



Commercial Powder

Metal Group – **NICKEL**
Catalogue No. – **SST-N0036**



Description:

A general nickel-ceramic blend of nickel and alumina, with particle size distribution especially tailored for the cold spray process. The deposition is characterized by high hardness and is suitable for applications that require a high hardness coating with both good corrosion and wear resistance. The coating presents full density and good bonding strength.

Specifications:

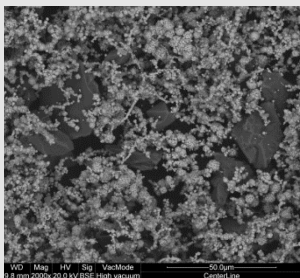
Material Properties

Composition:	Ni 99.7% Min., Al ₂ O ₃ 92% Min.
Particle Size:	-45 to +5 µm
Characteristics:	Irregular shaped particles for maximum velocity

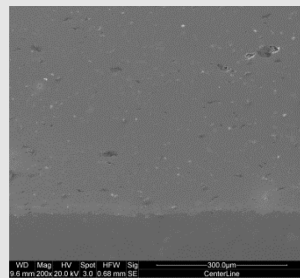
Typical Coating Properties

	Series P	Series EP
Bond Strength:	> 1500 psi	> 4800 psi
Deposition Efficiency:	Up to 23%	Up to 40%
Deposition Rate:	Up to 4 g/min	Up to 16 g/min
Hardness (Rockwell B):	95 – 98	100 – 106
Density:	> 99.5%	> 99.5%

Typical Micrograph



SST-N0036 Powder



SST-N0036 Coating on Steel
(Series EP)

Recommended Spray Parameters

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

	Series P	Series EP
Temperature:	450– 550°C	450 – 550°C
Pressure:	100 – 250 psi	100 – 500 psi
Powder Pre-heating:	N/A	N/A
Standoff Distance:	10 – 25 mm	10 – 40 mm
Gas:	Compressed air or nitrogen	
Feed Rate (gram/min.):	12 – 18	18 – 55
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-N0036
Standard Packaging:	400 ml or 1 gallon sized container
Selling Unit:	Pound
Material Certification:	Available upon request

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