



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

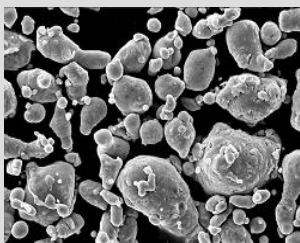
Composition:	Zn 98% Min.
Particle Size:	Average 25-45 µm
Characteristics:	Irregular shaped particles for maximum velocity

Typical Coating Properties

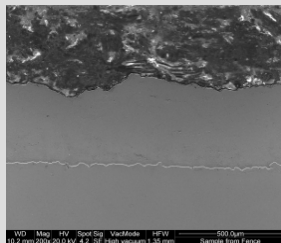
Bond Strength*:	> 3000 psi
Hardness (Brinell):	40-42
Density:	> 99%
Deposition Efficiency:	Up to 14 %
Deposition Rate:	Up to 4 g/min

*Higher bond strengths can be achieved. Please consult with CenterLine to receive assistance in optimizing the spray parameters.

Typical Micrograph



SST-Z5001 Powder



SST-Z5001 Coating on Steel (Series P)

Spray Parameter Ranges

Spray parameters only apply to CenterLine Cold Spray equipment.

Series P/PX

Temperature:	350 – 400°C
Pressure:	85 – 250 psi
Powder Pre-heating:	N/A
Standoff Distance:	10 – 25 mm
Gas:	Compressed air or Nitrogen
Feed Rate (gram/min):	12 – 28
Gun Traverse Speed:	10 – 200 mm/s depending on process settings and target coating thickness
Surface Preparation:	SST-G0002 commercial blast
Spray Nozzle:	UltiLife™

Ordering

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

To discuss your Cold Spray Application(s), including the optimization of spray parameters for higher coating bond strengths, or for more information about powders and blends, please contact your CenterLine SST representative or visit our website at www.supersonicspray.com.