from flammable vapors, dismantled, and removed from the premises Tanks that are not to be removed should have all flammable liquid removed and be filled with a nonshrinking inert solid material They should have all inlets and outlets capped

Tanks taken out of service for less than 90 days should have fill line, gauge opening, and pump suction line capped, and be secured against tampering The vent line should be left open

Common Uses of Flammable Liquids

Industrial use of flammable liquids involves all the general precautions outlined in this chapter pertaining to static, toxicity, storage, housekeeping, explosion-proof electrical installation, segregation and isolation of operations, ventilation, enclosure of operations, grounding sources of ignition, and fire and explosion

All rooms or portions of plants, and equipment in them, in which flammable liquids or vapors are used or generated should be constructed, installed, and operated as recommended by the National Fire Protection Association in its *Flammable & Combustible Liquids Code,* and as required by local ordinances

The following paragraphs discuss several of the more common processes and items of equipment which use flammable liquids, and the precautions applying to each

Dip tanks

Dip tanks containing flammable liquids subject to ignition at ordinary temperatures and giving off flammable vapors present a severe fire and explosion hazard (See NFPA Standard No 34, *Dip Tanks Containing Flammable or Combustible Liquids*)

Dipping operations should be conducted above grade in a detached one-story building of noncombustible construction or in a cutoff one-story section in as large a room as possible, adequately ventilated, away from sources of ignition, and conspicuously marked as a flammable liquid area

Handling of flammable liquids in open containers can be hazardous and should be avoided The openings should be as small as possible and a cover should be provided

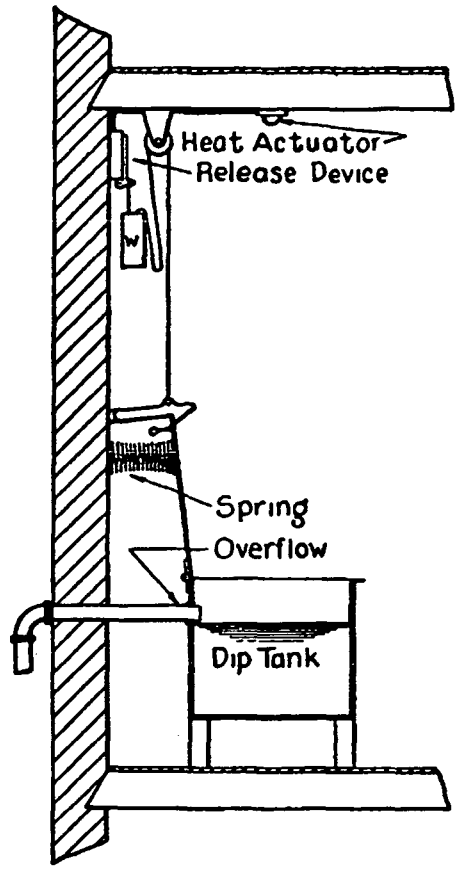


FIG 34-17 —Cover for medium-sized dip tank can be hinged and gravity closing or should slide on tracks and be held open by a fusible link or other heat-actuated device

Courtesy National Fire Protection Association

The cover should be hinged and gravity closing or should slide on tracks and be held open by a fusible link or other heat-actuated device (See Fig 34-17)

The NFPA states, "Mechanical ventilation shall be provided and the ventilating system arranged to move air from all directions toward the vapor area origin and thence to a safe outside location The ventilating system shall be so arranged that the failure of any ventilating fan shall automatically stop any dipping conveyor system"

Tanks with capacities over 500 gal should have bottom drains unless the viscosity of