Discrete-time frequency model identification method for Process with final cyclic-steady-state

유경환, 김경수, 강호숙, 이시내, 조준용, 이지태, 성수환*
경북대학교
(suwhansung@knu.ac.kr*)

A new non-parametric process identification method is proposed to obtain the discrete-time frequency response model from given process input and output data. Existing methods can be applied to only when the process include initial/final zero-steady-state. The proposed method uses a new transform to estimate the frequency response model for more various conditions including both initial/final steady-state and initial steady-state/final cyclic-steady-state. It can estimate exact frequency response model because approximations are used in developing the proposed algorithm. Also, the proposed method can provide the same exact model even in the case of static disturbances.