

SL WPG AQUATHERM

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

Pump Applications in a Fertilizer Plant

Pump bearings in a fertilizer complex sit in continuous wet service — cooling tower spray, scrubber liquor, condensate, ammonia and urea solutions, ETP. Ordinary greases wash out in hours. Bearing seizes, pump trips, train de-rates.

Part A — Annual Cost of Pump Bearing Failures (1.27 MMTPA Urea Complex)

- **Bearing life: 3–5 years design → 1–1.5 years actual.** 80–150 extra failures per year across 300–500 wet-zone pumps.
- **Spares + cascade overhaul: ₹70 lakh – 1.2 cr/year.** Failing bearing takes the seal, shaft, and housing — 3× the bearing cost.
- **Labour + energy waste: ₹30–50 lakh/year.** Callouts, overhaul hours, plus 2–4% higher motor current on contaminated bearings.
- **Downtime: ₹4–10 cr/year — the dominant cost.** Urea train trip ₹50 lakh – 1.5 cr/day; ammonia trip cascades downstream and aborts inventory.
- **Total: ₹5–11 cr/year.** 40–60% grease-preventable → **₹2–6 cr/year addressable** by switching to a proper water-resistant grease.

Part B — Pump Applications

- **Ammonia Plant** — process water; condensate; cooling water; quench.
- **Urea Synthesis** — carbamate condensate; recycle; scrubber pumps.
- **Urea Concentration / Prilling** — vacuum seal; condensate; prill tower water pumps.
- **Cooling Towers** — main CW; ACW (large complexes have 2–3 CT cells).
- **DAP / NPK Plant** — phosphoric acid transfer; slurry; scrubber liquor pumps.
- **Sulphuric Acid Plant** — cooling water; dilution; absorption tower circulation.
- **Phosphoric Acid Plant** — gypsum slurry; filter pumps; scrubber circulation.
- **Captive Power Plant** — BFP, CEP, CW, ACW, ash handling.
- **Bagging Plant** — dust suppression; sump pumps.
- **Fire Water** — main, jockey, diesel.
- **Effluent Treatment** — neutralisation; sludge; clarifier underflow.
- **Tank Farm** — ammonia transfer; urea solution; phosphoric acid pumps.

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

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

STANVAC CHEMICALS INDIA LTD