

**Solar / Stringer TT1400 ECA**  
Freiberg, Germany, February 12, 2018

**Major contract for teamtechnik:  
Italian PV manufacturer orders stringers for  
production of high-efficiency modules with HJT  
cells**



Image caption:  
Stringer TT1400 ECA from teamtechnik reliably connects HJT cells using adhesive technology in series production  
Photo: teamtechnik (no fee for printing – notification requested)

**The Italian manufacturer located in Catania specializes in the manufacture of thin-film solar cells and module production for solar parks. The innovative company uses high-efficiency heterojunction (HJT) solar cells.** In tests for connecting the sensitive HJT solar cells, the teamtechnik Stringer TT1400 ECA delivered the best results. This system interconnects the cells using a new adhesive technology that reduces thermal and mechanical stresses on the sensitive HJT cells and results in a high string quality.

After seeking out a suitable partner for the interconnection of the sensitive HJT cells, the manufacturer has opted for stringer specialist teamtechnik. The client has ordered a number of Stringer TT1400

ECA units from the German system builder. These systems connect HJT cells reliably at lower process temperatures using an innovative adhesive technology.

The challenges involved were considerable; it is not possible to connect the high-performance bifacial HJT cells with Light-Capturing Ribbons (LCR) using conventional stringer technology. Tests conducted in advance under realistic production conditions convinced the client of teamtechnik's system.

### **Innovative adhesive technology for HJT cells**

Here, ECA is the abbreviation for 'electrically conductive adhesive'. In this process, developed by teamtechnik in-house, a conductive adhesive material is applied to both sides of the cell by means of a screen-printing technique. The LCRs are then positioned precisely over the solar cells ready for the latter to be connected into a string, and cured at temperatures of about 160°C entirely on the string transport. On this stringer the patented hold-down technology used further contributes to a precise ribbon position. ECA technology has been tested in many applications and has been found to reduce thermal and mechanical stress on the sensitive HJT cells and result in a high string quality. The finished product is a solar module that is designed for extremely high performance and long life.

### **Reliable series production with high unit volumes**

The Stringer TT1400 ECA is based on the same successful process platform that is used for all teamtechnik stringers. Over 700 of these systems are already on the market and are proving themselves in 24/7 production worldwide. The Stringer TT1400 ECA is also designed for reliable series production with high unit volumes. This major order has yet again proven teamtechnik's global position as a technology leader.

With this order, the client and teamtechnik have formed an intensive technological and development partnership. The high performance of the system was achieved through jointly testing the cells in advance and then evaluating the optimal combination of materials together. 'With our innovative adhesive technology for HJT cells we aim to support our customer in advancing the technology transition rapidly and to contribute towards enabling the production of high-performance modules with the lowest possible levelized cost of electricity for the solar parks', says Sven Kramer, Vice President Sales Solar Technology at teamtechnik group.

**A brief portrait: teamtechnik Group**

*teamtechnik Group is one of the international market leaders for production technology, assembly and functional test systems. The company, based in Freiberg am Neckar, Germany, focuses on developing and building custom automation solutions for the solar, automotive and medical technology sectors, in which it is recognized as a technology leader with a high level of process expertise. teamtechnik was founded in 1976 and today has production sites in Germany, Poland, China and the USA. With over 1000 employees worldwide, the systems manufacturer achieves a turnover of €170 million.*

<b>Contact</b>	Uta Straube
<b>Telephone</b>	+49 7141 7003-167
<b>Fax</b>	+49 7141 7003-70
<b>E-mail</b>	Uta.Straube@teamtechnik.com
<b>Internet</b>	<a href="http://www.teamtechnik.com">www.teamtechnik.com</a>

Additional image material:



Image caption:  
Processes with long-term stability in the Stringer TT1400 ECA

Photo: teamtechnik (no fee for printing – notification requested)