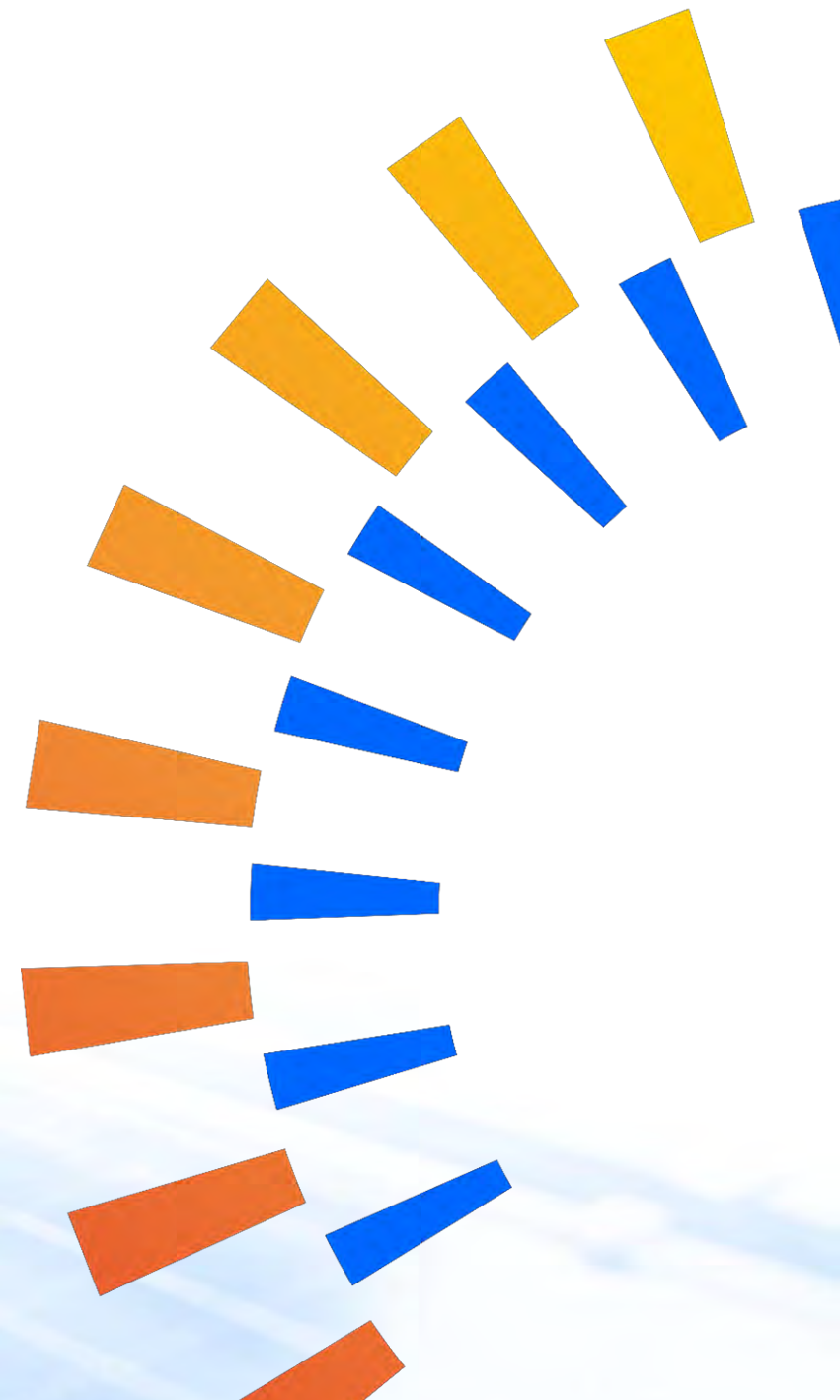


Meyer Burger Solar Roof Tile with SHJ Tunnel-IBC Cell Technology



MEYER BURGER

Rainer Grischke



Overview

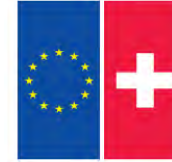
- Meyer Burger Tile
- PILATUS Project
- Project Impact on the Solar Tile



MEYER BURGER

Meyer Burger Tile

- Solid glass-glass with 17 W_p/Tile
 - SHJ solar cells
 - SmartWire Connection Technology SWCT[®]



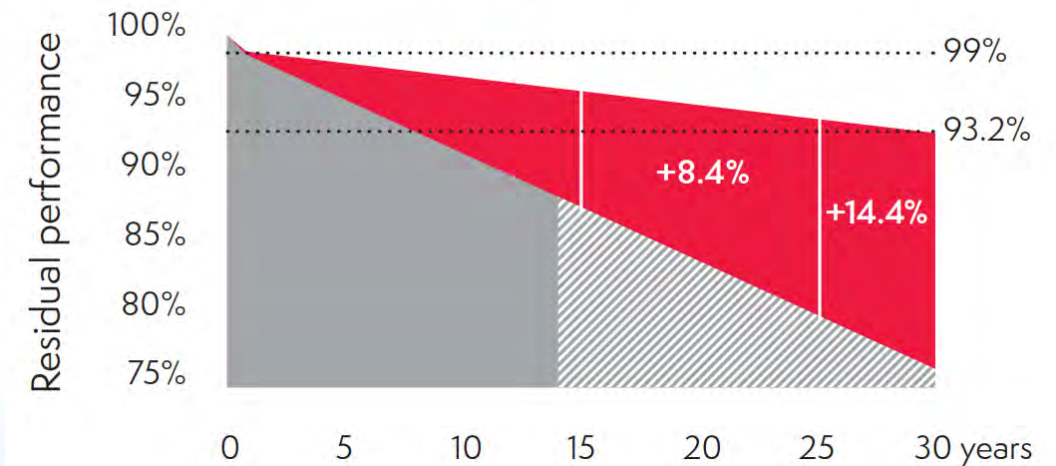
Made in Europe.
Designed in Switzerland.



Meyer Burger Tile

- Solid glass-glass with 17 W_p/Tile
 - SHJ solar cells
 - SmartWire Connection Technology SWCT®
- Robustness and Longevity
 - 30 year performance warranty ≥93%
 - Hail Test with 55mm hailstone (IEC 61215)
 - Mechanical load +12`000 Pa

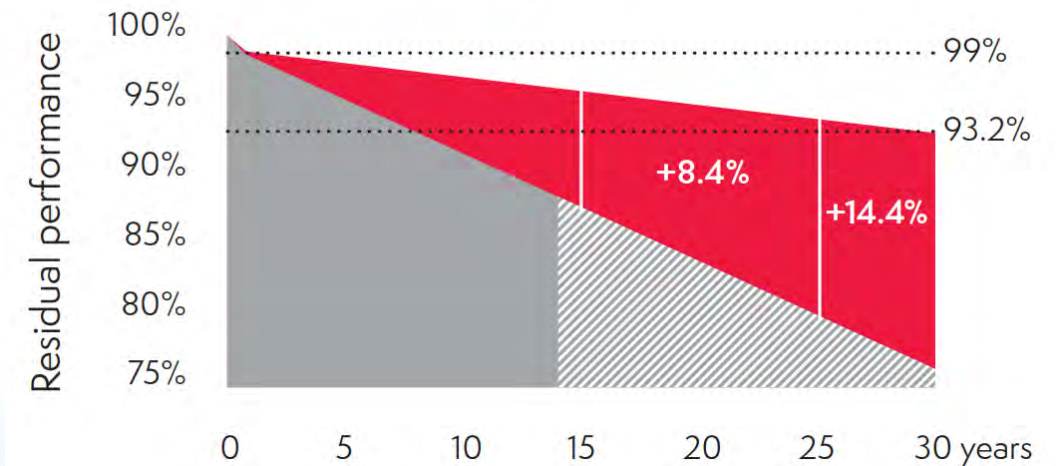
Linear performance warranty



Meyer Burger Tile

- Solid glass-glass with 17 W_p/Tile
 - SHJ solar cells
 - SmartWire Connection Technology SWCT®
- Robustness and Longevity
 - 30 year performance warranty ≥93%
 - Hail Test with 55mm hailstone (IEC 61215)
 - Mechanical load +12`000 Pa
- Waterproof and Fire-Resistant
 - Classified as “hard roofing” according EN 13501-5 fire protection class, B_{ROOF} (t1)

Linear performance warranty



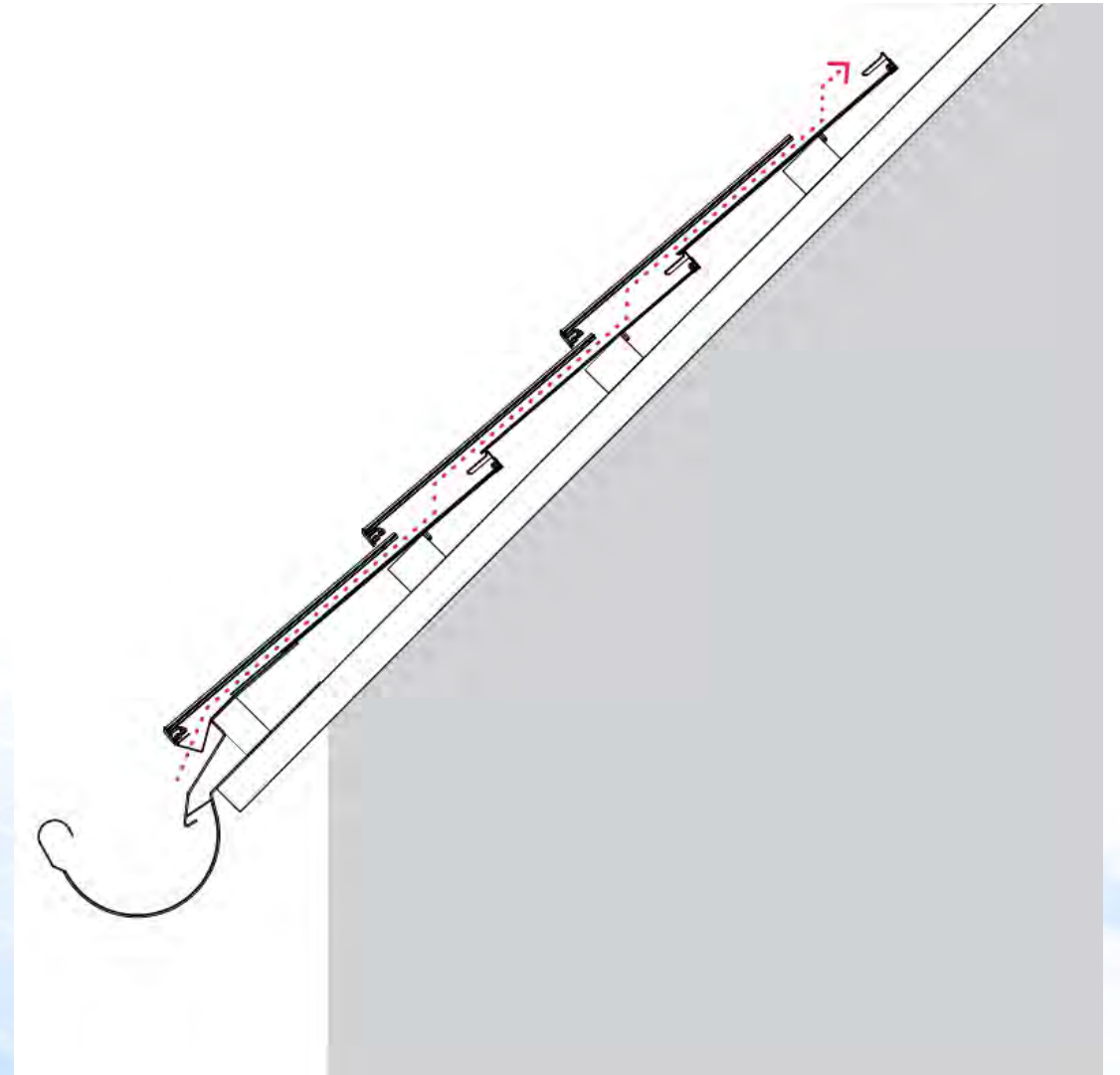
Meyer Burger Tile

- Water drainage
 - shingled installation
 - lap joints are fully sealed by a water conducting layer



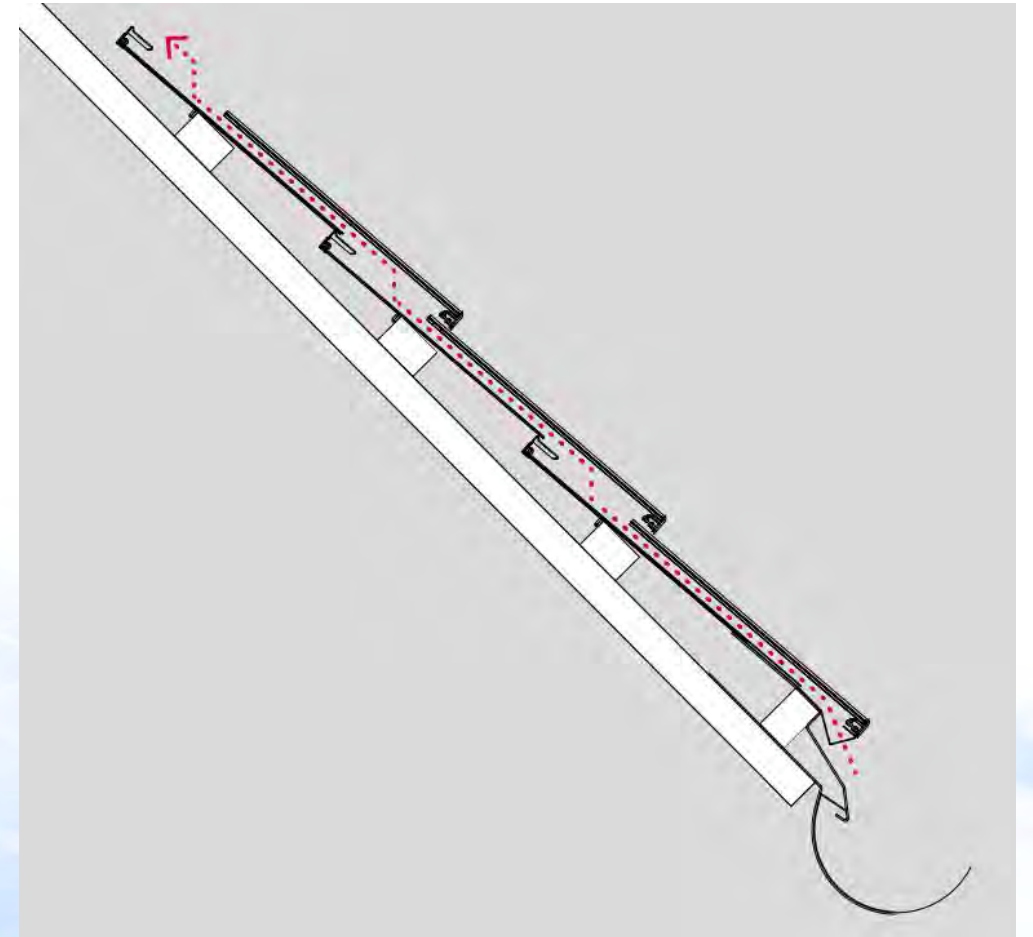
Meyer Burger Tile

- **Water drainage**
 - shingled installation
 - lap joints are fully sealed by a water conducting layer
- **Air ventilation**
 - double housing ensures optimal venting through chimney effect



Meyer Burger Tile

- **Water drainage**
 - shingled installation
 - lap joints are fully sealed by a water conducting layer
- **Air ventilation**
 - double housing ensures optimal venting through chimney effect
- **High Energy Yield**
 - cooling via continuous air flow





Meyer Burger Tile

- Appealing Aesthetics



Meyer Burger Tile

- Appealing Aesthetics
 - Installation in rows or offset



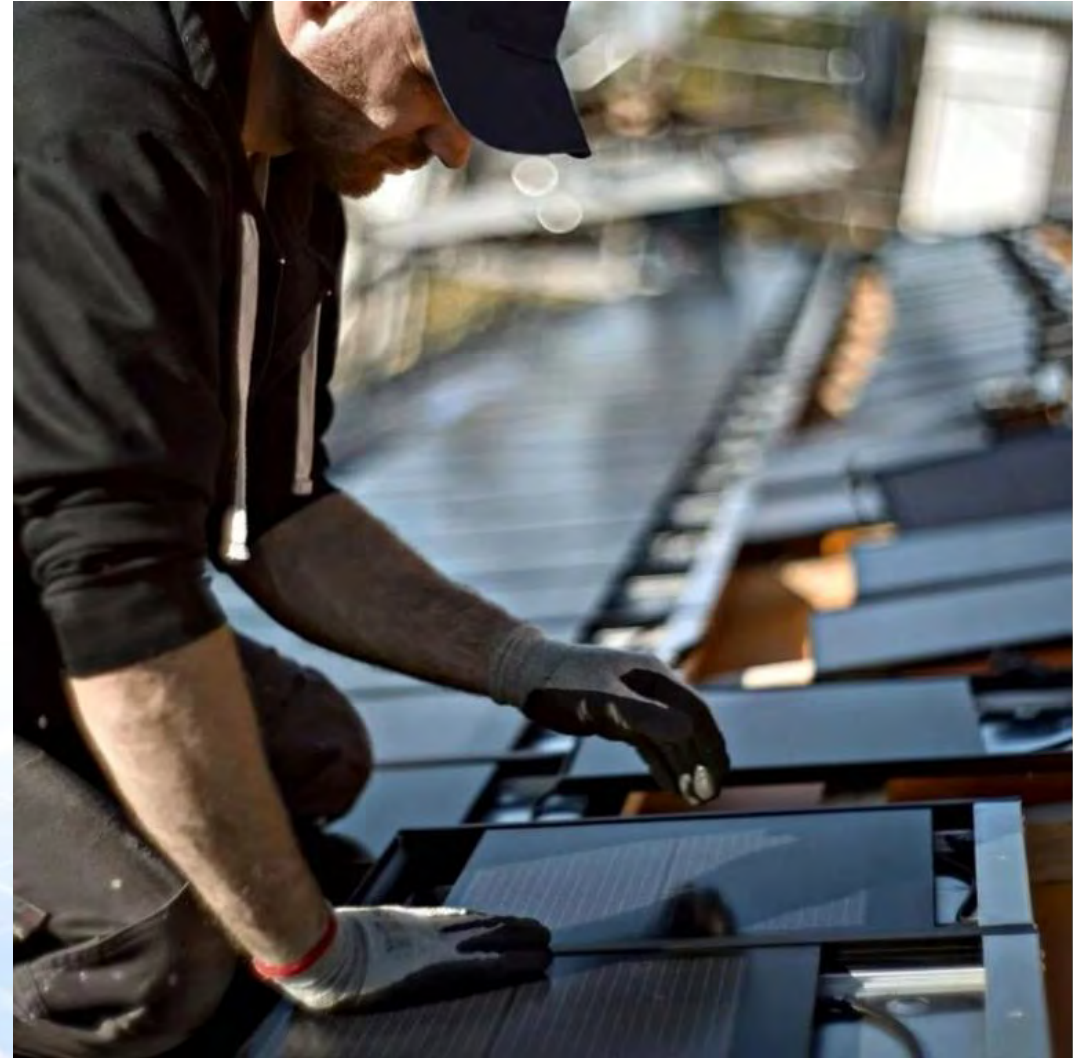
Meyer Burger Tile

- **Appealing Aesthetics**
 - Installation in rows or offset
 - Suits listed buildings and complex architecture
 - Blends Tradition with Innovation



Meyer Burger Tile

- **Appealing Aesthetics**
 - Installation in rows or offset
 - Suits listed buildings and complex architecture
 - Blends Tradition with Innovation
- **Easy Installation**
 - Various complementary tiles
 - Lightweight (2.8 kg)
 - Variable cover length (312-340 mm)
 - Build-in step aid for the craftsman



PILATUS

- 3-year EU-funded project aiming for TRL7 of 3 pilot lines: wafer, solar cells & modules

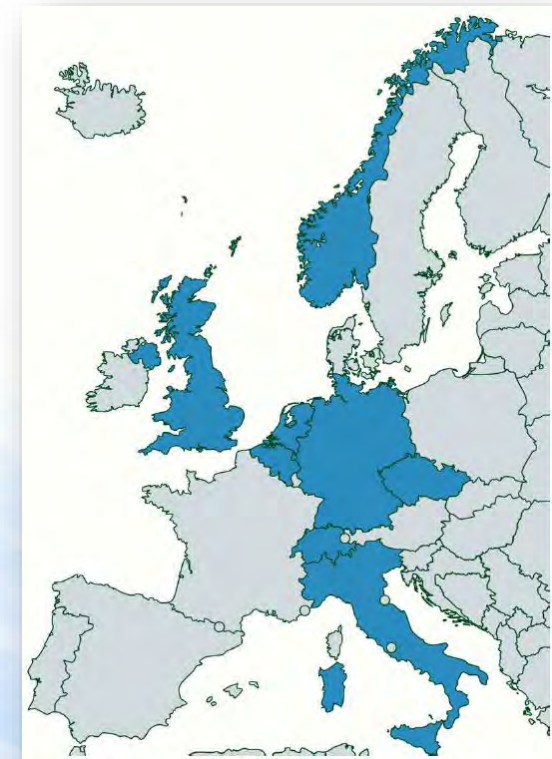


PILATUS

- 3-year EU-funded project aiming for TRL7 of 3 pilot lines: wafer, solar cells & modules
- 7 companies + 8 institutes

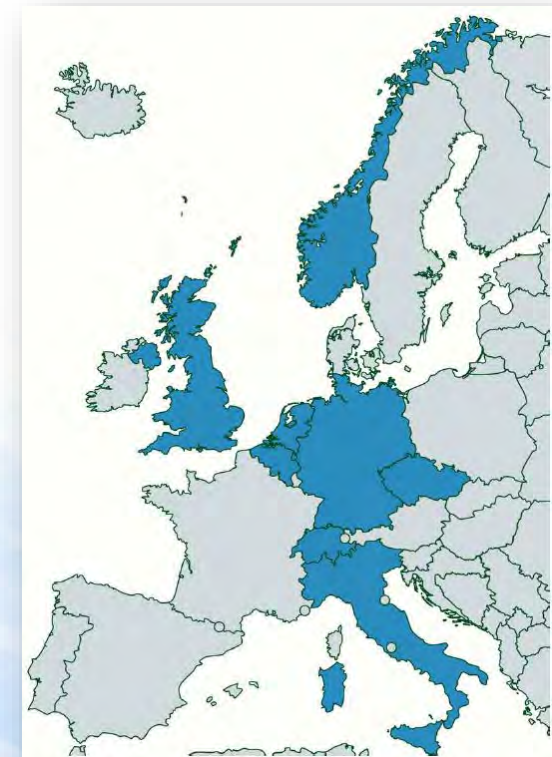
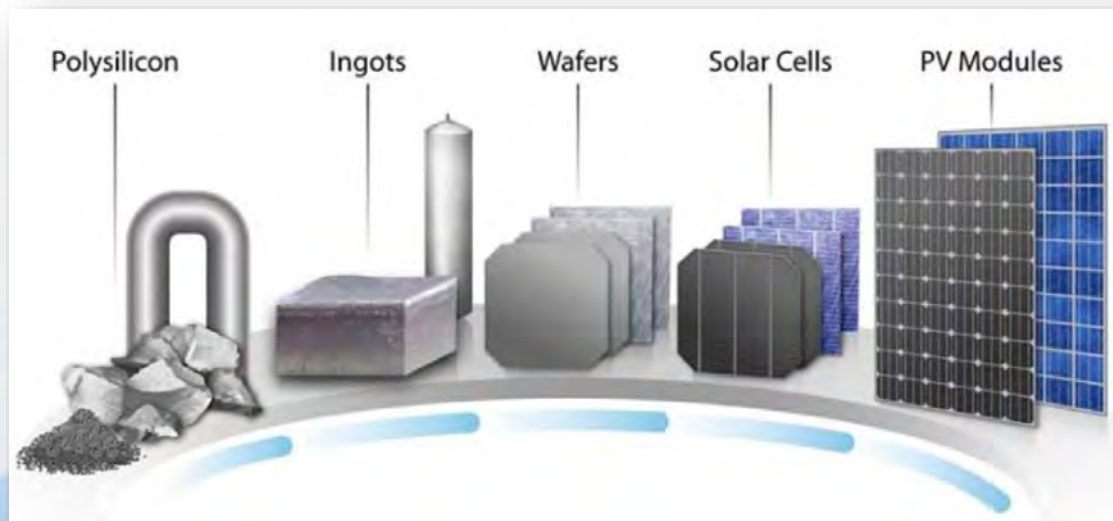


PILATUS



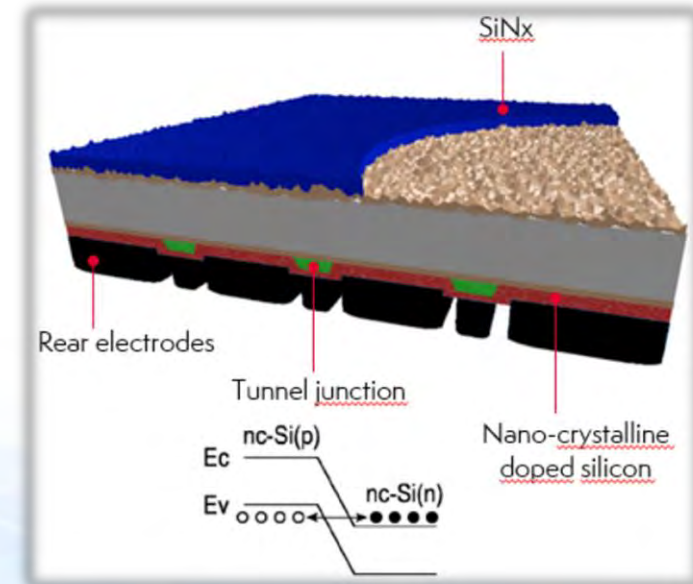
PILATUS

- 3-year EU-funded project aiming for TRL7 of 3 pilot lines: wafer, solar cells & modules
- 7 companies + 8 institutes covering the complete PV value chain



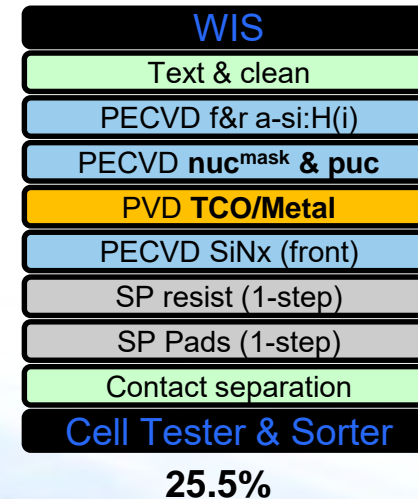
SHJ – tunnel – IBC

- Silicon Heterojunction (SHJ)-tunnel-Interdigitated Back Contact (IBC) Technology
- Patented by CSEM



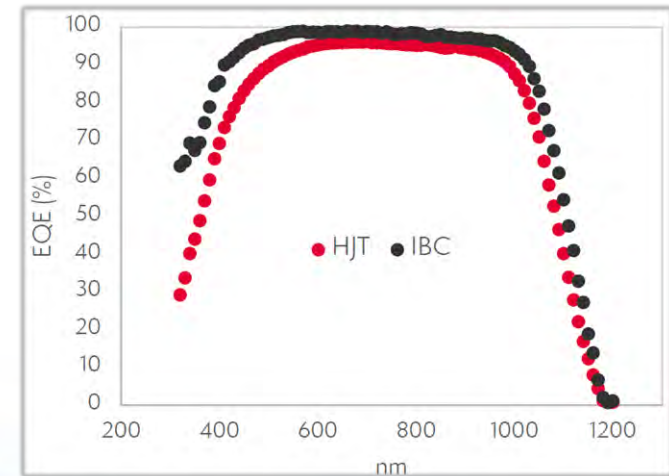
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- Only 10 cell process steps needed
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SHJ – tunnel – IBC

- Silicon Heterojunction (SHJ)–tunnel-Interdigitated Back Contact (IBC) Technology
- Patented by CSEM
- Only 10 cell process steps needed
- Target cell efficiency >25.5%
- Advantages for Meyer Burger Tile:
 - exquisite elegance on the roof
 - Indium-free and ultra low Ag-consumption <3.3mg/Wp
 - Power gain of >5% due to SHJ-tunnel-IBC
 - Reduced silicon: 110μm thick solar cell
 - Enhanced quantum efficiency



Contact Us

Meyer Burger:

<https://www.meyerburger.com>

Rainer.Grischke@MeyerBurger.com

Meyer Burger Tile:

<https://www.meyerburger.com/en/solar-roof-tiles#main>

PILATUS:

<https://pilatus-project.eu>

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