2007-S-196

아연도금 공정시 국소 환기시스템의 유동해석에 관한 연구

이 중 섭*†, 장 성 철*, 윤 강 로*, 정 한 식**, 정 효 민**
삼원기술주식회사*, 경상대학교 기계항공공학부**

A Study on Flow Analysis of Local Ventilation System with Zinc Plating Process

Chung Seub Yi*†, Sung Cheol Jang*, Kang Ro Yoon*, Hanshik Chung**, Hyomin Jeong**
*† *Samwon tech co.,LTD, Gimhae 586-1, Korea*
** *School of Mechanical and Aerospace Engineering, Gyeongsang National University Tongyoung 445, Korea*

ABSTRACT: This study represents numerical analysis on the fluid flow and concentration characteristics by scattering fume at zinc plating bath. Numerical analysis with computational fluid dynamics(CFD) was carried out to investigate the scattering fume that flow into a hood system. This phenomenon simulated about local ventilation system by using CFD and base on these fact has find improvements. This study result shows that if scatter velocity of fume become an independent variable then push-nozzle and air-curtain working as a dependent variable, And also result confirmed that nozzle angle could be as important variable.

Key words: Zinc plating(아연도금), Local ventilation(국소환기), Hood(후드)