

SL123R UNITHERM

India's First and Only True Synthetic · High Load · High Temperature Grease to Prevent Failures in Gear Couplings and Heavy-Duty Drives

Gear Coupling & Heavy Drive Applications in Mining Operations

Mining is the flagship environment for high-load-plus-heat grease duty — dragline and shovel slewing rings carry full boom load with shock from every bucket cycle; SAG and ball mill pinions grind continuously under heavy loading; crusher bearings (primary jaw, secondary cone, tertiary impact) absorb rock shock loading. All these duties see heat buildup from friction and outdoor ambient. Conventional EP grease fails within months; SL123R UNITHERM is designed for exactly this combined stress profile.

Part A — Annual Cost of Gear Coupling & Drive Failures — Deep Shaft + Open Cast + Washery

- **Drive life:** ordinary EP grease delivers 8–18 months on crusher bearings, mill pinions, and dragline slewing rings against 5+ year design life.
- **Coupling / bearing spares: ₹40–80 lakh/year.** Crusher bearings and mill pinions are high-value spares; replacement often means 48–96 hr mine outage.
- **Maintenance + change-out: ₹20–35 lakh/year.** Remote sites have high mobilisation cost for specialist alignment work.
- **Production halt: ₹2–5 cr/year — the dominant cost.** Primary crusher bearing failure halts the entire mining circuit; mill pinion failure halts processing and backs up the mine.
- **Total: ₹3–7 cr/year per complex.** A true synthetic high-load, high-temperature grease delivers 3–5× component life and addresses ₹1.2–4 cr/year.

Part B — Gear Coupling & Heavy Drive Applications

- **Dragline & Shovel** — slewing ring gearing; hoist and drag motion drive couplings; boom suspension linkage; dipper trip drive.
- **Primary Crushing** — primary jaw crusher eccentric bearings; gyratory crusher mantle bearings; crusher drive couplings.
- **Secondary & Tertiary Crushing** — cone crusher bearings; impact crusher rotor bearings; HPGR drive couplings.
- **SAG / Ball / Rod Mill** — mill pinion drive; trunnion bearings; main drive coupling; feed end chute drive.
- **Conveyor System** — head pulley drive couplings; tail pulley drives; booster drive couplings on long conveyors.
- **Screen Drive** — vibrating screen eccentric shaft bearings; screen drive couplings.
- **Mine Hoist (Deep Shaft)** — hoist drum drive couplings; brake linkage pivots; Koepe sheave bearings.
- **Washery** — heavy media drum drive couplings; centrifuge drive couplings; thickener drive gearbox coupling.
- **Haul Truck / Dragline Walking Mechanism** — articulation joint pivots; walking leg linkage bearings; fifth wheel pins.
- **Stockyard** — stacker-reclaimer slew drive; bucket wheel drive coupling.

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

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