

## indeDiesel®

## Production of Ultra-low Sulphur Diesel

Introduction of Ultra-low Sulphur Diesel (ULSD) necessitated quantum improvement 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 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 feed meeting the diesel Sulphur Specification ( $\leq 8$  ppmw)
- Design capability to process a wide range of cracked components (10% to 80%)
- Flexibility to produce Jet fuel
- Cetane improvement in diesel over combined feed can be customised to  $\geq 12$  Cetane units
- Technical support for optimization of unit performance and trouble-shooting studies
- Revamp for capacity augmentation & product quality improvement





**indeDiesel**  
*Ultra Low Sulfur Process*

## Commercial Experience

### Commissioned Units

- Two grassroots 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
- Successfully revamped three large capacity units in Indian refineries and in operation 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

