Defects
Improved material and surface properties are the main reason for the coating and laminating of substrates. No defects are allowed to influence this new and improved functionality. Typical defects like coating streaks or delamination defects need to be detected and alarmed to the operator, also a later elimination of the defects needs to be supported in the workflow. The iPQ-Check surface is the ideal system for implementing a zero defect quality control solution during production.

100% Inspection
The small and robust camera module has the smallest footprint in the market. This allows for an easy and low cost integration into the production line. With its modular architecture the system can be adapted perfectly to many different applications. The iPQ-Check surface can be equipped with RGB or monochrome line scan cameras, as well as different types of high performing LED’s for illumination.

Defect Visualization
Image capturing and defect evaluation works in real time on uniform or pattern structured surfaces. The smallest defects and inaccuracies are automatically detected and displayed on the workstation monitor. This display enables the operator to make fast and confident decisions before countless feet (meters) of waste are produced.

Defect Marking
A label inserter can be used for precise defect marking. If a defect occurs the iPQ-Check surface triggers a label insertion at the position of the defect. The signal activation can be selected for the whole web or linked to specific lanes as well as selected only for certain defect types and sizes.
Defect Verification

Not every defect detected during the production process automatically means waste. The quality_assistant is a powerful software tool to evaluate the roll log reports according to your overall quality criteria. This overview can be carried out either at a central workplace or directly at the rewinder. Individual defects or defect groups can be defined as being irrelevant, also the complete roll log report can be reevaluate by new sensitvities setting. Usually, one roll log is handled in less than a minute.

Defect Elimination

Based on the roll log reports, the rewind_navigator triggers the rewinder in a way that the defects to be eliminated are placed precisely at the splice table. Between two relevant defects, the rewinder continues operating at maximum speed. This saves precious time. When working with rewind_navigator, all defect handling steps are logged into a new report to complete the traceability chain.

Roll Log Reporting

The roll log report provides an overview of the process quality and lists all single defects of the entire production. Parameter changes or special events are also logged to the report. This can serve as a basis for integrating the surface inspection into the production workflow.