

Successful market launch of LID Scope

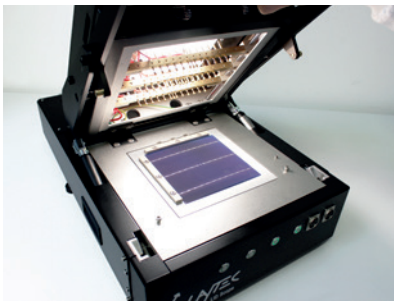


Fig. 1: LID Scope

LayTec has successfully launched a new tool for monitoring of Light Induced Degradation (LID) in solar cells. The system called LID Scope was demonstrated at three major PV events: SNEC (China)

IEEE (U.S.) and EUPVSEC/Intersolar Europe (Germany). Our sales team could demonstrate LID Scope in action to several hundreds booth visitors, more than 100 qualitative leads have asked for a commercial proposal!

In China, LID Scope was awarded as one of the "SNEC Top 10 Highlights" for its economic benefits: the tool enables fast and comprehensive LID tests already in the lab on the solar cell level! It performs automated and repeatable degrada-

tion as well as routine tracking for fast production control and it is easy to handle.

At the SNEC conference, Dr. Dominik Lausch of Fraunhofer CSP held a talk about "Accelerated Quality Control for Light-Induced Degradation (LID) on solar cell level" and presented the results of his research with LID Scope ([download the talk](#)). According to Mr. Lausch, "The PV industry continuously develops different techniques to prevent the loss of solar cell performance in field. With LID Scope, manufacturers can quickly check the success of these methods and optimize their production processes much faster and easier."

PV Magazine interviewed the developers of LID Scope and published an article about how LID testing can help a PERC upgrade pay off (see May issue of the global edition). In the interview, Tobias Schenk of LayTec commented: "Cell producers need to be able to look closely at the LID effect as it has a direct impact on the price-per-watt they can charge." For more information please visit laytec.de/lidscope.

REC installed X Link® SAM - a mapping system for lamination control

We are proud to announce the installation of LayTec's semi automated mapping system XLink® SAM at REC in Singapore! The tool measures the degree of cross-linking at predefined positions on the module. The measured data is presented as color maps that show the uniformity of the

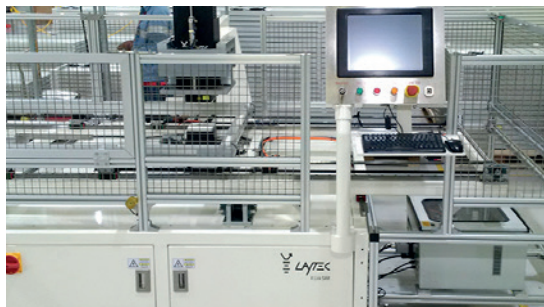


Fig. 2:
X Link® SAM – LayTec's mapping system for lamination control used in solar module production line at REC in Singapore

curing state of the encapsulant across the whole module. With a measurement time of less than one minute per point, XLink® SAM allows a fast feed-back on homogeneity in the lamination process and quick reaction on production issues. In delivery control, the tool checks the quality of the encapsulation, spotting quality issues at a glance. The whole measurement procedure is non-destructive and does not affect the functionality of the tested modules. Learn more at laytec.de/xlink!



Celebrating its 20th anniversary in 2016, REC is a leading European brand of solar panels. Through integrated manufacturing from polysilicon to wafers, cells, panels and turnkey solar solutions, REC strives to help meet the world's growing energy needs. Founded in 1996, REC is a Bluestar Elkem company with headquarters in Norway and operational headquarters in Singapore. REC concluded 2015 with 2,000 employees worldwide, 1.3 GW solar panel production capacity, and annual revenues of USD 755 million.

X Cal secures tool-to-tool and fab-to-fab accuracy of X Link®

LayTec has launched X Cal – a set of tools for on-site calibration of X Link®. X Cal consists of three components: X Cal-F calibrates X Link's force measurement, X Cal-T – temperature measurements and X Cal-M – LXM reading (LXM= LayTec cross-linking metric). X Cal set is delivered with a certi-

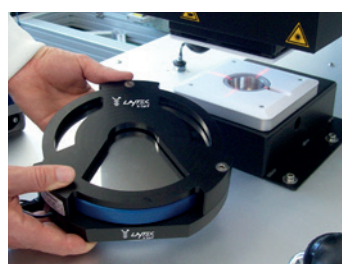


Fig 3: X Cal-F



Fig 4: X Cal-T during temperature calibration

fied calibration. The tool guarantees the high accuracy of X Link® systems, which is indispensable for process control and quality management in solar module production. It is recommended to calibrate X Link® after its installation or moving as well as once a year to fulfill the requirements of customer's auditors. Learn more at laytec.de/xlink!

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

7–9 September 2016 | [Renewable Energy India Expo](#) | Greater Noida, India | represented by Bergen Associates

27–28 September 2016 | [PV Days](#) | Halle/Saale, Germany

19–21 October 2016 | [Intersolar India](#) | Mumbai, India | represented by Bergen Associates