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## Hydrodynamic Study and Sizing of a Distillation Column by HYSYS Software

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**Abstract :** This work consists, first of all, of mastering one of the powerful process simulation tools currently used in the industrial processes, which is the HYSYS sizing software, and second, of simulating a petroleum distillation column. This study is divided into two parts; where the first one consists of a dimensioning of the column with a fast approximating method using state equations, iterative calculations, and then a precise simulation method with the HYSYS software. The second part of this study is a hydrodynamic study in order to verify by obtained results the proper functioning of the plates.

Keywords: industry process engineering, water distillation, environment, HYSYS simulation tool

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