

SYNTHOX HT

India's First and Only True Synthetic · High Moly · Non-Melting Grease with Highest Anti-Wear and Anti-Friction Capabilities to Prevent Failures in Heavy-Duty Fans and Blowers

Fan & Blower Applications in Refineries & Petrochemical Complexes

Refineries run some of the most critical hot blowers in heavy industry — FCC regenerator main air blowers, furnace FD and ID fans across CDU, VDU, hydrocracker, and reformer units, sulphur plant tail gas fans, flue gas expanders. FCC main air blower bearing failure is a unit trip with per-day outage cost in crores. Bearings face 150–220°C duty with hydrocarbon and sulphur vapour exposure. SYNTHOX HT's thermal stability and moly boundary protection match API refinery reliability specifications.

Part A — Annual Cost of Fan Bearing Failures (15 MMTPA Refinery)

- **Fan bearing life:** ordinary high-temp grease delivers 1.5–2.5 years on critical refinery fans against 5+ year design life.
- **Bearing + overhaul spares: ₹60 lakh–1.2 cr/year.** Refinery fan bearings are API 610/673 spec; overhaul includes rotor balancing and alignment.
- **Re-greasing + monitoring: ₹20–35 lakh/year.** API units are condition-monitored; grease degradation shows on oil analysis but requires action.
- **Unit downtime / flaring: ₹3–8 cr/year — the dominant cost.** FCC main air blower failure trips the unit; furnace ID fan failure forces firebox shutdown and partial cold restart.
- **Total: ₹4–10.5 cr/year per refinery.** A non-melting synthetic moly grease with API-aligned thermal spec delivers 2–3× bearing life and addresses ₹1.5–4 cr/year.

Part B — Fan & Blower Applications

- **FCC Unit** — FCC regenerator main air blower bearings; flue gas expander bearings; third-stage separator fan bearings; air ring fan bearings.
- **CDU / VDU Furnace** — furnace FD fan bearings; ID fan bearings; flue gas bypass fan bearings.
- **Hydrocracker / Hydrotreater** — furnace FD and ID fan bearings; recycle gas seal-oil vent fan bearings.
- **Reformer / Isomerisation** — reformer heater FD and ID fan bearings; regeneration blower bearings.
- **Sulphur Recovery (SRU)** — SRU tail gas fan bearings; incinerator FD fan bearings; Claus reactor blower bearings.
- **Utilities & Boiler** — boiler FD, ID, and PA fan bearings; cogen HRSG fan bearings; flue gas expander bearings.
- **Cooling Tower** — induced-draft fan gearbox bearings; forced-draft fan hub bearings.
- **Flare System** — flare stack steam-assist blower bearings; purge gas blower bearings.
- **Petrochem Cracker** — furnace FD and ID fan bearings; dilution steam drum exhaust fan bearings; decoke blower bearings.
- **ETP / Biotreater** — activated sludge aeration blower bearings; sludge dryer exhaust fan bearings.

Request a free 90-day plant trial — your reliability data will speak for itself.

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