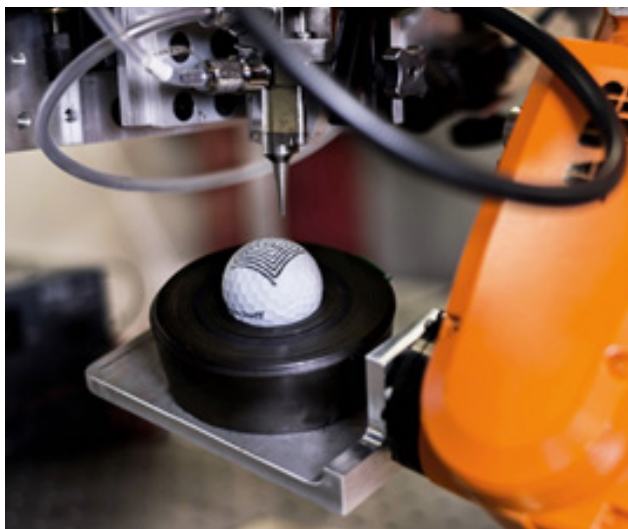


# Xerox Silver Nanoparticle Pneumatic Aerosol Jet Ink Product Code: xcm-nsPA

Xerox silver nanoparticle ink is based on proprietary silver nanoparticles designed and created at the Xerox Research Centre of Canada.

## Technology

- Low annealing temperature (100 - 130°C) enabled by small and uniform particles (8 nm± 2 nm)
- Resistivity up to 3x bulk silver
- Compatible with aerosol jettable Xerox dielectric ink (xdi-dcs)
- Customization available
- Produced at kilo-scale in XRCC pilot plant with consistent lot-to-lot reproducibility



## Ink Characteristics

Viscosity	8-15 cps
Surface Tension	24 - 31 mN/m
Ink Vehicle	hydrocarbon
Metal Content	60% -67 wt%
Particle Size	< 10 nm
Cure (thermal under ambient)	100°C - 130°C
Photonic sintering also available	

## Materials Performance

Resistivity	~3.5 – 4.5x bulk
Conductivity	> 9 x 10 <sup>4</sup> S·cm <sup>-1</sup>

Conductive traces were printed using an Optomec Sprint print system. Printed line widths of 0.5 mm with sintered pile heights of 3 – 7 μm were achieved when printed using the following conditions: 1 mm round nozzle, 400 sccm sheath gas (N<sub>2</sub>), 300 sccm push gas (N<sub>2</sub>).

## Engage Us

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