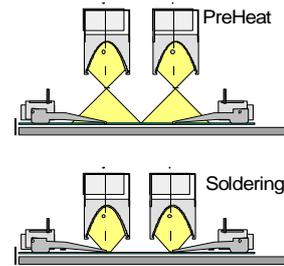
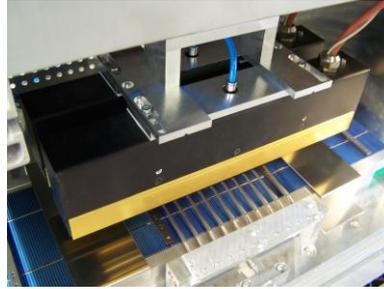
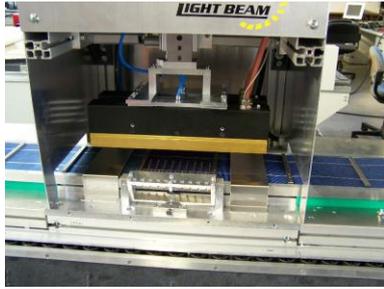


Semi Automatic Stringer



- *for cells with 2 or 3 busbars*
- *contactless and accurate heat transfer*
- *reproducible soldering process*
- *high flexibility*
- *low cycle times by using temperature profiles*
- *low operating costs and low investment*

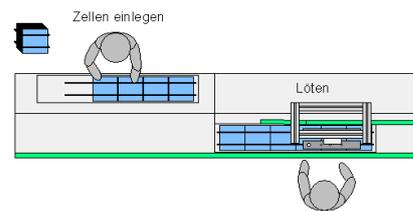
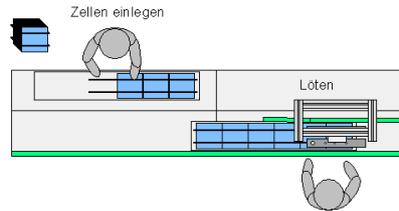
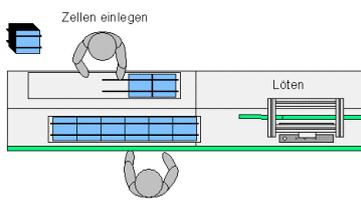
ATN-stringer: cell contacting with *LightBeam*-line emitters



At the production of solar panels the soldering of busbars, for contacting the cells, is a quality-related process. Thereby very thin tinned copper tapes are soldered on the contacts of

the solar cells. With the ATNs manual stringer the automated soldering is possible. This causes reproducible soldering results with reliable quality. Only the handling is done manually.

This allows higher flexibility for production and lower investment costs.



Technical data

cell dimensions	125x125-156x156mm	<ul style="list-style-type: none"> - low cycle time - the cell is heated up only once (top and bottom side simultaneously) - without mechanical stress - reproducible process - easier work (manual soldering is difficult and requires high skills) - the same process as in mass production
cell thickness	160-300µm	
busbar qty. per cell	2 / 3*	
max. string length	flexible	
flux supply	manually	
dimension basic unit	1.500x700x800 mm	
dimension incl. table extension	e.g. 3.000x700x1.500	
power input	4kW / 6kW*	

* optional 3rd emitter

IR line emitter *LightBeam*

	BS360		
power (W):	1.000W, 230V 2.000W, 230V 3.000W, 230V		
dimensions HxBxL (mm)	90 x 50 x 360		
focus FB x FL (mm):	4 x 280		
distance FA (mm)	16-20		
durability lamp	1000-5000h		

With the *LightBeam* line emitters ATN offers a wide range of optical systems for contactless heating. The halogen lamp emits light of wavelengths from 500 to 1500nm, using a convergence mirror to focus the IR-light.

The process time and the emitter power can be set at the menu-driven display in a very convenient way. A ramp function allows the use of temperature profiles. Beam power and process time will be controlled electronically and can be infinitely variable adjusted.

- 50mm slim design, => for cells with 2 or 3 busbars
- cooling with silencer
- adjustable lamp
- short cycle times by using temperature profiles
- optimised power profile for ultra-thin cells