YieldViewer identifies and specifies process deviations in real time

Achieve unprecedented process stability with complete production transparency: React immediately to pending problems and benefit from highest yields at the lowest cost

Today, manufacturers require a quick overview of the status quo of their production. With its YieldViewer, ISRA VISION provides a software module for the evaluation of key data in real time for the entire PV production. In a fast graphical live overview, the system shows the distribution of production quality and other key data of the connected systems. As a part of the Connected Photovoltaics 4.0 solutions, the YieldViewer also provides more process transparency.

The challenge today is that manufacturers need to constantly monitor their complex production processes. In reality however, the lines are generally still inspected and maintained one after the other in a predefined order. If a system is not running ideally, the production managers do not always notice this straight away and production on the line continues despite the defects. As a result, the defect rate may rise, the produced quality may decrease and the yield may be reduced.

It is therefore all the more important for the manufacturers to gain a precise overview of their production plants.

This therefore requires a high level of process transparency: Which line is losing the most yield? How can priorities for troubleshooting be determined best? Which defects are there even? Can the defect be rectified with the personnel that is on hand or is it a serious defect? The YieldViewer software module provides the answers to these questions, making it easy to identify deviations in the process quality of the individual plants.

The solution gives the user a quick live overview of their production and provides all production data in real time. If the systems in the plants are not running ideally, this immediately becomes clear in the YieldViewer.

If necessary, detailed data on the individual systems can be called up with a click of a mouse.
The source of errors can be identified quickly. Example: If the “finger interruption” error message appears frequently during the print inspection, the print sieve is likely clogged. This error is relatively easy to rectify.

The tool clearly shows which defects occur most in deviating systems and cause a depreciation in quality. Detailed error reports from individual systems provide an insight into the process deviation. The user therefore knows where immediate intervention is necessary and most economical.

Prioritizing resource deviations – using resources in a targeted manner

The process knowledge provided by the YieldViewer allows the plant personnel to act efficiently. Unimportant activities and the elimination of less important sources of errors can be postponed. Reject rates and yield losses are avoided and targeted optimization measures are made possible.

As a part of the Connected Photovoltaics (CPV) 4.0 solutions, the YieldViewer makes a significant contribution to increased productivity and complete production transparency in the spirit of Industry 4.0. All inspection systems from ISRA VISION support the connection to the Connected Photovoltaics 4.0 solutions. The solutions enable the interconnected evaluation of the data from all process lines and the parallel central controlling and monitoring of all measurement processes.

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Identify underperforming systems in real-time