Automatic filling station

Innovation in photovoltaic technology

perovskite ready

3D-nano

The nanomaterials company

High Precision Automatic Filling Station
Designed for Dye Sensitized Solar Cells
Operates with large modules in production scale
Suitable for any others liquid PV technologies
Perovskite ready

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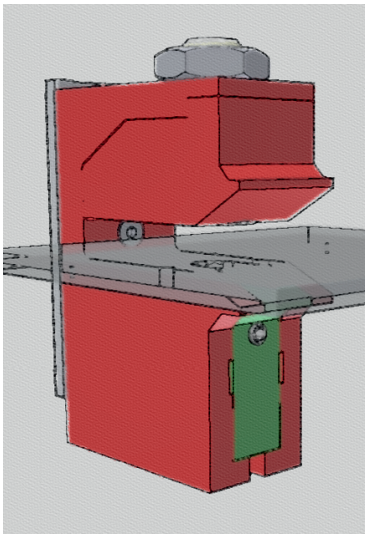
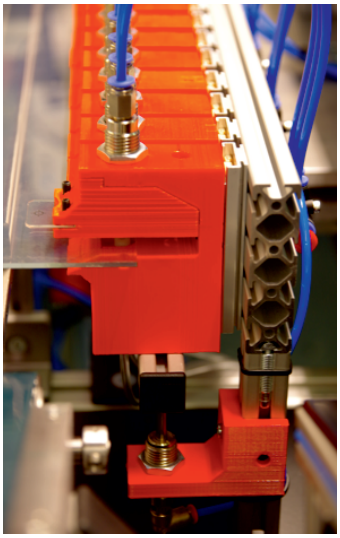
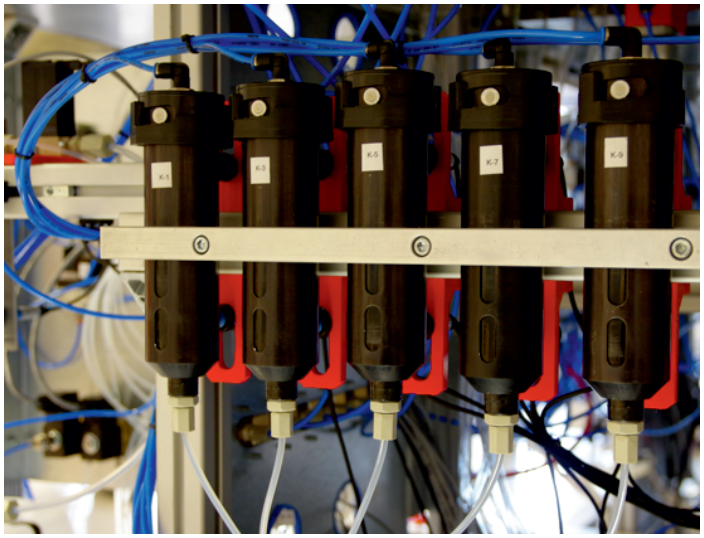
FEATURES

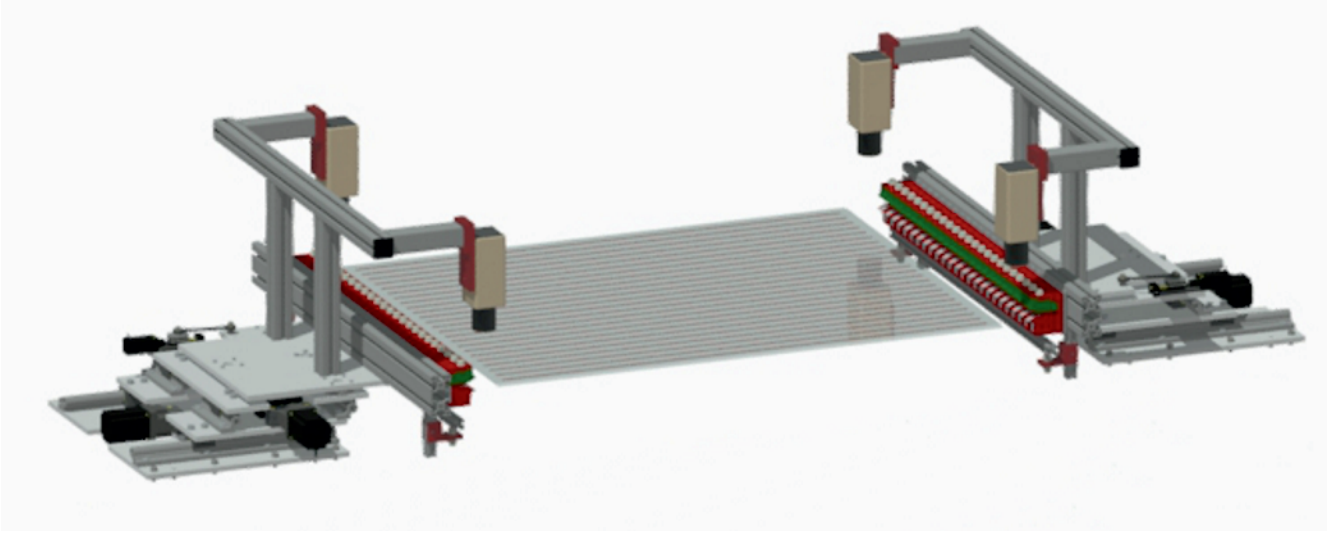
- Designed for dyeing process of DSSC modules or filling them with electrolyte
- Unique and innovative construction of the filling heads







- Compensation of the inequality of the glass substrate in the „Z" axis on the each head
- Sophisticated, innovating hydraulic system for the filling and dyeing processes
- Excellent repeatability of the filling or dyeing process
- Precisely tailored to the customer's requirements
- Complete solution for filling PV modules with liquids



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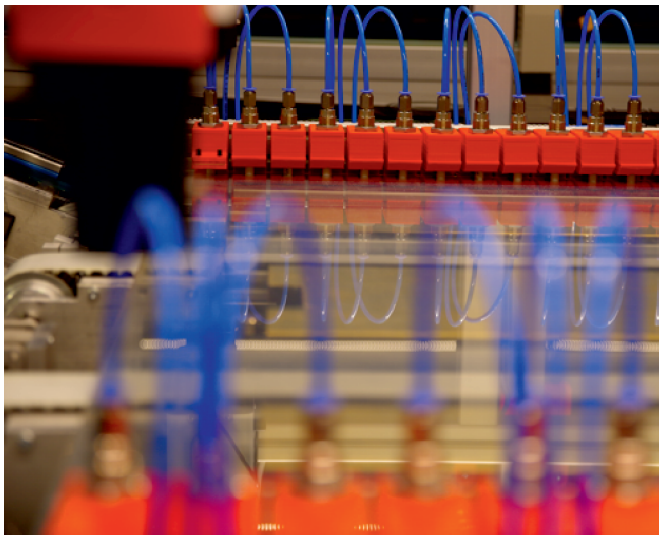
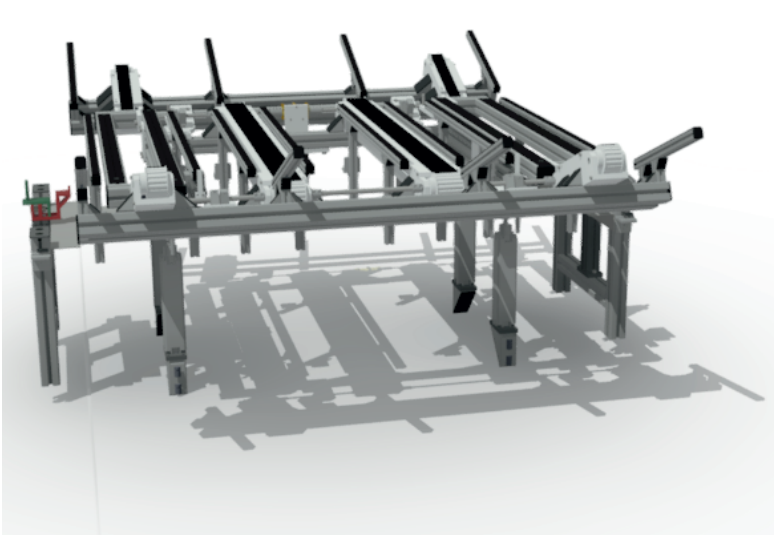
- Smart operating panel with large touch screen monitor
- Easy to operate visual positioning system



- Fully controlled parameters of the process
- Precise and reliable transport system with automatic loading/unloading of the module
- Heated bed - up to 60°C
- Complies with high safety standards
- Optimized to work in production lines with throughfeed configuration



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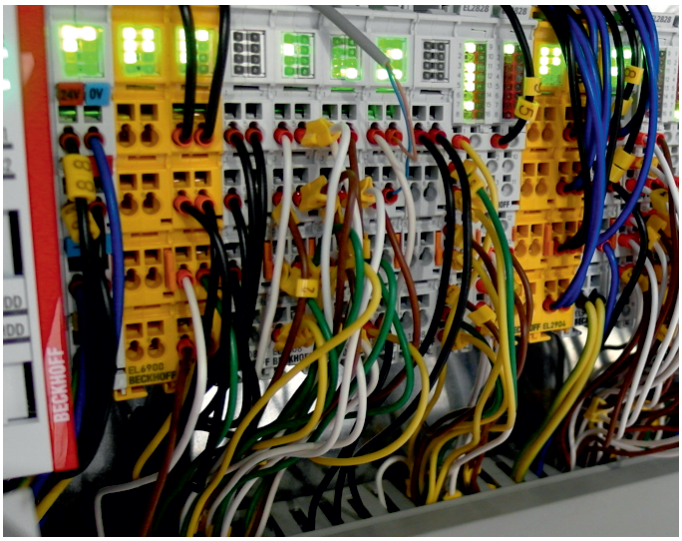
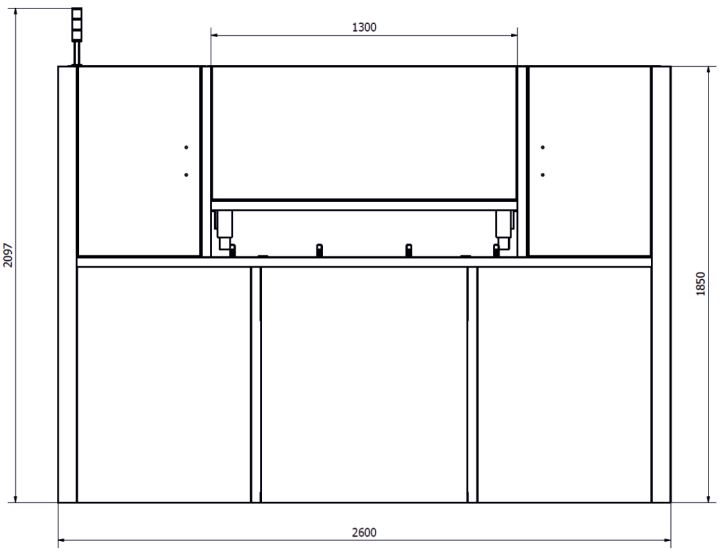
- Process controlled by PLC automation
- Reliabe Beckhoff Automation system
- Low power consumption & high efficiency


SPECIFICATIONS

- PV module dimensions: 1200x800
- Control system: Beckhoff Automation
- Compressed air: max. 8 Bar
- An inert gas: e.g. Nitrogen, max. 1,5 Bar
- Power supply: 400VAC 50Hz 2kW
- Approx. weight: 1500 kg
- Dimensions: 2600x1600x2100mm



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OUR APPROACH

3D-nano is pushing back the limitations of 3rd generation of solar technology by providing an easy way to start with DSSC and perovskite solar cells production. 3D-nano offers design and manufacturing of unique and specialized industry devices including machinery and measuring equipment. We develop and apply latest techonologies and innovative solutions. Each and every project we work on is unique - this is why we are a first choice partner for science & research community, sharing our expertise in prototype and single-unit devices creation. 3D-nano industry partners can expect a competent and direct support during the entire development process. Starting with project overview, through the production phase and operational launch, we look after every step on the manufacturing ladder. We also provide consulting and post-production maintenance of our designed devices.

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