

MOUNTING APPARATUS OF ELECTRONIC COMPONENTS AND MOUNTING METHODS OF THE SAME

ABSTRACT OF THE DISCLOSURE

An apparatus and method for improving the productivity and accuracy of mounting electronic components on a substrate. The mounting apparatus includes a line-sensor for image recognition, a carriage head 20 having plural nozzles 21a, 21b and 21c aligned along a predetermined axis. The carriage head 20 is transferred along the direction of the aligned nozzles and above the line-sensor 33 of a recognition member 30. The line-sensor 33 takes images in sequence of the electronic components (chip) vacuum chucked by each nozzle 21a, 21b and 21c in order to recognize positions of the chips 12. Then, based on the recognition results, position deviations of the chips 12 with regard to X, Y and θ directions are compensated, and the chips 12 are mounted onto specified coordinate spots of substrate 3. The recognition member 30 includes an adjusting means of rotation angle for crossing the longitudinal direction of line-sensor 33 with the transferring direction of nozzles 21a, 21b and 21c at right angles.

Figure 3.