Solution of preventing differential pressure in fix bed reactors for RCD unit

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The unit of RCD (Reduced Crude Desulfurization) was applied for decreasing of Sulfur, CCR (coradson carbon residue), metals of heavy feeds AR (Atmospheric Residue), VR (Vacuum Residue), and also prepared the feed of RFCC (Reduced Fluid Catalytic Cracking) unit. The unit includes the following parts: Feed pretreating (Filter) Section, Reactor Section, Fractionator Section, and make-up Hydrogen Compression Section. These compounds were easily converted to H2S, however feedstocks containing heteroatomic aromatic molecules were processed with difficulty. Desulfurization of these compounds was preceded by initial ring opening and sulfur removal followed by saturation of the resulting olefin. Thiophene was processed 15 times more difficult compared to diethylsulfide. Fixed bed reactor type one is used for the process. One of the main problems in such unit is differential pressure of reactors. This paper discusses about how we could prevent DP in the reactors in real operation.

Biography
Ali Shaeri is currently working in NIOEC as a Senior Process Engineer, Technical Advisor of REF Co and is teaching in the university. He is a member of IPS (Iranian Petroleum Standard) and Scientific Mission at Elmi- Karbordi University.

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