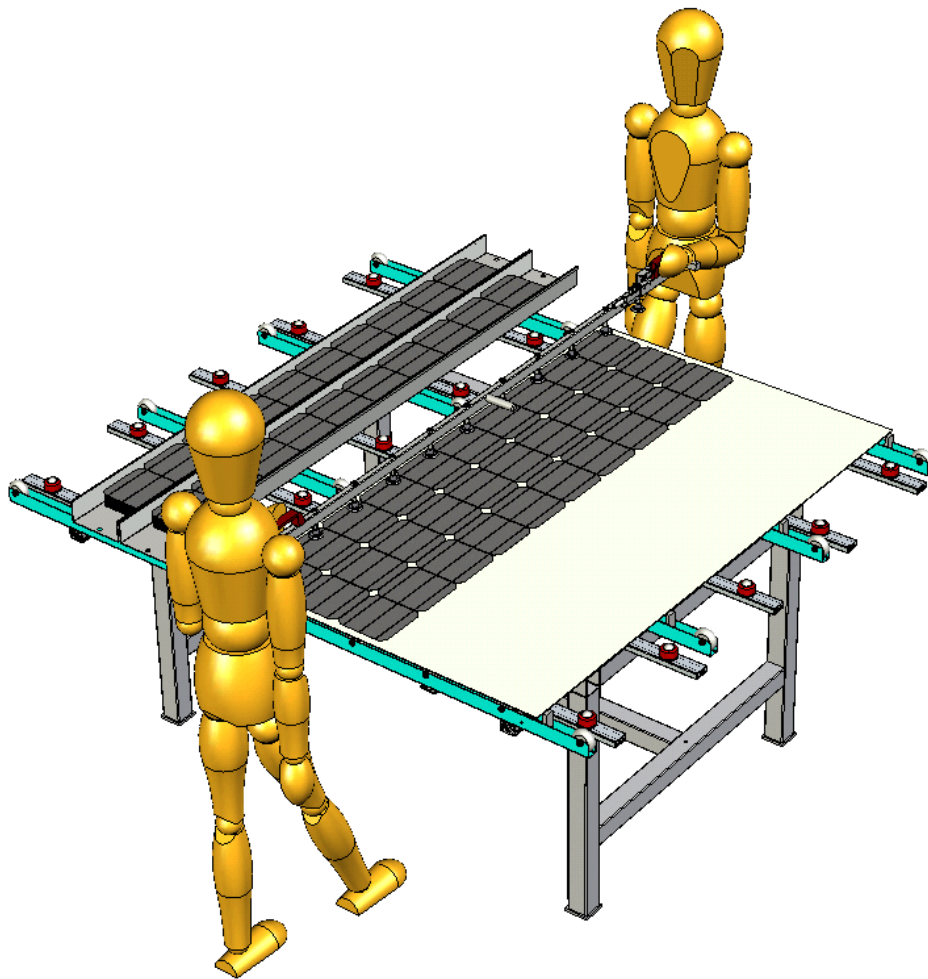


Manual LayUp



- *Exact positioning*
- *Minimised breakage due to assisted handling of strings*
- *Adjustable to different module and cell sizes*

System description

Depending on production throughput, a fully automated or mechanised LayUp is not always necessary.

ATN's manual LayUp enables two operators to align strings to the EVA-lined glass of a solar panel.

The strings with both directions of polarisation are fed to the process via two string boxes.

Strings are handled by means of height-adaptive suction grippers. The strings are taken from the

string boxes and are then precisely placed on the module.

Ball transfer units allow feeding the glass panels sideways, roller conveyors can be raised to precisely transfer the product to the next station.

Technical data

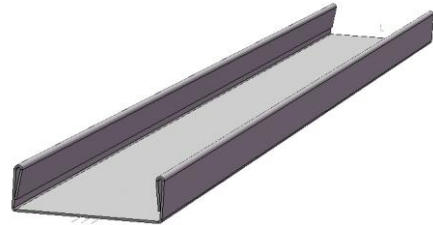
Cell dimensions	4" to 6"
Length of string	max. 1.900 mm
Module dimensions	1.000x1.800 mm
Unit dimensions (WLH)	2.400x2.400x1.800 mm
Weight	appr. 300 kg

Process

1. Insert and align glass to alignment edges
2. Insert EVA foil
3. Take 1st string from string box
4. Place and align string on panel
5. Repeat for 2nd string with different polarisation



Handling beam



String box

