READY TO INSPECT — FIELD CHECKLIST

Thermal energy storage tank quarterly maintenance checklist

A quarterly thermal energy storage tank 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 IMC (mechanical code), manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The HVAC or maintenance tech on the quarterly mechanical round. When: Every quarter through the cooling season, walked with the chiller plant. A tank that stops shifting load quietly costs demand charges long before anyone notices.

Insulation and shell

- [ ] Tank insulation and vapor seal dry and intact
  No sweating, dripping or wet spots on the jacket, vapor seal continuous at seams and penetrations, no corrosion staining running down the shell.
  2 photos required

- [ ] Tank supports and connections sound
  Supports and anchors solid, no shifting or cracking at the base, piping connections dry with no weeping at flanges or unions.
  1 photo required

Level and temperature

- [ ] Level and temperature readings agree with the plant controls
  Local level and temperature match what the plant is reading, charge and discharge temperatures show a real spread, sensors not stuck or shorted.
  2 photos required

Charge and discharge

- [ ] Tank charges and discharges on its schedule
  Tank observed charging off-peak and discharging on-peak per the sequence, isolation and changeover valves stroking to the right position, flow in the correct direction.
  1 photo required