

Alum and Lime Dosing Controllers for Water Treatment Plant

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Abstract

Many techniques are applied to control coagulant dosing in a drinking water treatment plant. Coagulant dosing rate is non linear correlated to raw water parameters such as turbidity, conductivity, pH, temperature, etc. Manual method called Jar testing is used to decide the dosing rates of Alum and Lime. Since parameters of the water source are continuously changing, dosing rate of Alum and Lime are difficult to adjust manually. The aim of the research is to automate the system by obtaining a simple relationship to find optimum coagulant dosage and handle practical situations of water treatment plants.