

SL WPG AQUATHERM

India's First and Only Fully Water Resistant Grease to Prevent Pump Failures
Pump Applications in an Oil Refinery & Petrochemical Complex

Pump bearings in a refinery face cooling water spray, firewater test loops, sour water leaks, scrubber circulation, and outdoor mounting through monsoon. Ordinary greases wash out in hours. Bearing seizes, pump trips, train goes off-spec.

Part A — Annual Cost of Pump Bearing Failures (15 MMTPA Refinery)

- **Bearing life: 3–5 years design → 1–2 years actual.** 200–400 extra failures per year across 800–1,500 wet-zone pumps.
- **Spares + cascade overhaul: ₹2–3.5 cr/year.** API-spec bearings and mechanical seals command premium; cascade damage drives 3–4× bearing cost.
- **Labour + energy waste: ₹70 lakh – 1.2 cr/year.** Skilled callouts; 2–4% higher motor current on contaminated bearings.
- **Downtime: ₹10–30 cr/year — the dominant cost.** Single train trip at ₹2–5 cr/hour effective margin loss; cooling water or firewater system trip can affect entire complex.
- **Total: ₹13–25 cr/year.** 30–50% grease-preventable (refineries already use better lubes than steel) → **₹4–12 cr/year addressable** by switching wet-zone duty to a proper water-resistant grease.

Part B — Pump Applications

- **Cooling Water** — main CW pumps for each cooling tower (multiple per refinery).
- **Fire Water System** — jockey, diesel, electric — extensive; firewater test cycle is brutal on bearings.
- **Crude Distillation** — overhead reflux; side-cut and bottoms pumps in wet service.
- **FCC / Hydrocracker** — wet gas scrubber; sour water; regenerator slide-valve cooling.
- **Sour Water Stripper** — feed pumps; bottoms; reflux.
- **Desalter** — wash water injection pumps; brine effluent.
- **Coker** — quench water; blowdown; decoking water pumps.
- **Sulphur Recovery (SRU)** — quench; condensate; tail-gas scrubber pumps.
- **Effluent Pretreatment** — API separator; sour water; oily water transfer pumps.
- **Tank Farm** — water draw pumps; transfer pumps in monsoon-exposed bunds.
- **Utilities** — DM water; raw water; chilled water; ETP; ZLD.
- **Marine Terminal (coastal)** — seawater intake; ballast; firewater 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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