

LED BIN Management

Eliminate errors and speed up setup and changeover by ensuring the correct LED BIN is used

OUTCOMES:

- - Eliminates errors
- - Optimizes setup and changeover time
- - Maintains product quality
- - Demonstrates proof of compliance

LED suppliers sort and package surface mount LEDs based on a Brightness Index Number (BIN). The BIN is indicated on the reel label, and it is separate from the component part number. LEDs with the same part number and BIN appear identical, but brightness and coloring can be different, and mixing different BINs on the same product unit is often unacceptable. The rules vary from product to product, resulting in challenges for the assembler.

Cogiscan offers a field-proven solution for tracking, validation, and traceability of LEDs based on part number and BIN that makes LED BIN management easier.

Cogiscan's Line Setup Control software validates line setup by tracking each reel to its feeder and specified feeder location on the machine, and checking the down line set-up. This ensures that the correct LEDs are being used, before allowing a PCB into the placement machine.

When replacing reels of LEDs due to low remaining quantity, the Cogiscan system will validate that the new reel has a compatible BIN to the one already in use. If the replacement reel has an incompatible BIN, the system will issue a validation error and prevent the machine from placing components. This ensures that incompatible BINs cannot be placed onto the same PCB.

For any given reel of LEDs, traceability report can be generated that includes the following information:

- - Time Stamp for start and end of SMT placement process.
- - Operator ID (if forced Operator Log-In feature is activated).
- - Unique ID, PN and LN for each Reel used.
- - BIN for each LED Reel used.

Cogiscan LED BIN Management ensures that the correct LED BIN is always used to minimize errors, scrap and rework, while optimizing setup and changeover time and maintaining product quality.

