



## Commercial Powder

Metal Group – ZINC  
Catalogue No. – SST-Z5001



### Description:

A pure zinc powder with the particle size distribution especially tailored for the cold spray process. The cold spray coating presents high density and good bond strength on both steel and glass substrate in applications such as corrosion protection and generating conductive bus bars for heated glass.

### Specifications:

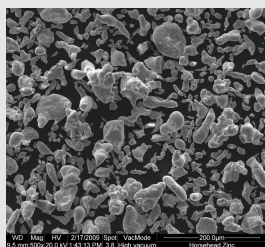
#### Material Properties

Composition:	Zn 99.7% Min.
Particle Size:	-50 to +5 µm
Characteristics:	Irregular shaped particles for maximum velocity.

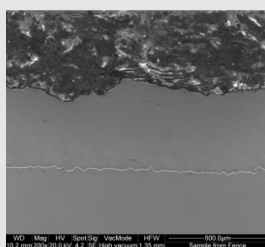
#### Typical Coating Properties

	<u>Series P</u>	<u>Series EP</u>
Bond Strength:	> 3500 psi	> 4800 psi
Deposition Efficiency:	Up to 7%	Up to 26%
Deposition Rate:	Up to 3 g/min	Up to 10 g/min
Hardness (Brinell):	38 – 40	38 – 40
Density:	> 99%	> 99%

#### Typical Micrograph



SST-Z5001 Powder



SST-Z5001 Coating on Steel  
(Series P)

#### Ordering Information

Catalogue Number:	<b>SST-Z5001</b>
Standard Packaging:	<b>400 ml or 1 gallon sized container</b>
Selling Unit:	<b>Pound</b>
Material Certification:	<b>Available upon request</b>

#### Recommended Spray Parameters

*(When utilizing CenterLine Cold Spray equipment. Recommendations may not apply when making use of non-CenterLine equipment)*

	<u>Series P</u>	<u>Series EP</u>
Temperature:	350– 400°C	350 – 400°C
Pressure:	85 – 250 psi	100 – 250 psi
Powder Pre-heating*:	N/A	≤ 350°C
Standoff Distance:	10 – 25 mm	10 – 40 mm
Gas:	Compressed air or Nitrogen	
Feed Rate (gram/min.):	24 – 28	36 – 40
Gun Traverse Speed:	10 – 200 mm/s depending on process settings and target coating thickness	
Surface Preparation:	SST-G0002 commercial blast	
Spray Nozzle:	UtiliLife™	

To discuss your Cold Spray Application(s) or for more information about powders and blends, please contact your CenterLine SST representative or visit our website at [www.supersonicspray.com](http://www.supersonicspray.com).

#### \* Notice for Powder Heater Use

Due to the specific material characteristics of this powder, equipment settings that deviate from the **Recommended Spray Parameters** listed above may result in clogging the powder heater. These parameters are based on 10 minutes of continuous spray time. For applications that require continuous spray times exceeding 10 minutes, please consult with CenterLine to receive assistance in optimizing spray parameters. Note that the SST Spray Machine and Gun User's Manuals also contain information on proper settings and operating parameters.