indDSN
Naphtha Deep Desulfurization

indDSN®

Production of Ultra-low Sulphur Naphtha Stream

ndDSN® is a process technology for treating Naphtha stream to achieve product stream containing ultra-low sulphur (≤ 0.5 ppmw). In addition to sulphur removal, the process is also able to remove nitrogen and saturate olefins. Further, as required in refinery operation, the technology has the capability to process lighter as well as full range Naphtha. Thus, the technology is suitable for treating Naphtha range streams upstream of Isomerisation and Catalytic Reforming Units for production of gasoline components.

Salient Features

- Production of Naphtha stream having ultra-low Sulphur (≤ 0.5 ppmw) as required for Isomerisation or Catalytic Reforming Units
- Impurities such as metals and nitrogen are removed and olefins are saturated
- Customised Catalyst and efficient reactor internals developed by IndianOil R&D

Major Benefits

- Capable of handling wide range of Naphtha streams
- Low hydrogen consumption
- Flexibility to use reformer off-gas instead of pure hydrogen

Commercial Experience

- 235 KTA grassroots unit successfully commissioned in one of the Indian refineries in May 2021
- Development of BDEP for revamp of two NHT units in IndianOil refineries employing indDSN technology under progress