

SL WPG AQUATHERM

India's First and Only Fully Water Resistant Grease to Prevent Pump Failures

Pump Applications in a Thermal Power Plant

Pump bearings in a thermal power station run continuously wet — boiler glands, hotwell humidity, FGD slurry, cooling tower spray, ash slurry, monsoon-exposed pump houses. Ordinary greases wash out in hours. Bearing seizes, pump trips, unit derates or trips.

Part A — Annual Cost of Pump Bearing Failures (1320 MW = 2×660 MW)

- **Bearing life: 3–5 years design → 1–1.5 years actual.** 150–300 extra failures per year across 600–1,000 wet-zone pumps (both units).
- **Spares + cascade overhaul: ₹1–1.6 cr/year.** Failing bearing takes the seal, shaft, and housing — 3× the bearing cost.
- **Labour + energy waste: ₹40–70 lakh/year.** Callouts, overhaul hours, plus 2–4% higher motor current on contaminated bearings.
- **Downtime: ₹6–18 cr/year — the dominant cost.** Forced outage / deviation cost ₹1.5–3 cr/day; BFP, CEP, or main CW pump trip causes unit trip and PLF impact.
- **Total: ₹8–15 cr/year.** Higher in plants with FGD retrofit or coastal cooling. 40–60% grease-preventable → ₹3–9 cr/year addressable by switching to a proper water-resistant grease.

Part B — Pump Applications

- **Boiler Feed Pumps (BFP)** — main and standby; main and starting / auxiliary BFPs.
- **Condensate Extraction Pumps (CEP)** — main and standby; gland steam condenser drains.
- **Circulating Water (CW)** — main vertical wet-pit pumps; debris filter back-flush pumps.
- **Auxiliary Cooling Water (ACW / DMCW)** — main and standby; closed-loop circulation pumps.
- **DM & Make-Up Water** — DM transfer; make-up to condenser hotwell; regeneration pumps.
- **Cooling Tower** — basin sweeper; make-up; CT auxiliary pumps.
- **FGD System** — absorber recirculation pumps (3–5 per absorber); limestone slurry; gypsum dewatering.
- **Ash Handling** — bottom ash; HCSD fly ash slurry; ash water recovery; jet pumps.
- **Coal Handling Plant (CHP)** — dust suppression; water spray; sump pumps.
- **Fire Water** — main, jockey, diesel; foam and deluge system pumps.
- **Sumps** — TG hall, BFP cellar, mill bay, CHP, switchyard.
- **Effluent / ETP** — neutralisation; sludge; oil-water separator pumps.

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

Contact: technical@stanvac.com · www.stanvac.com

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