

State estimation of a dehydration process by interval analysis

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Abstract

This article presents a general methodology of state estimation by interval analysis in a dynamic system modeled by difference equations. The methodology is applied to a pineapple osmotic dehydration process, in order to predict the behavior of the process within a range of allowed perturbation. The paper presents simulations and validations.

keywords

Interval analysis, Osmotic dehydration, Physics model, State estimation