

SUPERQUIET 100

India's First and Only True Synthetic Grease That Will Not Leak into Windings and Cause Failure of HT Motors
HT Motor Applications in a Fertilizer Plant

Fertilizer plants run HT motors on synthesis gas compressors, ammonia refrigeration compressors, primary reformer blowers, urea CO₂ compressors, and main plant pumps. Bearing temperatures run 90–110°C; ammonia and acid vapour in the atmosphere accelerate grease oxidation and migration. Motor failure derates the reactor; restart is expensive and slow. SUPERQUIET 100 resists bleed and migration in corrosive atmospheres.

Part A — Annual Cost of HT Motor Failures — 1.5 MMTPA Urea / Complex Plant — 30–55 HT Motors

- **HT motor failure rate:** 2–5% annual; 25–40% lubricant-attributable — 1–2 preventable failures/year.
- **Motor replacement / rewind:** ₹50 lakh–1.2 cr/year. Synthesis gas compressor motors are the largest (5–12 MW); reformer blower motors 3–6 MW.
- **Re-greasing + monitoring:** ₹6–12 lakh/year. Critical compressor motors run online PD monitoring.
- **Reactor derate / trip:** ₹1.5–4 cr/year — the dominant cost. Syn gas compressor motor failure halts the urea reactor; reformer blower failure forces reformer cool-down.
- **Total:** ₹2–5.5 cr/year per plant. A true synthetic non-migrating grease addresses ₹60 lakh–2 cr/year.

Part B — HT Motor Applications

- **Ammonia Plant** — syn gas compressor motor (largest HT motor, 8–15 MW); process air compressor motor; ammonia refrigeration compressor motor.
- **Reformer** — primary reformer FD fan motor; ID fan motor; reformer charge pump motor.
- **Urea Plant** — CO₂ compressor motor; urea synthesis circulation pump motor; ammonia pump motor.
- **DAP / NPK** — slurry pump motor; scrubber circulation pump motor; reactor agitator motor.
- **Sulphuric Acid Plant** — main air blower motor (largest HT motor, 3–6 MW); acid circulation pump motor.
- **Phosphoric Acid Plant** — reactor recirculation pump motor; filtrate pump motor; slurry pump motor.
- **Utilities & Boiler** — BFP motor; CW pump motor; ID / FD fan motors; cogen TG auxiliary motors.
- **Compressor Plant** — plant air compressor motors; instrument air compressor motors.
- **Bagging & Dispatch** — bag packer drive motors; bulk loading conveyor motors (HT on large conveyors).
- **ETP** — aeration blower motor; sludge transfer pump motor.

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

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