

Study regarding the selection of catalytic systems used for hydrofining of straight run naphtha and coking naphtha blending

Anca APREOTESEI GHIȚĂU^A, Gabriela FOCȘĂNEANU^a and Simona LEPĂDAT^a

^a *Department of Fuels, INCERP-CERCETARE Ploiesti, 291A Republicii Blvd., Romania*

Abstract The activities of some catalytic systems resulting from testing them in a micropilot unit, for hydrodesulfurization (HDS) and olefins hydrogenation (HDO) of straight run naphtha and coking naphtha blending, are presented in the paper. Catalytic systems used in process are Ni-Mo/Al₂O₃ and Co-Mo/Al₂O₃ type. The purpose of the process consists in obtaining higher hydrodesulfurization and hydrogenation of olefins degrees. From the analysis of experimental results the following parameters to operate the process were established: Feedstock -straight run naphtha and coking naphtha (4/1 vol); Temperature - 340°C; Pressure, 35 bar; LHSV, 1 – 3 h⁻¹; H₂/feedstock ratio, 200 NI/l.

Keywords: hydrodesulfurization, hydrogenation, catalytic system, straight run naphtha and coking naphtha.
