Integrating refining and petrochemicals. Ma'adhah, A.; Abul-Hamayel, M.; Redhwi, H.; Aitani, A.; Saeed, M.; Ino, T. King Fahd University of Petroleum Minerals, Saudi Arabia. Hydrocarbon Engineering (2003), 8(6), 49,52-54. Publisher: Palladian Publications Ltd., CODEN: HYENF5 ISSN: 1468-9340. Journal written in English. CAN 140:184284 AN 2003:569672 CAPLUS (Copyright (C) 2008 ACS on SciFinder (R))

Abstract

An HS-fluid catalytic cracking (HS-FCC) process was developed to integrate refining with petrochems. prodn. The process consists of several steps, including reaction, stripping regeneration and sepn. HS-FCC process consists of downer reactor, high reaction temp., short contact time and high catalyst/oil ratio. Pilot plant study showed, based on the intrinsic features of HS-FCC, max. light olefins yield can be obtained by the combination of optimized catalyst system and operating conditions. Catalytic cracking of vacuum gas oil under high severity in a downer type reactor boosts overall conversion and enhances the prodn. of gasoline and light olefins.