The account of influence of time delays of processing of signals in digital control systems

Leonty K. Samoylov
Technological Institute of Southern Federal University, Taganrog, Russia
samoilov@fep.tsure.ru

Output signals of digital control systems have an essential delay concerning input signals. This delay is the reason of an additional error of control. Influence of a delay of the information is offered to be considered in the form of a component of dynamic error of process of digitization - restoration. At such approach the delay increase leads to increase in demanded frequency of digitization or to increase in an error of control.

Keywords: digital control systems, delay, dynamic error, control error