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A Comparative Study of the Modeling and Quality Control of the Propylene-Propane Classical Distillation and Distillation Column with Heat Pump

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Abstract : The paper presents the research evolution in the propylene – propane distillation process, especially for the distillation columns equipped with heat pump. The paper is structured in three parts: separation of the propylene-propane mixture, steady state process modeling, and quality control systems. The first part is dedicated to state of art of the two distillation processes. The second part continues the author’s researches of the steady state process modeling. There has been elaborated a software simulation instrument that may be used to dynamic simulation of the process and to design the quality control systems. The last part presents the research of the control systems, especially for quality control systems.

Keywords : absorption, distillation, heat pump, Unisim design
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