

# Solar

Screen printing mesh for the photovoltaic industry.

The screen print process gives the solar industry a cost-effective technology for applying the metallization layers required to produce solar cells – and meets the high-volume demands as the energy market continues to grow.

# Overview

### Energy, light, power: Printed solar cells

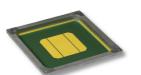
An industry is born and grows. Keywords: Renewable energy.

Means to an end: Solar cells. Method of production: Screen printing. Required: Extremely reliable and easy-to-use screen printing stencils. No other printing process is able to produce within seconds reliable and reproducible functional layers on almost all substrates. Naturally, this requires a standardized production process, precise definition of printing parameters, exact process steps and continuous quality management.

Sefar offers screen printing meshes made to the tightest tolerances, tested in the context of your needs and continually developed for such uncompromising applications.

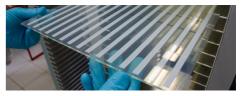
# Our offer. Your benefit:

- Technology and quality of the world's leading manufacturer
- Wide product range for all requirements from stock
- Innovative products providing maximum efficiency
- Individual support for your printing projects
- Lean, efficient production, in both stencil preparation and the printing process











#### DOWNLOADS

SEFAR PME Leaflet (PDF 223 kb)
SEFAR PME Article list (PDF 645 kb)
SEFAR PME Product data sheet (PDF 344 kb)
SEFAR PET 1500 Leaflet (PDF 193 kb)
SEFAR PET 1500 Article list (PDF 879 kb)
SEEAR PET 1500 Product data sheet

SEFAR PET 1500 Product data (PDF 238 kb)

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- Sustainability, safety and reliability of supply to the finished printed product
- Local, world-wide cooperative partnerships with Sefar's support teams
- Increase the competitiveness of your business

# Applications

#### Sustained high performance – Crystalline solar cells



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- Back surface field metallization
- Frontside grid metallization

For specialists it has long been crystal clear: Screen printing offers the photovoltaic industry the most trusted, cheapest and fastest technology for applying metallization and passivation layers. In the process of manufacturing crystalline solar cells new ways are constantly sought to further increase the benefit/cost ratio. Sefar screen printing solutions will reduce production costs of your screen printing process with the same, if not improved efficiency – we particularly recommend the best all-rounder SEFAR PET 1500.

#### Thin layer with a big impact - Dye-sensitized solar cells



- Indium tin oxide
- Catalyst
- Electrodes

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Why has screen printing become established as one of the main production processes in the manufacturing of dye-sensitized solar cells? It is because of the wide range and ease of selection of printed layer thicknesses, the production rate and design capabilities are above all because of reproducibility in any up-scaling process. Sefar screen printing mesh is the state of the art choice for dye-sensitized solar cell printing.

#### **Screen Printing Mesh**

# SEFAR PME – The best performing screen printing mesh



SEFAR PME is the screen printing mesh for use in the industrial environment. It is based on an innovative, high modulus polyester yarn developed by Sefar having extraordinary tensile strength combined with very low and evenly-balanced elongation. SEFAR PME sets new standards in the stencil making process. Its quality printing results are hugely impressive in the most demanding and innovative printing applications.

#### SEFAR PET 1500 – The screen printing mesh professionals use

SEFAR PET 1500 is the best stencil carrier for an almost infinite number of screen printing applications – the most

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wanted for decoration of any printable substrate. SEFAR PET 1500 is available in the largest range of different screen printing mesh types.

# Locations





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