

API 650 Tank Accessories

Functions, interfaces, and coordination points for welded storage tanks



Access, Monitoring and Pressure Control

Accessory	Function
Spiral stairway	Routine access to the roof and upper instruments.
Vertical ladder with cage	Compact access where permitted by the site safety rules.
Roof platform	Operating area around gauges, vents, or sampling points.
Shell manway	Internal entry for cleaning and inspection.
Roof manway	Access to roof space or internal floating-roof systems.
Level gauge	Continuous or local liquid-level indication.
High-level switch	Alarm or shutdown input for overfill protection.
Pressure/vacuum vent	Controls normal breathing pressure and vacuum.
Emergency vent	Provides additional relieving capacity for defined emergency cases.

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Process, Protection and Maintenance Accessories

Accessory	Function
Water draw-off nozzle	Removes settled water from hydrocarbon storage.
Sump and drain	Supports bottom drainage and cleaning.
Heating coil	Maintains viscosity or process temperature.
Mixer	Reduces stratification or solids settlement.
Foam chamber	Connects the tank to the site fire-protection system.
Roof drain	Removes rainwater from an external floating roof.
Sampling connection	Provides controlled product sampling.
Insulation support	Supports external insulation and weather cladding.
Cathodic-protection connection	Interfaces with the tank-bottom corrosion-control system.

Coordination note: Accessories should be shown on a coordinated nozzle and appurtenance schedule. Nozzle diameter alone is not sufficient; elevation, orientation, flange rating, internal projection, access clearance, and connection duty should be fixed before fabrication to avoid site rework.