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(57) Abstract

This application is related to a process for hydrocracking of heavy naphtha feeds. An improvement in the selectivity of the hydrocracking process was observed by decoupling aromatics saturation and hydrocracking reactions. This benefit has been observed for hydrocracking with either noble metal or base metal catalysts. The improved selectivity was observed in a low pressure as well as standard pressure operation. A decrease in the amount of light gas (C_1–C_4) and an increase in the amount of liquid product produced was observed. Decoupling the aromatic saturation and hydrocracking reactions also resulted in a significant improvement in process operability (i.e., decreased runaway tendency) and controllability and a reduction in catalyst deactivation rate.



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