

Cooling tower quarterly maintenance checklist

A quarterly cooling tower 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 water-treatment or mechanical tech on the quarterly rooftop round. When: Every quarter during the cooling season, timed with the treatment vendor's visit so the dip test and the mechanical look happen together.

Basin and water

- ☐ **Basin checked for sludge, algae and debris**
Cold-water basin visually clear, no biofilm or leaf mat over the suction screen, strainer clean and seated. 2 photos required
- ☐ **Makeup float and overflow set correctly**
Float shuts off at the design level, no continuous overflow to the roof drain, makeup valve not weeping past. 1 photo required
- ☐ **Bleed running and treatment present**
Bleed line open and flowing, conductivity within the treatment vendor's range, chemical feed and biocide reservoirs not run dry. 2 photos required

Fill and drift

- ☐ **Fill and water distribution checked from the top**
Even sheeting across the fill, spray nozzles or distribution basin not clogged, no dry channels or heavy scale on the pack face. 2 photos required
- ☐ **Drift eliminators seated and intact**
Eliminator sections in place with no gaps, no carryover misting off the tower, no crushed or displaced panels. 1 photo required

Fan and drive

- ☐ **Fan, belt and bearings observed running**
Fan turning freely in the correct direction, belt tensioned and not glazed, no bearing squeal or wobble at speed. 1 photo required
- ☐ **Gearbox oil level and motor checked where fitted**
Sight glass at level with no milky water intrusion, no oil weep at seals, motor not running hot or drawing off-nameplate. 1 photo required