

A Simplified Model of the Control System with PFM

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Abstract : This work considers the automated control system (ACS) of milk quality during its magnetic field processing. For achieving high level of quality control methods were applied transformation of complex nonlinear systems in a linearized system with a less complex structure. Presented ACS is adjustable by seven parameters: mass fraction of fat, mass fraction of dry skim milk residues (DSMR), density, mass fraction of added water, temperature, mass fraction of protein, acidity.

Keywords : fluids magnetization, nuclear magnetic resonance, automated control system, dynamic pulse-frequency modulator, PFM, nonlinear systems, structural model

Conference Title : ICCSEA 2015 : International Conference on Computer Science, Engineering and Applications

Conference Location : Paris, France

Conference Dates : May 18-19, 2015