

ABSTRACT

"*Simulator Proses Kontrol*" plant is a plant located at Laboratorium Control, Christian University of Maranatha Bandung. This Plant is designed and built with a purpose a simple example of process jetting of water fluid, which based on industry, so it gives an image of for students, specially technique student of elektro Christian University of Maranatha Bandung about process in industry.

As target of identification plant "*Simulator Proses Kontrol*" is seeking of mathematics model as way to study a system and design a controller.

Mathematics model which identification on this paper is an equation of mathematics influenced by time. For that reason, process seeking of and delay of bandwidth must be searching. Method seeking of delay use a function of correlation coefficient analysis, while method seeking of bandwidth use a function of coherence.

Mathematics model got on this paper have been proved with statistical test, so that can expressed as a represent of the system of plant "*Simulator Proses Kontrol*" with an error ± 1.979 cm for mode 1 (process jetting of water with 2 tank) and an error ± 2.555 cm for mode 2 (process jetting of water with 3 tank).

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