

Benefit Analysis of Using RFID System on Document Management

Student : Chen-Yi Peng

Advisor : Dr. Chi-Yang Tsai

Institute of Industrial Engineering and Management
Yuan-Ze University

ABSTRACT

TFT-LCD industry is the one of the important industries in Taiwan's global market, and polarizer is one of the key components in TFT LCD. The LCD's gross profit declines continuously caused by product price decreasing steadily in recent years, and it impacts the polarizer manufacturers. The material cost of polarizer is accounted for over 70% and is difficult to obtain, so material usage planning is very important. How to reduce unnecessary waste has become a major issue.

This research is intended to take the multilayer polarizer material assignment as the main research object. Currently, the material is still assigned by traditional way of manual operations in the case company. To improve the current assignment operation based on experience, efficient assignment rules are developed under the consideration of simplicity of the application, waste minimization, and reduction of non-productive calculation procedure. This research utilizes data collected from a domestic polarizer plant and develops a material assignment system combining Access 2002, VB.net program, and Excel spreadsheets. The system is used to execute the proposed assignment method and applied to real cases. The results are analyzed and compared to the current situation and the research conclusion and recommendations are obtained. The findings validate the proposed assignment method which improves material loss by 2.4% and provide the substantial contributions to this industry.

Keyword: Polairzer 、 Multilayer Polarizer Material Assignment 、 Assignment Rlue 、 Software Interface