READY TO INSPECT — FIELD CHECKLIST

Base-mounted HVAC pump quarterly maintenance checklist

A quarterly base-mounted pump round is short on purpose: it catches the wear items that fail between annual services. This checklist is sized for a tech with a phone. Every item says what to look at and the photo that proves the round happened. Work is commonly verified against manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The mechanical tech on the quarterly mechanical-room round. When: Every quarter, walked with the rest of the mechanical-room equipment so the pump numbers are read against the gauges on the same visit.

Seal and leakage

- [ ] Mechanical seal or packing checked for leakage
  Mechanical seal essentially dry, or packing gland dripping only at the light rate it's meant to, no product tracking down the shaft onto the base.
  2 photos required
- [ ] Base and drip pan dry
  Pump base and any drip pan free of standing water, no rust trails under the seal, floor drain clear.
  1 photo required
- [ ] Casing gasket, flanges and vent and drain plugs dry
  Volute gasket, suction and discharge flanges, casing vent and drain plugs dry, no mineral crust or rust bloom marking an old leak.
  1 photo required

Bearings and drive

- [ ] Bearings running quiet and cool
  No growl, whine or knock from the bearing housings, temperature by hand or gun within a normal band, no grease purged onto the guard.
  1 photo required
- [ ] Coupling guard and shaft observed running
  Coupling guard secure, shaft running true with no visible wobble, no rubbing or heat discoloration at the coupling.
  1 photo required
- [ ] Vibration read at each bearing against the baseline
  Meter reading taken at the motor and pump bearing housings with the guard on, compared with the commissioning baseline and the last round, any rise flagged.
  1 photo required
- [ ] Bearing lube record checked against the manufacturer's schedule
  Last grease date, type and quantity read from the log or lube tag, grease added only when the schedule calls for it, sealed bearings noted as such.
  No photo required

Pressure and strainer

- [ ] Suction and discharge pressures read and compared
  Both gauges live and read, differential across the pump matching the expected head, no unexplained drop pointing at cavitation or a plugged suction.
  2 photos required
- [ ] Suction strainer checked for loading
  Strainer differential or blowdown checked, basket not loaded with debris, no rising suction restriction starving the pump.
  1 photo required

Motor and piping

- [ ] Motor fan cover and cooling air path clear
  Fan cover free of lint and debris, cooling air path open, frame paint not discolored by heat, conduit and flex into the terminal box secure.
  1 photo required
- [ ] Piping supported with no strain on the pump flanges
  Suction and discharge piping carried by its own supports, flexible connectors not bulging, cracked or over-extended, no pipe weight riding on the casing.
  1 photo required
- [ ] Idle standby pump checked for reverse rotation
  Where a standby pump sits in parallel, its shaft is still with the lead pump running, showing its check valve holds against backflow.
  No photo required
- [ ] Drive speed logged on a VFD-driven pump
  Where a drive is fitted, speed and output current read at the keypad and logged against the last round, no unexplained full-speed running.
  No photo required