

Design and Fabrication of Incense Stick Drying Chamber

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Abstract: *Incense and joss stick are generally used in the world. Most products were made in small household factories. There are many environmental and occupational hazards in these factories. Objective is to evaluate the workplace environmental and occupational hazards in small household incense and joss stick factories. Nine small household factories in rural areas, were studied. Dust concentration and small aerosol particles were counted through real time exposure monitoring. The inductively coupled plasma optical emission spectrometry (ICP-OES) was used for quantitative measurement of heavy metal residue in incense products. Several heavy metals were found in dissolved dye and joss sticks. Those included barium, manganese, and lead. Rolling and shaking processes produced the highest concentration of dust and aerosols. Only 3.9% of female workers used personal protection equipment. Dust and chemicals were major threats in small household incense and joss stick factories in Industrial Areas..*

Keywords: Stick Drying Chamber

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