Plant # 373

10,900 BPD Selective Hydro-Desulfurization (SHDS) Unit for Sale

Capacity: 10,900 BPD

Raw Materials: Light Cat Cracked Spirit (LCCS), Heavy Cat Cracked Spirit (HCCS)

End Products: Low-sulfur Gasoline Blend, LLCCS, HLCCS

Year Built: 2003

Process Information

The unit is designed for light cat cracked spirit (LCCS), and up to 15% heavy cat cracked spirit (HCCS). The products following distillation (D-3) are: LLCCS stream for gasoline blending. From operational averages this is 40% of the feed, at 46ppm Sulphur, and HLCCS stream to feed to SHDS unit for deep desulphurisation.

Major Equipment

- SHDS Reactor 1 & 2
- Flash Drum
- Stabiliser
- Pressure Vessels and Reactor beds

BRIEF PLANT DESCRIPTION

Phoenix Equipment has this 10,900 BPD Selective Hydro-desulfurization Unit for sale. The overall aim of the SHDS process is to produce a low sulphur gasoline blending component from cat cracked gasoline with minimal octane loss. The reactions in the SHDS reactors are desulphurisation with minimal olefin saturation to prevent octane loss: D-24, D-1. The design treat gas ratio is 15 m³ of H₂ per m³ of hydrocarbon feed, with a reactor pressure of 23.5 barg, and temperatures of 160°C (start of run) to 200°C (end of run).