

대형 클린룸내 전자부품 생산공정에서의 이물질이 예측을 위한  
기류해석에 관한 연구

정기호, 신안섭, 박창식, 변향은

삼성전기 중앙연구소 부산연구분소

**The Prediction and Evaluation of Contamination in the Large Clean Room  
for Manufacturing Electronic Components**

Giho Jeong, Anseob Shin, Changsik Park, Hyangeun Byun

BUSAN R&D Center, SAMSUNG ELECTRO-MECHANICS

**Abstract** : The world gross market of many kinds of electronics, such as TV and mobile phone has been increasing rapidly these days. It is mainly caused by the amazing developments of IT technology during past decade and the changes of individual life style for the better. Thanks to the increases of electronics manufactured in quantity, much more electronic components such as MLCC (multi layer ceramic capacitor) and PCB (printed circuit board), which are our main products, have been needed as a consequence.

Though it was reported that total market of electronic components exceeds several hundreds of billion dollars, there are many manufactures struggling for survival in the competition of electronics components. Then the recognition of quality as a key technology has spread and the efforts for high-yield production lines have been kept in many companies.

In this paper, our efforts to eliminate the contamination of particles and the diffusion of some volatile organic compounds which is very harmful to workers at production line have been introduced.

**Key Words** : Clean room, Cross contamination, Particle Trajectory