The reproducibility verification of Edge Bead Removal(EBR) process for contamination control in lithography.

JAEYOUNG PARK ¹

¹SKKU Univ., Korea, Republic of

Recently, As the miniaturization of semiconductor Critical Dimension(CD), new the defects or factors affecting the yields have appeared. As the robots velocity is increasing at cost competitiveness. Among them, lithography\'s robots were one of the fastest robots in semiconductor. It was directly related to contamination inside the equipment. And it is very important to control the robot for wafers. The Photo Resist(PR) coating process, which is one of the semiconductor manufacturing core processes, must proceed including the step of removing the edge after PR coating from the contamination control. Since the PR of the edge of the wafer induces the particle during the transfer via the transport device after the coating process, it is necessary to delete it. This process is called Edge Bead Removal(EBR) process, and size and scatter control of EBR are very important so as not to affect the pattern. In this paper, to checked the robot reproducibility actually and it suggested the directions for the future. The EBR is representing robot control index in lithography equipment. To introduce some method of controlling the robot in lithography equipment, and to confirm each method of the EBR trends for the long term.