Review and Comparison of FCC Gasoline Selective Hydrodesulfurization Process

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Abstract
Lowing gasoline sulfur regulation is a definite worldwide trend. From 2009, the EU, North American countries and some Asian countries have adopted gasoline sulfur <10 ppm regulation successively. FCC gasoline sulfur is the biggest contributor to the gasoline pool. For achieving 10 ppm ultra low sulfur gasoline target, most refineries determine to install FCC selective hydrodesulfurization units as the main countermeasures. This article gives a review on some main FCC selective HDS technologies including Prime G+, SCANfining, CDHydro/CDHDS, RSDS-I/II and OCT-M/OCT-MD. The process design, technology improvements and process comparison on these technologies are also reported. In addition, by comparing the process feature, reaction mechanism and operation constrains of these technologies, it was also helpful to learn more about CPC adopted technologies.

Keywords: FCC Gasoline, Selective Hydrodesulfurization, Ultra Low Sulfur Gasoline

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