

利用模擬分析來提升單片多反應室機台之生產力

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摘要

Semiconductor manufacturing was developed and grown up over the past decades. In order to maintain higher yield and productivity, Single-Wafer/Multi-Chamber equipment became the main stream in modern semiconductor manufacturing factories which occupies over 50% of production machines. Therefore, how to increase the productivity of this kind of machines is the major topic for the managers.

In this work, a productivity enhancement model for Single-Wafer/Multi-Chamber machine is proposed. A simulation model is built to forecast the bottleneck unit of equipment and make experiments of improvement plan. Besides, TOC steps are applied to find out the way to enhance equipment productivity. ANOVA is applied to verify the results of improvement.

關鍵字：Wafer fabrication, Single-Wafer/Multi-Chamber equipment, Productivity, System simulation.