Miller Thermal SG-100
Primary Gas:	Ar	Ar	Ar
Secondary Gas:	H ₂	H ₂	H ₂
Nozzle:	G	GH/732	---
Anode/Cathode:	---	---	2083-720/1083A-720
Powder Port:	#2	#2	---
Gas Injector:	---	---	3083-112
Primary Gas Pressure:	60 psi	100 psi	40 psi
Secondary Gas Pressure:	60 psi	50 psi	10-15 psi
Primary Gas Flow:	125	80	---
Primary Gas Orifice:	---	---	56
Secondary Gas Flow:	20	15	---
Secondary Gas Orifice:	---	---	97
Amps:	500	600	450
Voltage:	80-85	64-70	39-41
Carrier Gas Pressure:	---	100 psi	30-35 psi
Carrier Gas Flow:	30	37	---
Carrier Gas Orifice:	---	---	77
Feedrate:	6-8 lb/hr	6-12 lb/hr	5-7 lb/hr
Spray Distance:	3-5 in.	2-3 in.	3-4 in.
Deposition Rate:	---	4-5 lb/hr	---
Deposition Efficiency:	---	65-40% decreases as feedrate increases	---

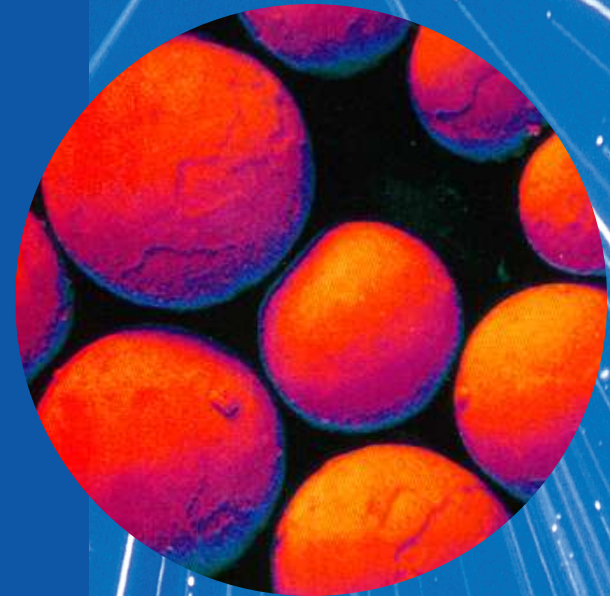
Comments for both Miller and Metco set-ups:

- Spray distance effects porosity more than other parameters.
- High substrate preheat will yield higher coating density.
- Coating deposition rate as a function of traverse rate will influence porosity and internal stress cracking more than other parameters.

For more information: Phone (508) 795-5000 FAX (508) 795-5868
 or write: Saint-Gobain Ceramics & Plastics
 Ceramic Materials
 1 New Bond Street
 P.O. Box 15137
 Worcester, MA 01615-0137



Hollow



Spherical

Ceramic Materials
 1 New Bond Street,
 PO Box 15137, Worcester, MA 01615-0137
 Tel: 508-795-5000 • Fax: 508-795-5868

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