



INDAddept®

Adsorption Technology for Deep Desulphurisation of Cracked Gasoline

IndianOil R&D has developed INDAddept process and proprietary adsorbent to reduce sulphur from cracked gasoline feedstocks to meet BS-VI/Euro-VI sulphur specifications. The technology comprises of two fixed bed reactors operated in swing mode of adsorption and regeneration, for deep desulphurisation of gasoline under optimised operating conditions. In this process, sulphur in gasoline is removed by Reactive Adsorption mechanism. After reaching the Sulphur-breakthrough point, the adsorbent is regenerated under controlled conditions with lean air (1% O₂ in N₂) by oxidation of adsorbed Sulphur and Coke followed by activation with nitrogen - hydrogen mixture.

Salient Features

- Reactive adsorption based process technology for production of low sulphur gasoline component meeting BS-VI/Euro - VI sulphur specification
- Process comprises of two fixed bed reactors operated in swing mode of adsorption & regeneration

Major Benefits

- Capable of handling heavy cut of cracked gasoline feedstock like FCC Gasoline and Coker Gasoline
- Reduces Sulphur content to < 10 ppmw
- Low hydrogen consumption in the range of 0.20 to 0.30 wt% of feed
- Uses low-cost proprietary adsorbent

Commercial Experience

- 35 KTA grassroots unit commissioned in 2017 in one of the Indian refineries

