

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 a Fertilizer Plant

Fertilizer plants run hot reformer fans, ammonia plant auxiliary blowers, urea scrubber fans, DAP and NPK reactor gas fans, and sulphuric / phosphoric acid plant blowers continuously — and a single fan failure derates the reactor train or halts the product line. Bearings see 150–200°C duty with ammonia, acid mist, and urea dust exposure. SYNTHOX HT's thermal stability and corrosion-inhibited additive package match the chemical aggression of this service.

Part A — Annual Cost of Fan Bearing Failures (1.5 MMTPA Urea / Complex Plant)

- **Fan bearing life:** ordinary high-temp grease delivers 1.5–2.5 years on reformer and acid plant fans against 4–5 year design life.
- **Bearing + overhaul spares:** ₹25–45 lakh/year. Cascade damage to corroded shafts and seals typical on acid-exposed fans.
- **Re-greasing labour:** ₹10–18 lakh/year. Ammonia and acid vapour cut grease life by half.
- **Reactor derate:** ₹1.5–4 cr/year — the dominant cost. Primary reformer ID fan bearing failure derates the urea reactor; DAP reactor scrubber fan failure halts the train.
- **Total:** ₹2–6 cr/year per 1.5 MMTPA plant. A non-melting synthetic moly grease delivers 2–3× bearing life and addresses ₹80 lakh–2.5 cr/year.

Part B — Fan & Blower Applications

- **Ammonia Plant** — primary reformer FD and ID fan bearings; secondary reformer auxiliary blower bearings; synthesis gas compressor auxiliary fan bearings.
- **Urea Plant** — urea scrubber fan bearings; prilling tower induced-draft fan bearings; dust recovery fan bearings.
- **DAP / NPK** — reactor scrubber fan bearings; dryer exhaust fan bearings; cooler exhaust fan bearings; bag filter fan bearings.
- **Sulphuric Acid Plant** — main air blower bearings; absorber / converter fan bearings; acid plant ID fan bearings.
- **Phosphoric Acid Plant** — reactor vent scrubber fan bearings; gypsum filter exhaust fan bearings.
- **Utilities & Boiler** — boiler FD, ID, and PA fan bearings; cogen HRSG fan bearings.
- **Cooling Tower** — induced-draft fan gearbox bearings; cooling tower forced-draft fan bearings.
- **Bagging & Dispatch** — packer dust collector fan bearings; bulk loading dedusting fan bearings.
- **ETP** — aeration blower bearings; sludge dryer exhaust fan bearings.
- **Ancillary** — DM plant regen vent fan bearings; instrument air compressor auxiliary fan bearings.

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

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