



UK EMS PROVIDER CHEMIGRAPHIC INCREASES SMT LINE UTILISATION BY 30% USING AUTOMATED STORAGE MANAGEMENT SYSTEMS ISM BY JUKI

Chemigraphic, one of the UK's leading electronic manufacturing service businesses, continues the next phase of its investment cycle by purchasing JUKI's new ISM systems in order to enhance their surface mount operations and the speed up time to market for their customers.

Until now, Chemigraphic supplied their two Juki SMT lines out of a manual stock. It thus happened again and again that the material was not at the right time at the right place. Reels got lost because they had been stored wrong and the production lines stopped because the components weren't on site. Every SMT production knows this complex of problems very well.



Technical director Stewart Gadd comments: "During 2012, we started to look at how to increase our output from surface mount and decided that the limiting factor was placement efficiency. In a typical week we were only spending about half the time placing components. This was driven mainly by the amount of product changeovers we had within a week. Our typical batch sizes range from 1 to 300 and normally we change products 2 to 3 times a day on each line. There is very little commonality across our products, which results in a surface mount stock holding of around 15,000 items.

The solution was going to be improving the time spent retrieving components from stock and getting them onto feeders ready for the placement lines. Juki's solution based around the ISM2000 automated storage towers was ideal. We purchased two ISM2000's - configured for 2059 8 mm reels per tower and one ISM 400 - which we would use to store IC's sticks and others. We deliberately targeted the components that were on our standard products so that most of the stock would be retrieved from the cabinets. However, the highest use parts, such as decoupling capacitors, we left on our old shelves, no one ever had an issue finding these due to the high quantities held in stock."

With the update of the newest Juki intelligent machines, feeder and line software, the towers are now fully integrated in the production line. With a push on the bottom, Chemigraphic can now swiftly see positions where the reels are: Either on the machine or on an off-line feeder trolley or still in the ISM2000 tower.

A new job can be set up by giving the pick list from the line computer to the towers. 27 reels are automatically delivered. The footprint on site, the material count management integrated in the pick and place production and the setup speed had been dramatically improved. The ROI of the tower solution is calculated with only 1.9 years and their two lines up-time has increased from 50% to 80%.

Stewart Gadd is convinced that this had been one of the best investments Chemigraphic ever did on their shop floor and that the financial benefits will be visible very soon.

About Chemigraphic: As one of the UK's leading electronics services providers, Chemigraphic specialises in the design, development, manufacture and procurement of printed circuit boards, chassis, boxes, cabinets and systems for the communications, networking, computer, simulation, medical and instrumentation industries. Operating out of a state-of-the-art, 40,000 square foot UK-based factory, the company employs more than 150 people, with an annual turnover of over £20m and continuing year-on-year sales growth in excess of 15%. Our reputation is for premium quality, fit-for-purpose products, backed by unrivalled levels of service and quality control - all Chemigraphic products are tested to the requirements of their customers.