

LED 晶粒製造廠之最佳化存貨分配模式探討

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摘要

The LED chip manufacturing (LED-CM) is an important process in the LED supply chain. Considerable by-products will be accompanied by a production order due to the unstable production output of the LED-CM plants. However, these by-products are not defective products but can fit other specifications of the following orders. Therefore, considerable inventory is inevitable in a LED-CM plant. The feasible inventory will be first allocated to a new order so as to reduce the inevitable inventory. Then a manufacturing order is released for the inadequate quantity of this order. Secondly, the led chip specification of an order is composed by several bins. In order to achieve the optimal throughput or minimum inventory, LED-CM plants thus confront the issue of allocating the different inventory bins to different orders.

An optimal inventory allocation model for LED-CM plants is thus proposed in this paper. The LINGO software is then utilized to get the optimal inventory bin allocation solution for this model. This model not only gets the optimal throughput or minimum inventory but also can satisfy the most orders.

關鍵字：LED-CM plant、By-products、Inventory、Optimal inventory allocation