Leading Through Innovation

Solutions for the Photovoltaics Industry
ABOUT HERAEUS

A globally leading technology group, Heraeus is headquartered in Hanau, Germany. Founded in 1851, it is a family-owned portfolio company which traces its roots back to a pharmacy opened by the family in 1660. Today, Heraeus combines businesses in the environmental, energy, electronics, health, mobility and industrial applications sectors. With technical expertise, a commitment to excellence, a focus on innovation and entrepreneurial leadership, we are constantly striving to improve our performance. We create high-quality solutions for our clients and strengthen their long-term competitiveness by combining unique material expertise with leadership in technology.

ABOUT HERAEUS PHOTOVOLTAICS

Our contribution to the solar industry: Efficiency. Customized.

Broad product portfolio from cell to module level. Advanced metallization products for today’s and next generation cell and printing technologies to enable high cell efficiencies, based on more than 45 years of experience in developing and manufacturing silver paste.

- Local manufacturing and supply capabilities in all key markets
- Fast customization with short sample lead time
- Technical service centers in all key markets for global collaboration with our partners along the entire PV value chain

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IN ADDITION TO THE STANDARD PASTE PORTFOLIO, HERAEUS OFFERS...

...customized metallization pastes to meet customers’ individual needs
...metallization pastes for novel printing and deposition technologies beyond screen printing

**OUR INNOVATION ROADMAP**

- Targeted and systematic identification of relevant technological trends and integration of customer’s suggestions and ideas
- Allows effective and efficient implementation of innovative products that enhance cell efficiencies, adhesion and printability
- The continuously updating and expanding innovation roadmap is the key to our leading industrial product offering

**HERAEUS SOL-SILVER PASTE PRODUCT PORTFOLIO**

**HIGH-QUALITY PRODUCTS FOR EXCELLENT CELL AND MODULE PERFORMANCE**
- 100% guarantee of consistent product quality – from small to large size batches
- Local production and paste modification – for fast customization, scale up and delivery
- Sustainable silver supplier strategy

**INDUSTRY-LEADING INNOVATIVE METALLIZATION SOLUTIONS**
- Fundamental and customer-specific innovation
- Fast innovation cycles through local R&D
- Long-term innovation strategy
- Strong IP portfolio

**MAXIMUM YIELD THROUGH OPTIMIZED PRODUCTION PROCESSES**
- Highly skilled Application Engineering team
- Harmonization of product and production processes in a holistic approach
- Technical service centers in all key markets for close cooperation with customers

**GLOBAL SUPPLY CAPABILITY**
- Local manufacturing capabilities in all key markets – ready for weekly shipment
- Multiple silver powder suppliers including captive
- >160 years of experience in precious metals management
- >45 years of experience in silver paste

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Paste Customization - creating customized paste solutions for screen-printed metallization of crystalline silicon solar cells.

The Photovoltaics industry is a highly dynamic market environment: technologies are enhanced permanently to further increase the efficiency of solar modules. Each solar cell producer has a unique cell design and manufacturing process. By modifying the customization pastes for the customers’ individual manufacturing process, optimum results are ensured.

In addition, Heraeus PV also provides comprehensive solutions for the photovoltaic industry to help customers achieve efficiency and cost reduction as well as improve product yield. It includes a number of products other than silver paste: Module solutions, including SCRibbon™ selective coated ribbon for cell connection and HECARO® Electrically Conductive Adhesive, which can help improve the power and reliability of components in the near future.
HPT VISION

Creating a green and sustainable world for future generations
Making solar the most economical energy

HPT MISSION

We provide innovative and reliable PV solutions with solar paste and beyond
We’re a lean and competitive technology leader
We make our customers successful

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