



indeDiesel
Ultra Low Sulfur Process

indeDiesel®

Production of Ultra-low Sulphur Diesel

Introduction of Ultra-low Sulphur Diesel (ULSD) necessitated quantum improvements in performance of Diesel Hydrotreating technology. indeDiesel is a commercially proven technology for meeting BS-VI/Euro-VI diesel specifications. The technology offers flexibility to upgrade middle range straight run distillates, light coker gas oil stream and light cycle oil from Catalytic Cracking units to ultra low sulphur, high cetane diesel suitable for meeting ULSD specifications.

Salient Technology Features

Superior reactor design with improved hydrodynamics

Efficient reactor internals for enhanced catalyst life

Optimized feed preheat scheme & reactor configuration offering cost-effective designs considering both capital and operating costs

Employs improved high active hydrotreating catalyst developed by IndianOil

Customized process design and flow schemes depending on the feed characteristics and process objective



Major Benefits

- Can handle high sulphur in the feed
- Design capability to process a wide range of cracked components (10% to 80%)
- Flexibility to produce Jet fuel simultaneously
- Cetane improvement in diesel over combined feed can be tailor made to ≥ 12 units
- Sulphur content in diesel ≤ 8 ppmw
- Continuous support through model & pilot plant testing post start-up period and optimization, revamp and trouble-shooting studies

Commercial Experience

Commissioned units

- Two units each of 1.2 MMTPA are in operation producing BS-VI diesel (Sulphur < 10 ppmw & Cetane number > 51) since commissioning in 2011 and 2020 respectively
- Successful revamp of three large capacity units in Indian refineries for production of BS-VI quality diesel
 - DHDT unit by 130% to 2.86 MMTPA
 - DHDS unit by 124% to 2.20 MMTPA
 - DHDT unit by 130% to 1.6 MMTPA



Upcoming units

- A grassroots unit of 1.2 MMTPA capacity scheduled for commissioning in 2023-24 in India

For more information, please contact:



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