

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 Thermal Power Plant

Thermal power runs the highest density of hot-service fans in Indian industry — ID, FD, PA, mill seal air, scanner air, and FGD booster fans per unit. ID fan bearings see 130–150°C continuously with excursions to 180°C+ during upsets. Ordinary lithium complex grease oxidises, melts, and bleeds; bearing seizure forces unit load reduction or trip. SYNTHOX HT holds film integrity to 240°C with moly boundary backup for upset conditions.

Part A — Annual Cost of Fan Bearing Failures (660 MW Unit)

- **Fan bearing life:** ordinary high-temp grease delivers 1–2 years on hot ID / PA fans against 4–6 year bearing design life, due to thermal oxidation and melt-out.
- **Bearing + coupling spares: ₹40–70 lakh/year per 660 MW unit.** ID and PA fan bearings are large spherical roller types, ₹2–5 lakh each; cascade damage adds sleeve, seal, and coupling costs.
- **Re-greasing labour: ₹20–35 lakh/year.** Ordinary grease needs re-lube every 1,500 hours on hot fans; SYNTHOX HT stretches intervals 3–5×.
- **Unit derate + trip cost: ₹4–10 cr/year — the dominant cost.** ID fan bearing failure forces load reduction or unit trip; per-hour generation loss ₹25–60 lakh.
- **Total: ₹4.6–11 cr/year per 660 MW unit.** A non-melting synthetic moly grease delivers 2–4× bearing life and addresses ₹1.5–5 cr/year of fan-attributable failure cost.

Part B — Fan & Blower Applications

- **Boiler Draft System** — ID fan bearings; FD fan bearings; PA fan bearings (primary and standby).
- **Mill & Combustion Auxiliaries** — mill seal air fan bearings; scanner air fan bearings; atomising air fan bearings.
- **FGD & Emission Control** — FGD booster fan bearings; absorber recirculation fan bearings; SCR booster fan bearings.
- **Cooling Tower** — induced-draft fan gearbox bearings; fan hub bearings.
- **Coal Handling Plant** — crusher house exhaust fan bearings; belt transfer point dust collector fan bearings.
- **Ash Handling** — ash silo bag filter fan bearings; vacuum conveying fan bearings.
- **Boiler Island** — soot blower compressor bearings; gland steam exhaust fan bearings.
- **TG Island** — lube oil vapour extractor fan bearings; hydrogen cooler auxiliary fan bearings.
- **Service Air & Ventilation** — boiler house ventilation fan bearings; battery room exhaust fan bearings.
- **ESP / Bag House** — rapper mechanism auxiliary fan bearings; hopper heater blower bearings.

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

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