

# SCR™

## Selectively Coated Ribbon



NEW

Patent Pending

Selectively Coated Ribbon



## Upgrade your Modules!

- Enhanced internal reflection
- Power gain at every angle of incidence
- Increased module power
- Plug and play process integration

Heraeus' and Ulbrich's newly developed cell-connecting ribbon – SCR™ – for PV applications – increases module power easily. Its unique design enables a plug and play process integration. SCR™ can be used with all standard soldering and stringing technologies including contact, infrared, inductive and manual soldering. SCR™ has proven its reliability in long-term climate chamber tests. Manufactured and distributed by Ulbrich, this ribbon meets the highest standards with its outstanding quality and precision.

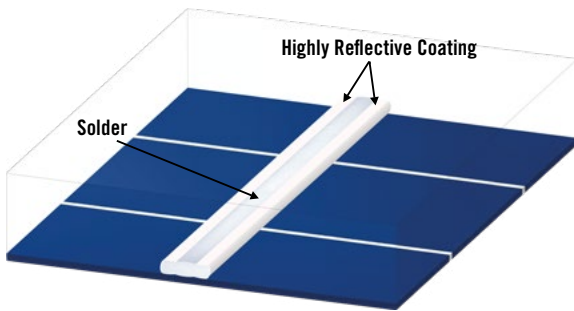


**Solar Technologies**  
Official Manufacturer & Distributor

## SCR™

SCR™ stands for Selectively Coated Ribbon. In a continuous and fully automated process, a highly reflective coating is applied onto the flat rolled ribbon. This coating supports internal reflection in the solar module and increases its power output.

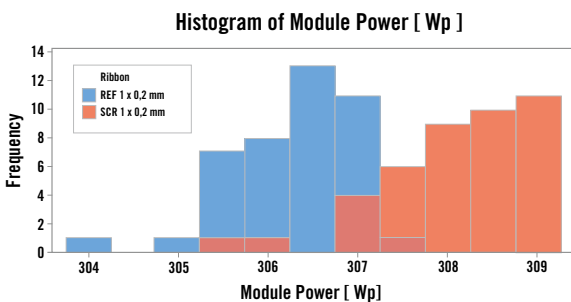
Due to the ribbons precision and unique design, the integration into an existing module manufacturing process is simple and requires no further investment.



## POWER GAIN

The reflective white, high-stability coating on the SCR™ leads to higher internal reflection and to higher Short Cut Current ( $I_{sc}$ ). Statistically proved results show an average power gain of 1.9 Watt per module.\*

\*External test results. Series of 84 60-cell modules (5BB, Mono, Perc, full cell)



## PLUG & PLAY

New products must be competitive and easy to integrate into existing production processes. The compatibility of SCR™ with all standard soldering technologies makes it easy to substitute your current cell interconnectors.

### Soldering and Stringing Technologies suitable for SCR™:

- Contact soldering
- Infrared soldering
- Induction soldering
- Manual rework

## MECHANICAL PROPERTIES

Optimized mechanical properties of the SCR™ improve the thermo-mechanical stress situation caused by the different thermal expansion coefficients of the copper ribbon and silicon cell. A specially designed heat treatment process, applied before the coating process, guarantees the needed reliability and fatigue resistance for solar cell interconnections.

## RELIABILITY

- Thermal cycling test: 600 cycles passed
- Damp heat test: 2000 h passed
- Combined Damp heat and UV: 240 kWh/m<sup>2</sup> passed

## DIMENSIONS

To ensure optimal power-gain in your module, this product will be available in a variety of dimensions.

Ulbrich's Application Engineering Team will assist you in finding the right product specification for your application.

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