

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 an Integrated Steel Plant

Steel plants combine high fan temperature with heavy abrasive dust loading — sinter, coke, iron oxide, and sinter fines contaminate the grease while thermal load degrades its structure. Sinter ID fans, BF top gas booster fans, cast house dedusting fans, and BOF secondary dedusting fans face 150–200°C bearing duty continuously. SYNTHOX HT's moly solid-film backup handles the combined thermal + abrasive stress where conventional greases fail.

Part A — Annual Cost of Fan Bearing Failures (5 MTPA Plant)

- **Fan bearing life:** ordinary high-temp grease delivers 1–2 years on hot dedusting and GCP fans against 4–6 year design life.
- **Bearing + coupling spares: ₹50–90 lakh/year.** Sinter and BF booster fan bearings run large; cascade damage to seals, housings, and couplings is typical.
- **Re-greasing + cleaning labour: ₹20–30 lakh/year.** Dust contamination cuts re-lube interval by half on ordinary grease.
- **Unit downtime + derate: ₹3–8 cr/year — the dominant cost.** Sinter ID fan bearing failure halts sinter production and derates BF burden; cast house dedusting fan trip forces casting to stop.
- **Total: ₹4–11 cr/year per 5 MTPA plant.** Scales ~2× at 10 MTPA. A non-melting synthetic moly grease delivers 2–4× bearing life and addresses ₹1.5–5 cr/year.

Part B — Fan & Blower Applications

- **Sinter Plant** — sinter machine ID fan bearings; sinter cooler fan bearings; sinter ESP booster fan bearings; mixing drum exhaust fan bearings.
- **Blast Furnace** — BF top gas booster fan bearings; stove combustion air fan bearings; cast house dedusting fan bearings; stock house bag filter fan bearings.
- **Steel Melting Shop (BOF / LD)** — primary dedusting booster fan bearings; secondary dedusting ID fan bearings; converter hood exhaust fan bearings.
- **Electric Arc Furnace (EAF)** — 4th hole exhaust fan bearings; canopy hood fan bearings; EAF dedusting ID fan bearings.
- **Continuous Caster** — mould cooling exhaust fan bearings; strand cooling fan bearings; caster bay ventilation fan bearings.
- **Coke Oven** — coke side ventilation fan bearings; wet GCP fan bearings; quench tower exhaust fan bearings; by-product plant exhauster bearings.
- **Hot Strip Mill** — walking beam furnace FD and ID fan bearings; coiler hood dedusting fan bearings; mill stand dedusting fan bearings.
- **Cold Rolling / Galvanising** — annealing furnace combustion fan bearings; galvanising pot exhaust fan bearings; CAL cooling fan bearings.
- **Captive Power Plant** — boiler ID, FD, and PA fan bearings; mill seal air fan bearings; FGD booster fan bearings.
- **Raw Material & CHP** — coal handling dust collector fan bearings; raw material yard dedusting fan bearings.

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

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