

SL WR2 WIRETHERM

India's First and Only Penetrative Synthetic Lubricant for Enhancing Wire Rope Life and Safety

Wire Rope Applications in an Integrated Steel Plant

A steel plant runs 80–150 cranes on wire rope, many carrying hot metal, liquid slag, or heavy coils. Ropes work in steam, descaling spray, roll coolant, and hot metal spatter, and fail from the inside out — internal corrosion and fretting at the core, invisible until the rope is already compromised. Topical grease protects only the surface; WIRETHERM penetrates to the core where failure actually starts.

Part A — Annual Cost of Wire Rope Failures (5 MTPA Plant)

- **Rope life:** topical-greased ropes on ladle, charging, and scrap cranes typically reach 40–60% of OEM design life before discard.
- **Rope spares: ₹1.8–3 cr/year.** 50–100 rope changes/year across mill, cast house, caster, and handling cranes; ₹3–12 lakh per rope set depending on size.
- **Inspection + change-out labour: ₹60–90 lakh/year.** Rope change on a ladle crane is a 12–24 hr outage plus rigging crew.
- **Downtime + safety risk: ₹4–10 cr/year — the dominant cost.** Ladle, charging, and BF cast house crane rope failures are Category 1 safety events and halt steelmaking.
- **Total: ₹6.5–14 cr/year.** Scales ~2× at 10 MTPA. A penetrative synthetic extends rope life 2–4× and addresses ₹2–6 cr/year of rope-attributable cost.

Part B — Wire Rope Applications

- **Steel Melting Shop (BOF / EAF)** — ladle crane ropes; charging crane ropes; scrap bucket crane ropes.
- **Continuous Caster** — tundish crane ropes; segment handling ropes; ladle turret drive ropes.
- **Blast Furnace** — cast house crane ropes; stock house charging ropes; slag handling crane ropes.
- **Hot Strip / Plate Mill** — slab tong crane ropes; coil handling crane ropes; roll change trolley ropes.
- **Cold Rolling Mill** — coil handling crane ropes; pay-off and tension reel auxiliary ropes.
- **Coke Oven** — pusher car haul ropes; coke quenching car ropes.
- **Sinter Plant** — raw material feed crane ropes; mixing drum auxiliary ropes.
- **Raw Material Handling (RMH)** — stacker-reclaimer hoist ropes; wagon tippler haul ropes; grab crane ropes.
- **Finishing / Dispatch** — coil yard crane ropes; pickling line bay ropes; shipping bay cranes.
- **Maintenance & Workshop** — roll shop crane ropes; motor bay crane ropes; shutdown rigging ropes.
- **Captive Power Plant** — TG hall crane ropes; coal handling grab crane ropes; ash silo crane ropes.
- **Ancillary** — scale pit grab ropes; slag pot car haul ropes; EOT crane ropes across all bays.

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

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