INTELLECTUAL SYSTEM FOR THE PRODUCTION OF PRINTED CIRCUIT BOARDS

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The intelligent system of the new format completely replaces the old processes of auto-correlation, pointing, optimization, alignment, imaging, recognition, processing of information of a particular installer in SMD production.

The structure of the system is designed with the help of all technical documents and interacts with the safety technology in this SMD area.

The basic principle is the developed system "Grape Tec", which allocates the necessary resources for the SMD mounters and emulates the system using Raspberry Pi or a computer, makes accurate algorithmic calculations, corrects the offsets and speeds up the work process.

After a successful result, any installer will not need to center or use their resources, it speeds up the process, stops the machine, its durability, safety on the part of the line operator and confidence in the accuracy of the work.

This technology can be developed in any smd production of mass or initial-technical trial level. It includes all types of projects.

The main advantage of the project is its development in modern production and its further use on the basis of private production, which gives reliability and efficiency in the work with a minimum number of rejects and maximum efficiency for the working plans. The result of the work is stable, efficient work for the benefit of both production and equipment and workers. The enhancement simplifies tasks for literally everyone, reduces material costs and connects any circuit base, with automatic rendering or element checking and proper optimization of feeders with ultra-precise nozzle pickup down to 0.4 μm. In other words, it completely automates both the software and the physical, working, financial part of production.

References:
1. Mirae Mx-series manual for SMD production. ©Copyright 2007 Mirae Corporation.
2. Working technological documents in production. Ajax systems comp.