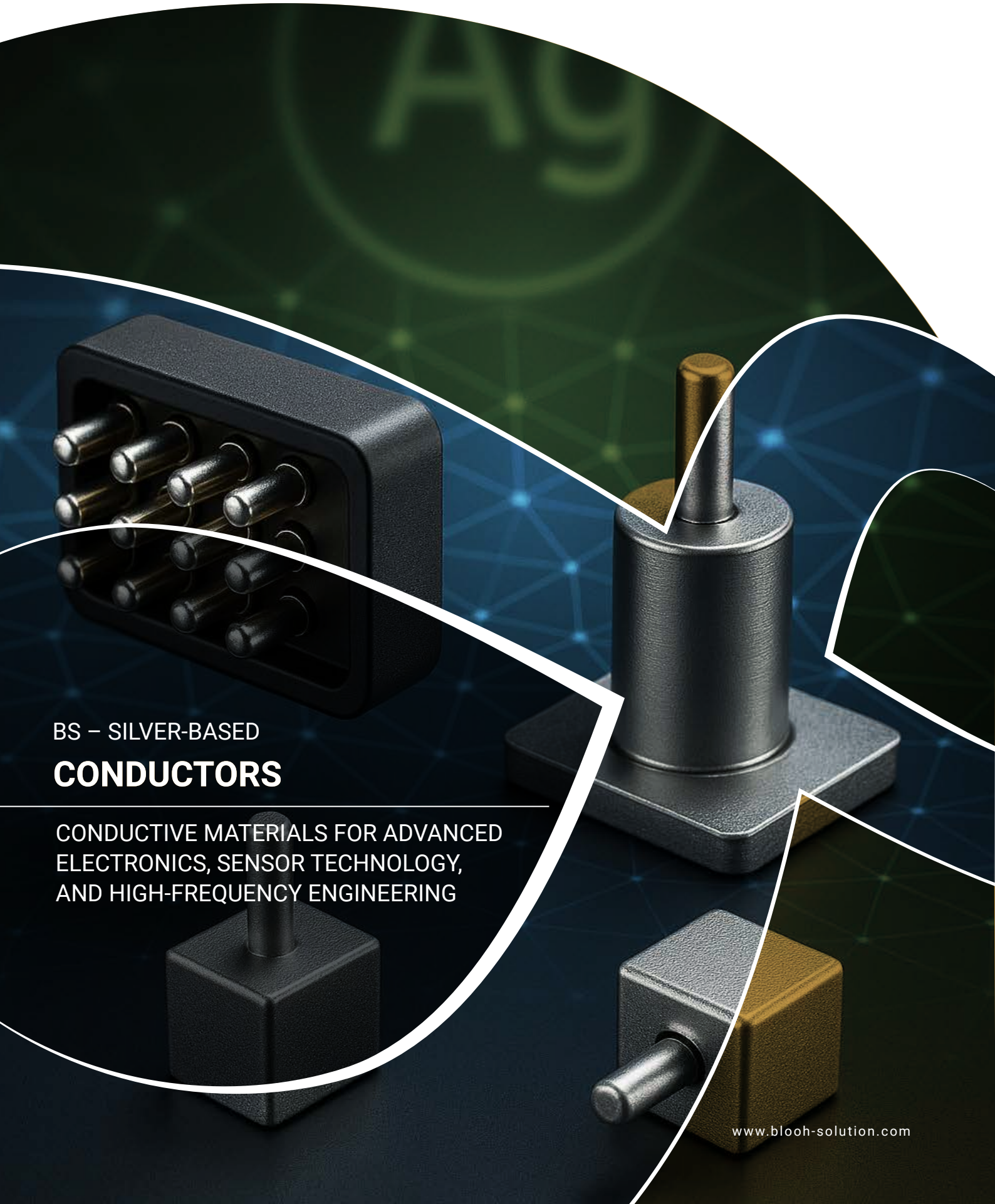
BLOOH SOLUTION
LTD.



BS – SILVER-BASED

CONDUCTORS

CONDUCTIVE MATERIALS FOR ADVANCED ELECTRONICS, SENSOR TECHNOLOGY, AND HIGH-FREQUENCY ENGINEERING

www.blooh-solution.com

INTRODUCTION: PRECISE SIGNAL TRANSMISSION BASED ON SILVER

In modern electronics, conductivity, dimensional stability, and frequency resonance determine the efficiency of components. Silver—the most electrically conductive metal—forms the foundation of a new class of conductive components in high-frequency technology, sensor systems, and miniaturized electronics.

Silver has the highest electrical and thermal conductivity of all metals—an advantage that becomes especially evident in the miniaturization, frequency stability, and energy efficiency of technical systems. Its material properties open up new possibilities for innovative circuit designs and reliable signal pathways.

BLOOH Solution Ltd. develops ultra-pure silver formulations for use in conductor pastes, printing inks, and flexible contact structures. Our solutions enable the production of RF circuits, wearable electronics, and sensor systems with precise signal performance, low impedance, and minimal power loss.

BS-BREAKTHROUGH

Our developments in the field of conductive silver materials are driven by the goal of combining top-tier electrical performance with industrial processability. Rather than relying solely on metallic filler content, BLOOH Solution integrates functional additives, nanostructured silver flakes, and thermally adaptive binders to achieve stable conductivity at low curing temperatures.

The advantages of our formulations become especially apparent in applications involving high-frequency signals or stretchable structures: low impedance loss, strong adhesion to complex geometries, and exceptional reliability under stress.

Technological Highlights of BLOOH Solution:

- Electrical conductivity up to 95% of solid silver
- Curing possible at temperatures as low as 90 °C (Low-Cure)
- Suitable for screen printing, inkjet, and aerosol jet
- Stable at frequencies >10 GHz
- Compatible with polyimide, PET, glass, and flexible

Areas of Application:

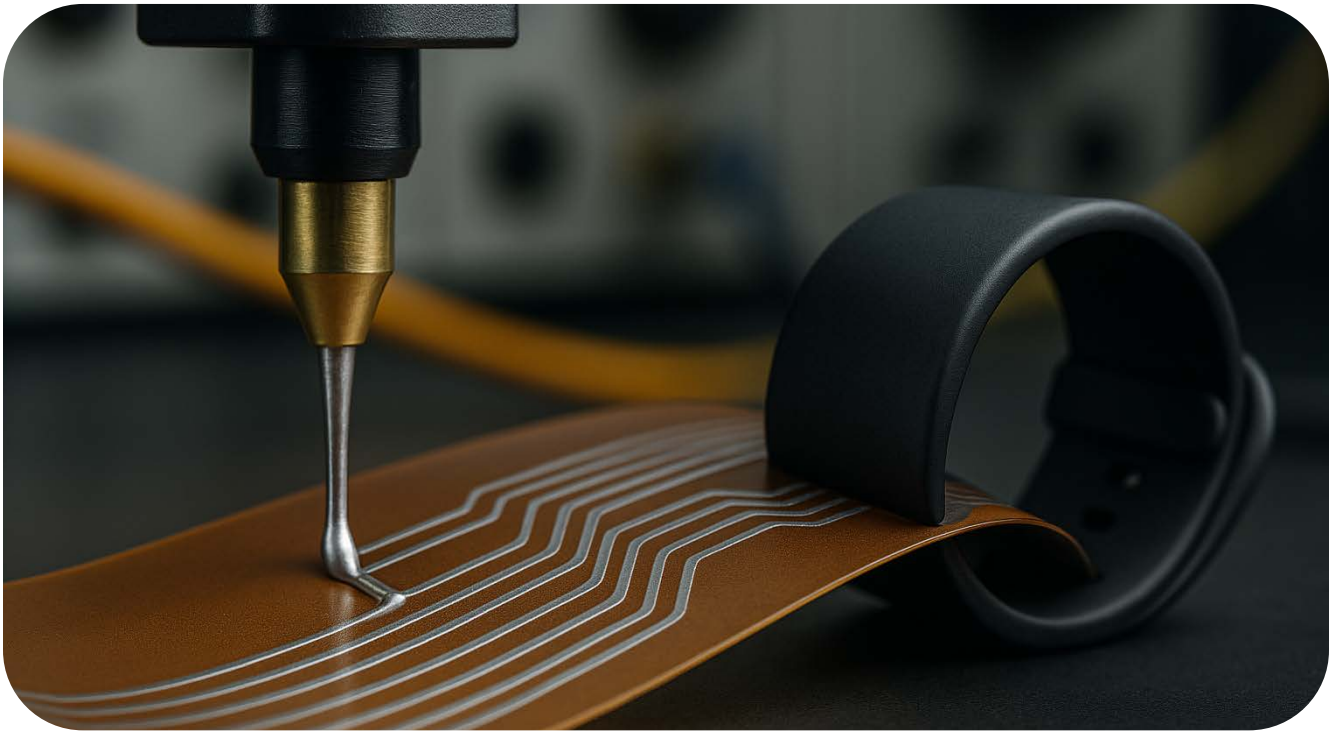
- Antenna structures in IoT and RF modules
- Touch sensors and stretchable circuits
- Printed sensors for medical and industrial use

Thanks to this technology, BLOOH Solution provides reliable solutions for markets with the highest demands in electrical performance, miniaturization, and manufacturing flexibility.

PORTFOLIO

MODEL AG-CON PRINT90

Low-temperature conductive paste for printing processes on flexible substrates, offering high resolution and strong bend resistance. Ideal for wearables and electronic labels. The formulation is based on silver-rich dispersions with thermally reactive binders and is specifically designed for applications with limited temperature tolerance. Its excellent printability allows for seamless integration into existing production lines.



TECHNICAL SPECIFICATION

Curing: 90–120 °C / 15 minutes

Conductivity: >2.5 × 10^7 S/m

Dry Film Thickness: 5–10 µm

Bending Cycles: >1,000 at R = 2 mm

Viscosity: 3000–6000 cP (depending on application)

Solvent-Free, RoHS-Compliant

Additional Benefit: Can also be applied at room temperature – ideal for temperature-sensitive substrates.

PORTFOLIO

MODEL AG-CON FLEX400

Silver conductive paste for high-frequency applications on flexible substrates, suitable for antennas, RFID, and printed RF circuits. It combines excellent signal transmission with mechanical flexibility and resistance to environmental influences. With its stable impedance performance, it is ideally suited for use in highly dynamic, mobile systems.

TECHNICAL SPECIFICATION

Frequency Range: Up to 20 GHz

Impedance Stability: ±2% under bending

Return Loss: >30 dB @ 2.4 GHz

Temperature Resistance: –40 °C to +125 °C

Compatibility: PET, PEN, PI, TPU

Additional Benefit: Excellent signal quality under dynamic stress and humidity.

DRIVING INNOVATION FORWARD!

FOR MORE INFORMATION PLEASE CONTACT:

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