

Simulation in Gas Processing.

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Abstract

LPG occupy a important place in the energetic balance of any country. They play a large role in the development of the Algerian national oil company Sonatrach .However, the evolution that the energy sector now provides better marketing opportunities, on the other hand, the production of LPG must meet the marketing standards, and that is why we must optimize the operating parameters in the fractionation units thereof. As part of the renovation of existing facilities, we use the simulation, which gives tangible results. Their application is often profitable. Nowadays, simulation and optimization of chemical processes require precise knowledge of the equilibrium properties of mixtures over wide temperature ranges, pressure and composition, the phase equilibrium can be measured by different methods. The objective of this work is; 1- Study the influence of the change of the load on the operating conditions and the quality of the final products. 2. Simulate the fractionation unit using a simulator HYSYS v7.2 to remove the thermodynamic model that represents well the nature of our office and the convergence algorithm from the simulation of the case then this design latter will be used to perform the simulation of the current case analysis of the operating parameters and the quality of the final product, the comparison between the two cases we were able to detect anomalies. 3- A simulation of the current case has been made by optimizing the process parameters in order to contribute to improving the quantity and qualities of the end products satisfy the required commercial standards.

References

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