



Building the green future together

Our vision

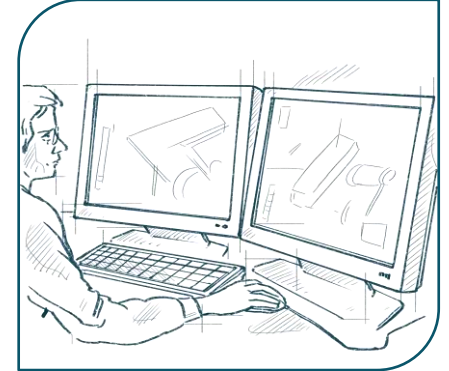
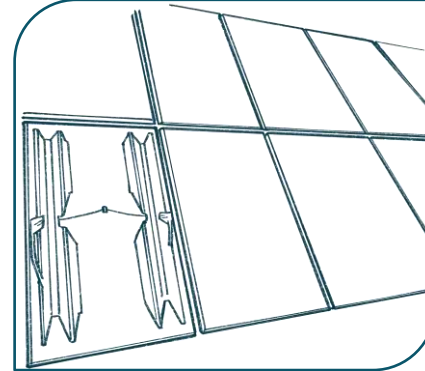
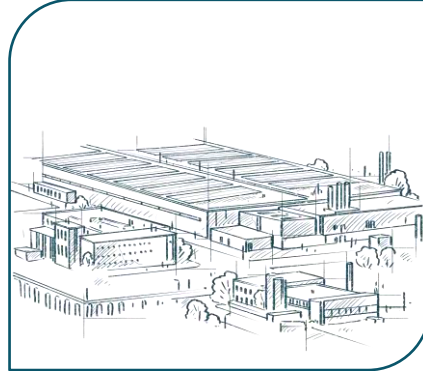
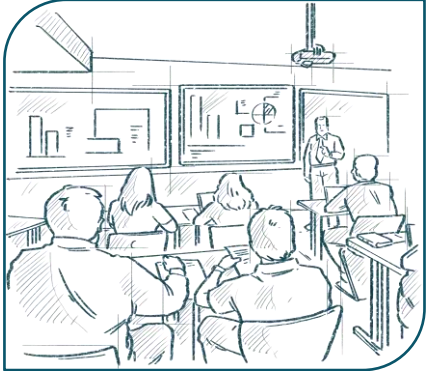
We believe in responsible use of social, economic and ecological resources. With our solutions and products, we aim to drive global energy supply through renewable energy sources.



- ◉ AVANCIS – Where we come from
 - Company Overview and our Business Areas
- ◉ Product approach – Why AVANCIS?
 - Equipment Approach and Technology Advantages
- ◉ Our Products and Services
 - Equipment portfolio



C H A N G E



Research & Development

- Basic research
- Increase of cell efficiency
- Development of new materials, technologies and applications
- Product characterization and optimization
- Worldwide plant monitoring

Equipment & Industrialization

- Transfer of research results to full-size modules
- Process optimization, cost reduction, yield maximization
- New CIGS applications and products

Technology Transfer

- Worldwide technology transfer of CIGS turn-key projects
- Factory planning from production process to training of future employees

Product & Applications

- Premium solar products that convince through excellence and aesthetics
- "Engineered & Made in Germany"
- Europe's leading manufacturer for CIGS PV modules: 40 years pioneer

Competence Center

- Consulting around the topic of building-integrated PV
- Various services for the realization of PV facades

EQUIPMENT

FROM MANUFACTURER FOR MANUFACTURERS

CUSTOMIZED EQUIPMENT DESIGNED & MANUFACTURED TO YOUR
INDIVIDUAL REQUESTS
MAINTENANCE & SERVICE SUPPORT



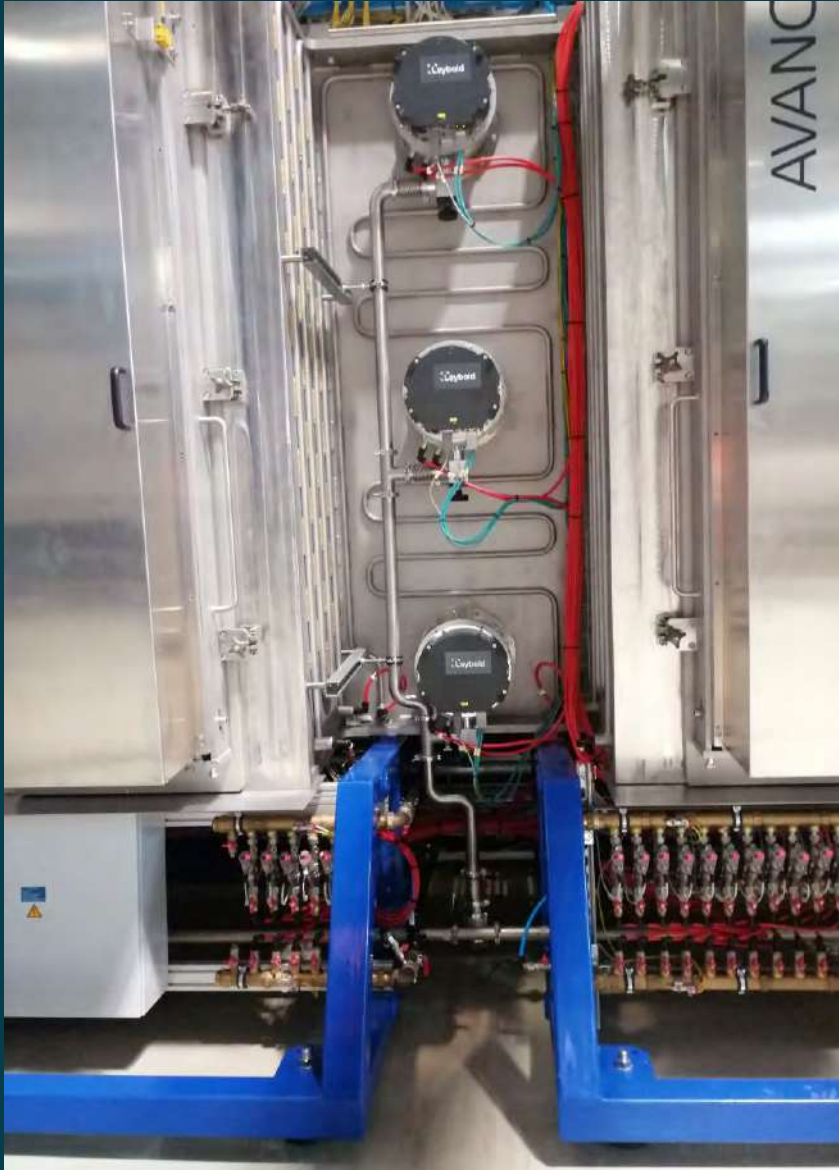
AVANCIS manufactures PV modules for electricity-generating facades, roofs and open spaces, unites scientists and technology experts under one roof and offers technical advice for energy-efficient construction planning.



Designed & made in Germany

Innovation & Technology
Sustainability & Responsibility





PORTFOLIO

Equipment design to built

Sputtern

Thermal vaporization

Electron beam evaporation

Drying

Measurements->We have the measurement technology

Temperature Tests->Florida Test

Service->

- AfterSales

- Temperature Test Electrical Cabinet ,

Maintenance (weekly, monthly, quarterly, yerly)

Maintenance Training

Maintance Support via remote

- HE leak detection

- SpareParts

PORTFOLIO

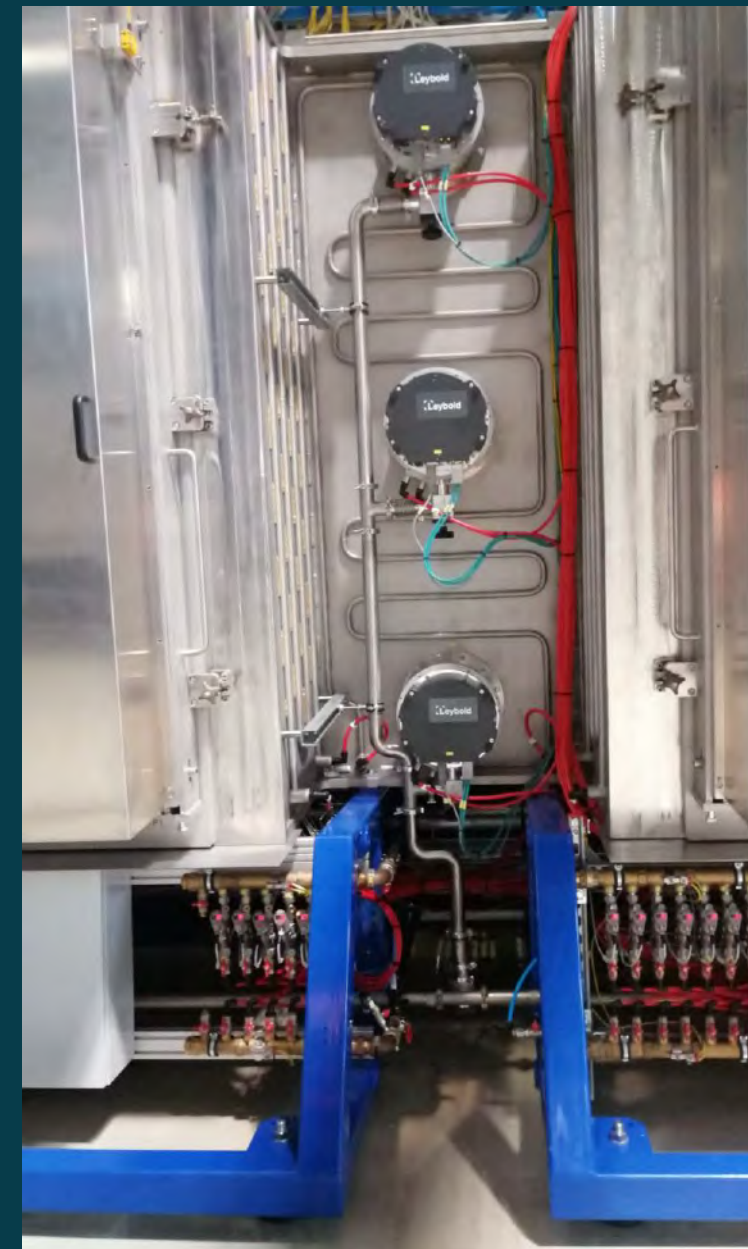
Equipment for Pummeltest SolarIndustrie
- exclusive designed by AVANCIS

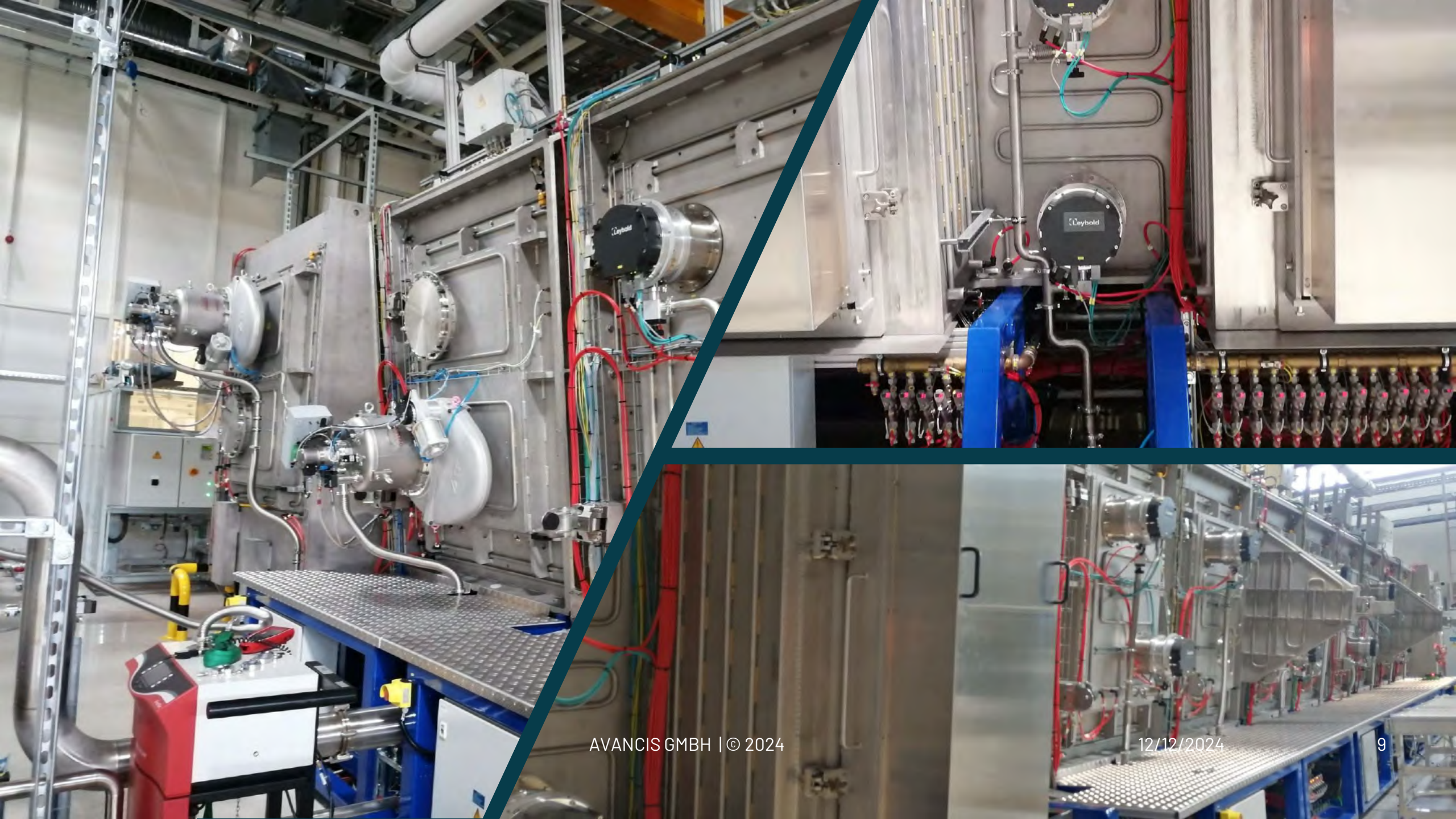
Job Coating -> you bring your own Material -> we do the job
- Quality Made in Germany

Coatingtests InHouse (Torgau&Munich)
- you have the questions, we´ve the experience and the experts

Process optimization

-Our experts have long-standing experience that will help you find the best possible solutions





Develop and build for Grid



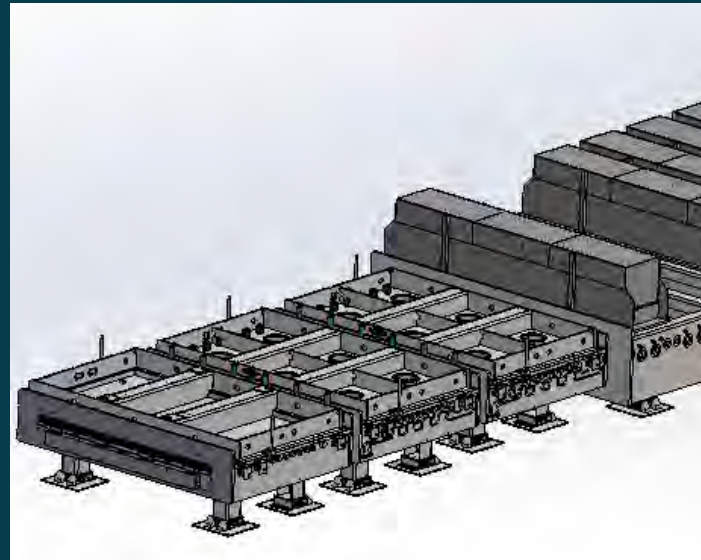
CUSTOMIZED ENGINEERING



OPTICAL FILTER
COATINGS

SEMICONDUCTOR
APPLICATIONS
FUNCTIONAL COATINGS
& MEMS

ARCHITECTURAL
GLASS COATING



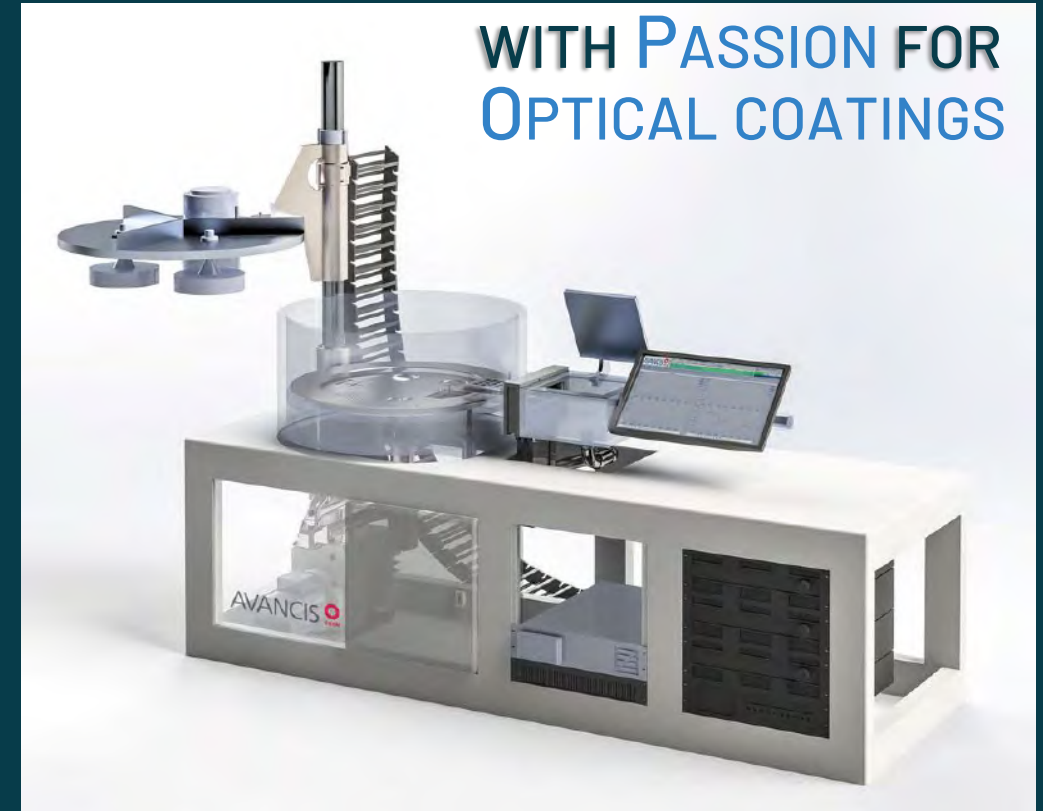
Features of the AVANCIS coating system



- Heating of substrates to a defined pre-deposition temperature
- Thermal evaporation deposition (*evaporation from side, $V 7^\circ$*) of an alkali-containing layer under vacuum conditions.
- Thermal Annealing of the incoming workpiece with deposited alkali layer under vacuum conditions

Optical coating equipment OPTAGON

- High precision sputter coater for multiple substrate formats
 - *Perfectly suited for small to medium production lots*
 - *Flexible substrate sizes due to substrate tray handling*
 - *Ranging from dia. 1 mm up to prism cubes*
 - *Max. size of 100 x 100 mm²*
 - *Max. substrate thickness of up to 15 mm*
- 2 DC pulsed circular magnetrons with uniformity shaper
 - *Coating non-uniformity below $\pm 0,75\%$*
 - *Safe and reliable process handling*
- In-situ optical monitoring
- Ion source for substrate pretreatment



Equipment and Process to conduct sputter deposition of a thin-film precursor consisting of several layers of Indium, Copper, and Gallium onto an incoming workpiece



References from the shop floor

Vertical Inline Coating Tool GEN7 / up to 350°C substrate temperature



WE DESIGN
BUILD & MAINTAIN



SERVICE PROPOSAL IN A NUTSHELL

Customized Engineering, manufacturing & service support
Vacuum equipmentour products and services

Sputter and evaporation coating

Thermal treatment

Hazardous process material handling (gaseous, solid)

Service support

Dedicated team of engineers and field service staff

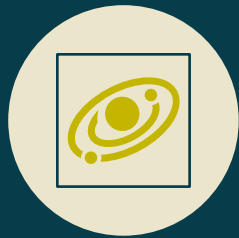
Support for commissioning, ramp-up to production and maintenance

Implementation support for production KPI and control

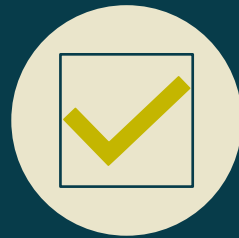
Fab automation and line integration

WITH PASSION FOR
SOPHISTICATION

Final Application Equipment



SOLAR



GLAS



AUTOMOBIL



SEMICONDUCTORS



MEDICAL

Why AVANCIS Equipment?

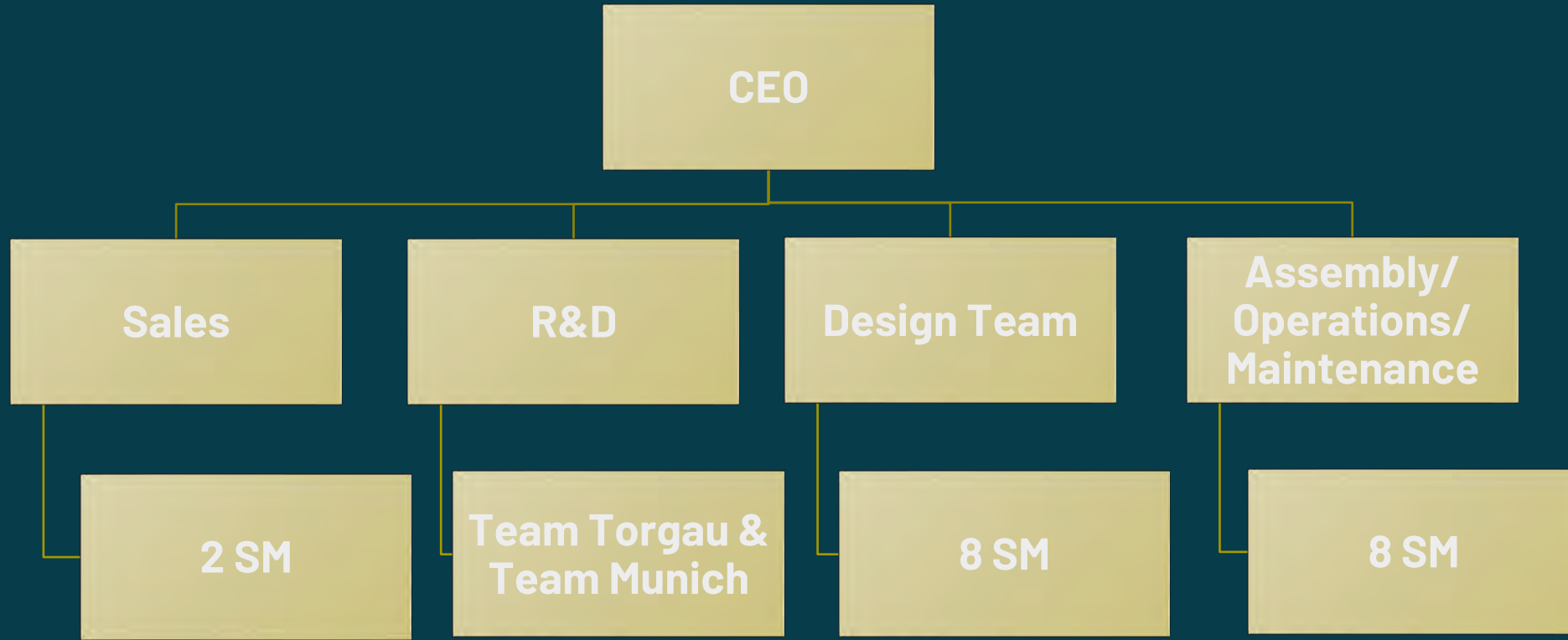
THE TEAM HAS OVER A HUNDRED YEARS OF COMBINED EXPERIENCE IN VACUUM AND COATING TECHNOLOGY

MANPOWER AVAILABLE ACROSS A LARGE BASE

SHORT DISTANCES TO CONTACT PERSONS
THIS MEANS FAST RESPONSE TIMES

ALL FROM A SINGLE PROVIDER
THE COMPLETE PROCESS THROUGH TO AFTESALES SERVICE

AVANCIS GUARANTEES QUALITY

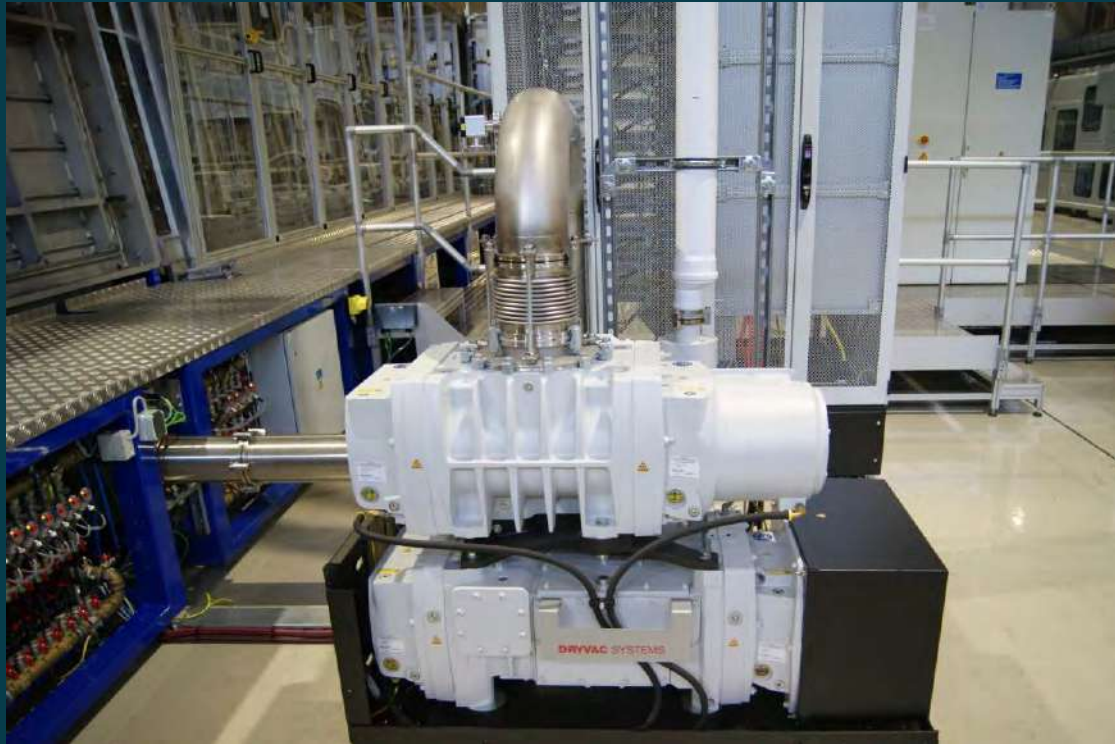


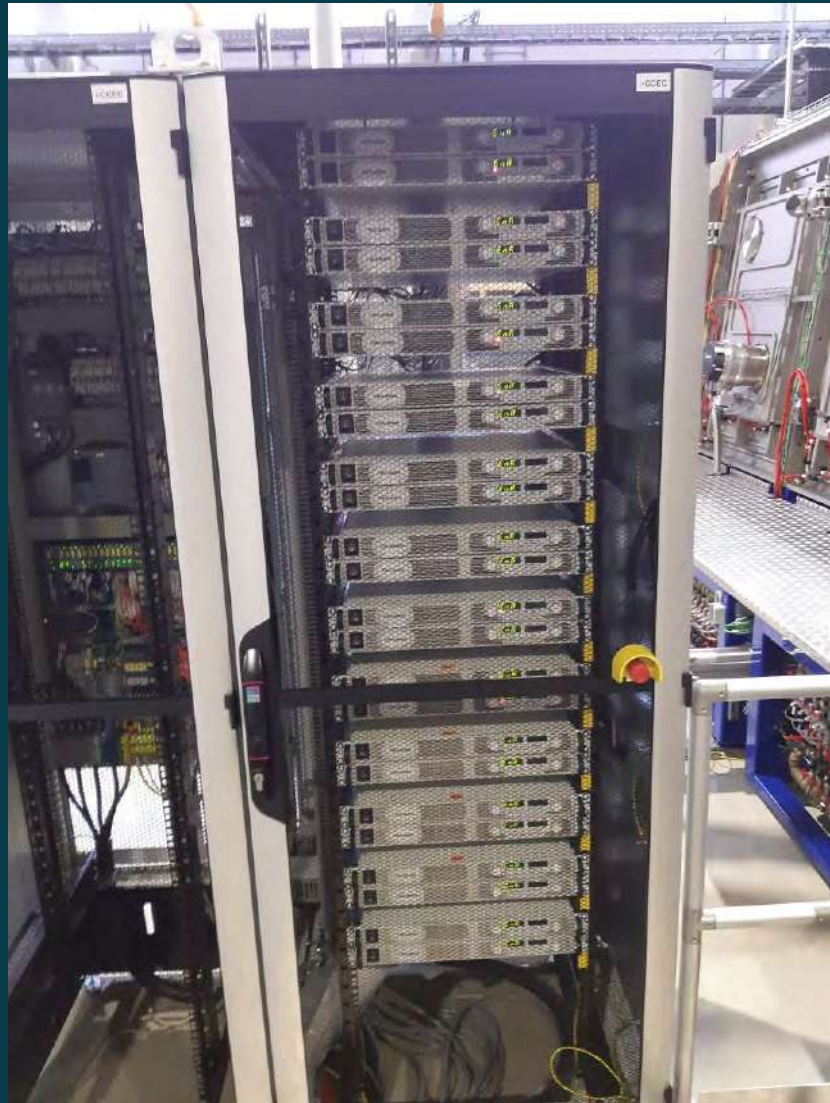
SM= Staff Member







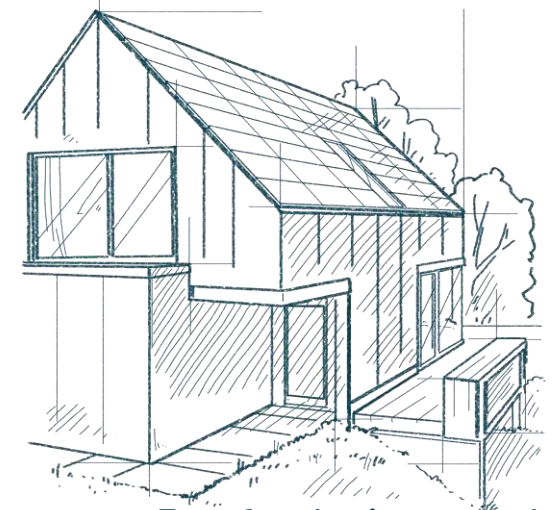




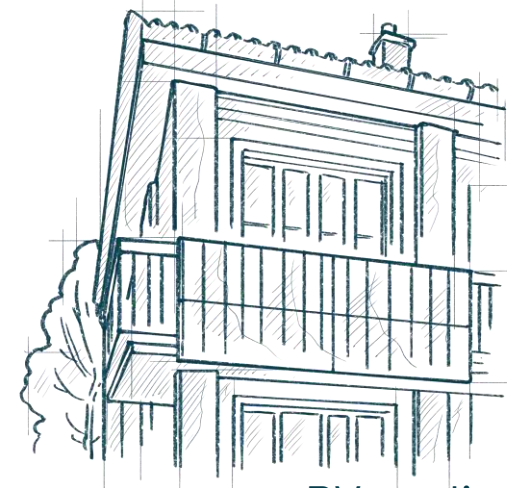
Photovoltaic thin film modules for various applications



Facade solutions



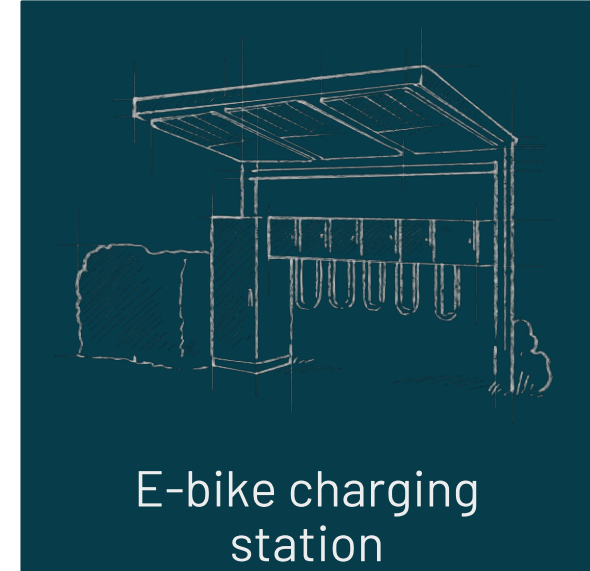
Roof solutions and industrial application



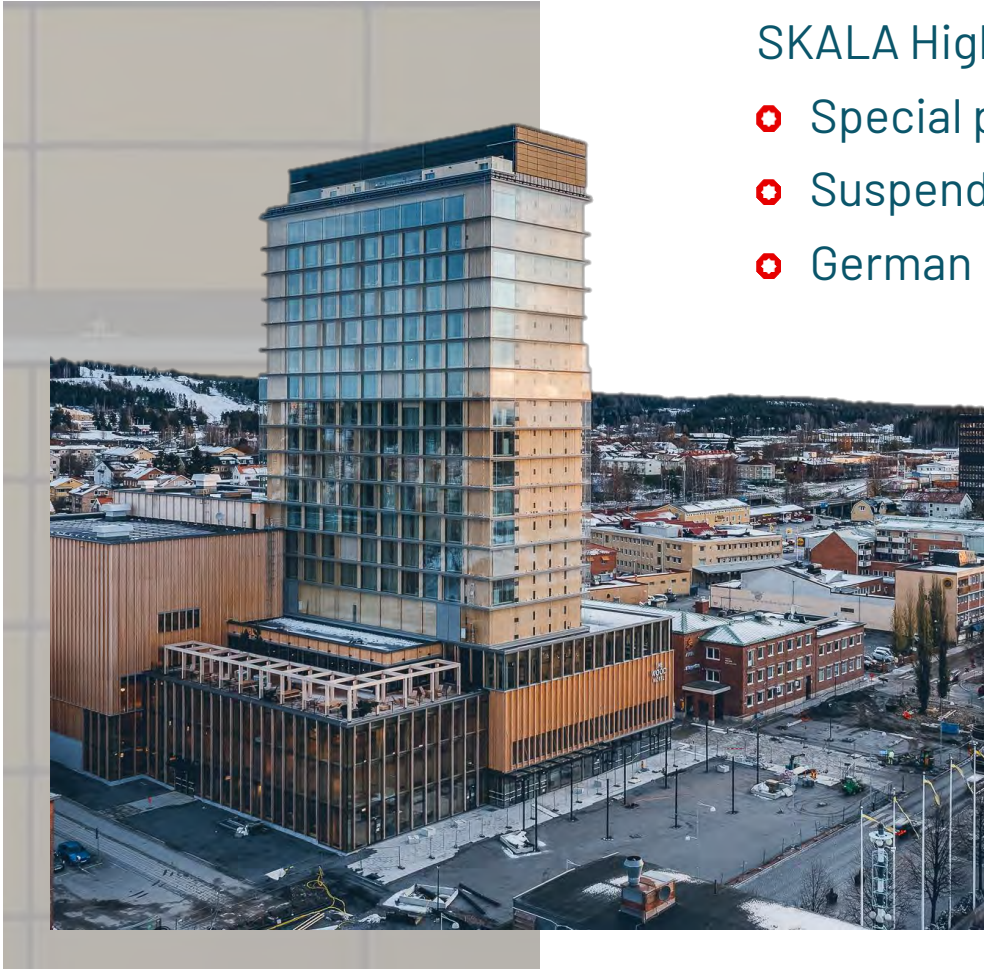
PV applications



Photovoltaic thin film modules
for various applications



High rise buildings

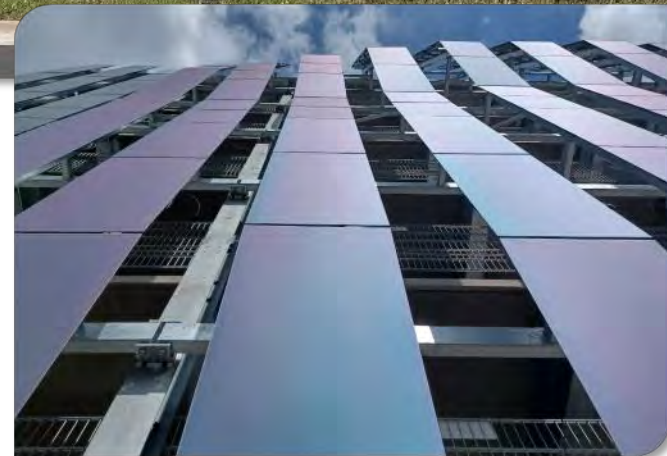
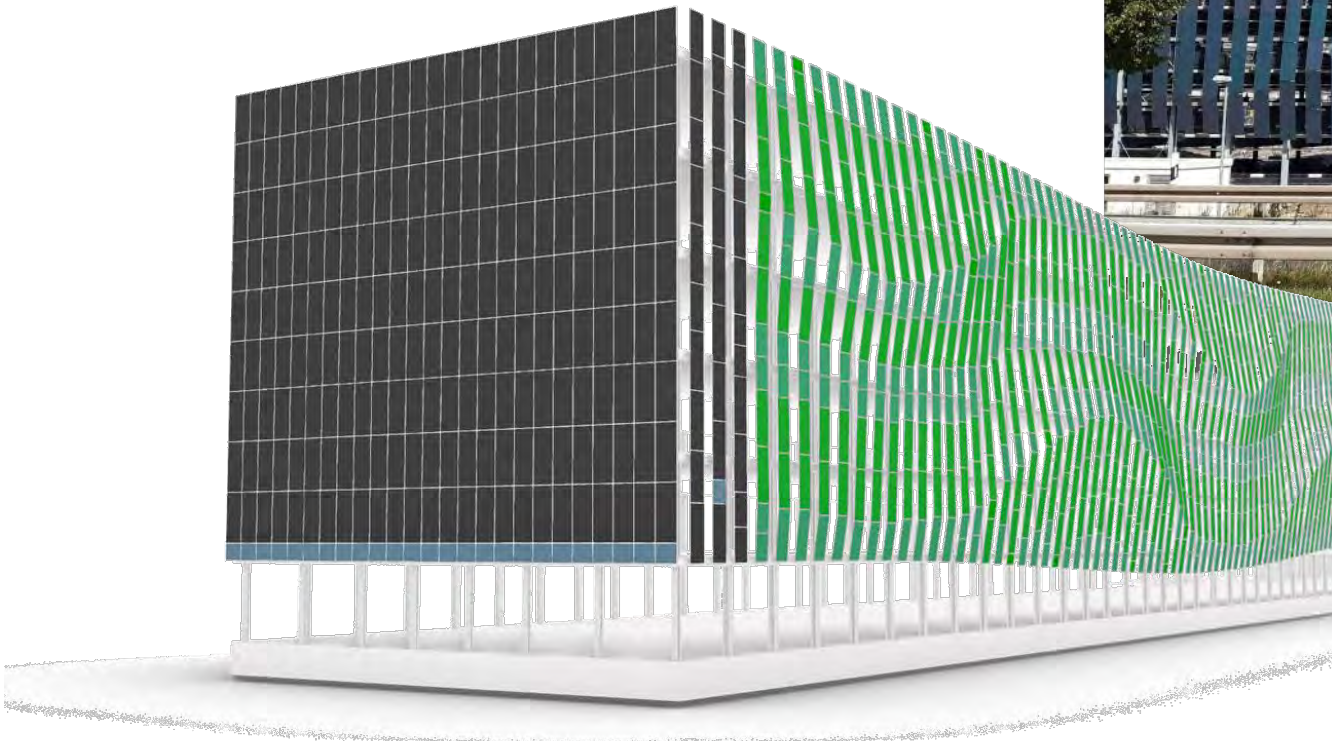


SKALA High

- Special product design of SKALA products, transferable to most modules
- Suspended mounting incl. riveting approved up to 6 kN/m^2
- German building approval since 2023



BIPV consulting



Reference Projects

Bronze
3001



Architects: White Arkitekter, Sweden
Photos: Jonas Westling



Anthracite
G001

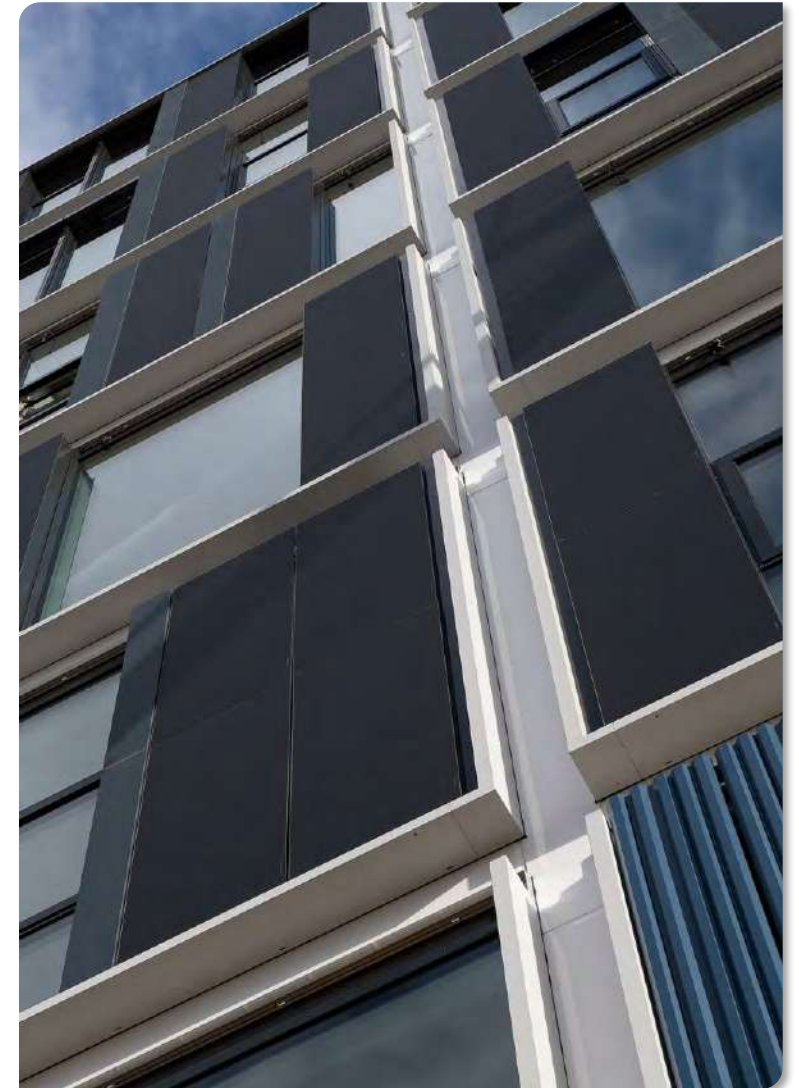
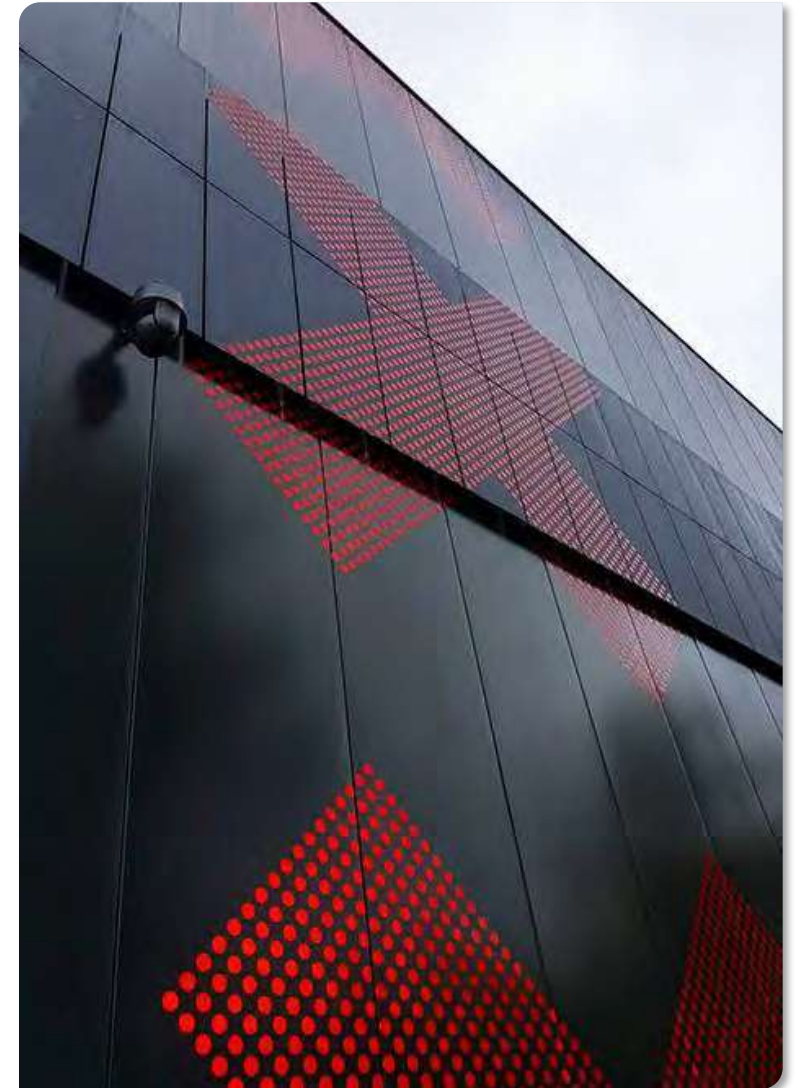


Photo: Saint-Gobain Solutions

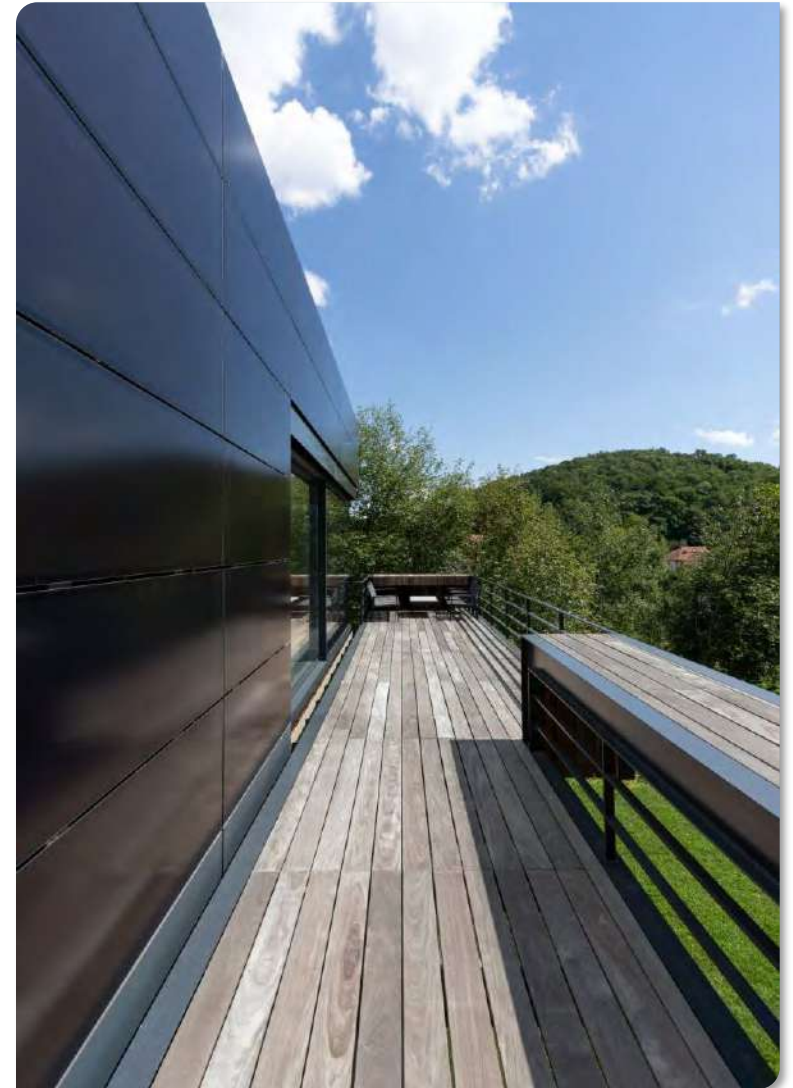
Grey
6002



Architects: Cezped, Delft, Netherlands
Photos: Lucas van der Wee

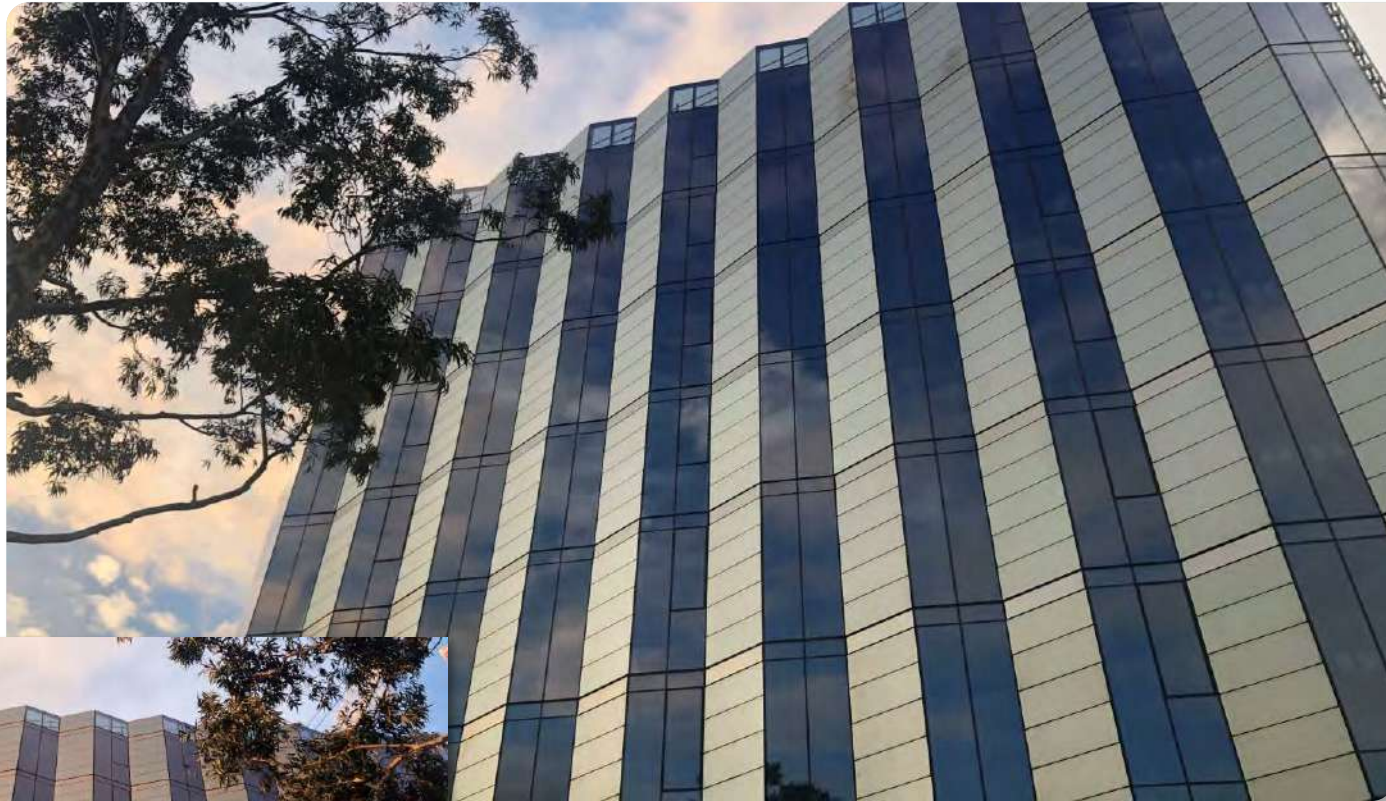


Black
B001



Architect & photos: Peter Kuczia

Light Grey
6004



Architects & photos:
Fethers architectural pty ltd. Pete Kennon, Australia

Thank you for your attention!

Vielen Dank für Ihre
Aufmerksamkeit!

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