

REC integrates LayTec's X Link® for non-destructive quality control

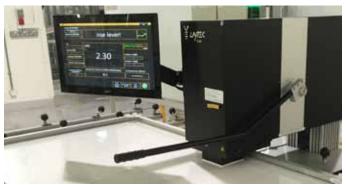


Fig 1: X Link®

LayTec takes pride that its unique metrology system X Link® fulfills the stringent solar manufacturing requirements of REC. X Link® allows fast non-destructive EVA cross-linkage testing directly integrated in production processes.

Mr. Raymond Lim, REC's Senior Director Engineering, highlighted: "X Link® allows us to ensure our quality assurance for EVA encapsulation ("gel content" test on EVA encapsulation). Because it is non-destructive, test can be conducted in real-time on actual production modules to ensure top-of-the-line quality in our manufacturing

process. This assures customers of our commitment to quality for the entire lifetime of our solar panels."

Mr. Ter Soon Kim, REC's Senior Vice President of Operations and Technology, said: "With the full automation and integrated manufacturing from polysilicon to wafers, cells, panels and turnkey solar solutions, REC strives to meet the world's growing energy needs. We chose LayTec as our control equipment supplier as they were able to add value to our operational excellence within the manufacturing value chain."

We are looking forward to the ongoing successful cooperation with REC! For more information about X Link® please visit us at EU PVSEC in Hamburg, Germany on September 14-17 in HALL H, BOOTH C1 or have a look at laytec.de/xlink.



ENERGIZING LIFE TOGETHER

REC is the largest European brand of solar panels, with more than 15 million highquality panels produced at the end of 2014. With integrated manufacturing from polysilicon to wafers, cells, panels and turnkey solar solutions, REC strives to help meet the world's growing energy needs. In partnership with a sales channel of distributors, installers, and EPCs, REC panels are installed globally. Founded in 1996, REC is a Bluestar Elkem company with headquarters in Norway and operational headquarters in Singapore. REC's 1,800 employees worldwide generated revenues of USD 680 million in 2014.

Hanwha Q CELLS uses X Link® in mass production of PV modules

Hanwha Q CELLS GmbH (Germany) has established Lay-Tec's X Link® into production of their PV modules.

Heribert Raaf, Senior Vice President Manufacturing Thalheim of Hanwha Q CELLS stated: "The lamination process is one of the most critical production steps of module manufacturing. Thanks to LayTec X Link®, ensuring the high quality of our lamination process and the corresponding quality controls have become faster and easier. Implementing this innovation in our production line is a further step in our commitment to provide top-notch quality PV modules. We are dedicated to making solar power the most reliable source of energy."

Meanwhile, Hanwha Q CELLS has deployed X Link® to all

of its production sites worldwide to ensure high standard quality control of EVA encapsulation.

At the EU PVSEC in Hamburg next week, Hanwha Q CELLS will present X Link® results in the poster "Evaluation of gel content measurement method for mass production of glass-foil based crystalline silicon PV modules". The tests at Hanwha have proven that X Link® provides extremely accurate measurements, faster and more exact process control, quality control, recipe evaluation and laminator characterization and enables an early detection of possible failures.

For more information please visit the **Poster Session on Wednesday**, **September 16 at 13:30-15:00 (Poster 5CV.2.1)**.

LayTec's Chinese sales partner JSun reports repeated X Link® orders from large scale manufacturers

LayTec's cooperation with JSun International Ltd. is bearing fruits: In the last months we had an increasing number of orders from China. Our sales in China grow not only by winning new customers, but essentially due to repeated orders from large scale solar cell and module manufacturers. We are happy to benefit from JSun's experience and their well established sales and distribution network in China!

You can meet us at the following workshops, conferences and trade fairs:

14 - 18 September 2015 | <u>30th EU PVSEC 2015</u> | Hamburg, Germany | Exhibition: Hall H Booth C1 | Conference: LayTec presents together with Hanwha Q CELLS Poster 5CV.2.1 on Sept 16 at 13:30 - 15:00

23 - 25 September 2015 | Renewable Energy Expo India 2015 | Greater Noida, India | LayTec is represented by Bergen Associates Pvt. Ltd.