

compartment is recommended, and permanent high-level markings should be installed

#### Tank construction

Tanks should be constructed and installed as recommended by the National Fire Protection Association in its latest *Flammable & Combustible Liquids Code*, Standard No 30

#### Vents

Storage tanks should be provided with vents of a type and size recommended by the National Fire Protection Association in its *Flammable & Combustible Liquids Code*. Vent pipes of underground tanks storing Class I flammable liquids should terminate outside buildings, higher than the fill pipe opening, and not less than 12 ft above the adjacent ground level. They should not be located so that flammable vapors will enter



FIG 34-13 - A well designed flammable liquid storage room with both high and low level ventilation and automatic fire extinguishment. Ventilators are designed for 12 air changes per hour

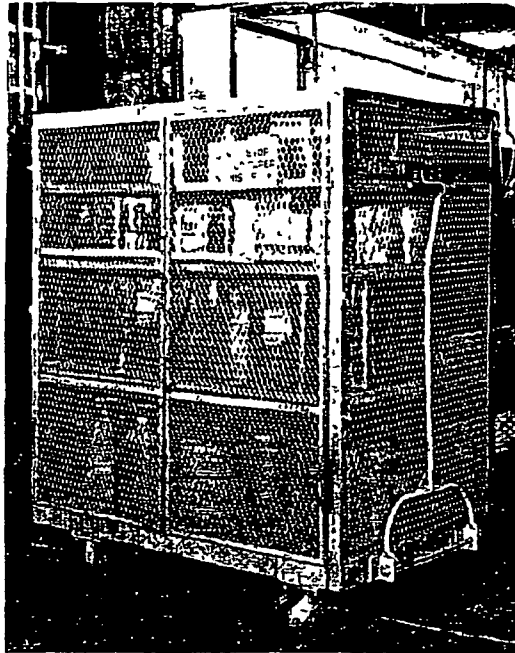


FIG 34-14 - Truck designed for transporting safety cans and other flammable liquid containers to points of use in the plant

Figures courtesy Western Electric Co

building openings or be trapped under eaves or other obstructions. Vent pipes from underground tanks storing Class II or Class III liquids should terminate outside buildings and higher than the fill pipe opening. Vent outlets should be above normal snow level.

Some authorities have questioned the effectiveness of mesh brass or copper screens as flame arresters in vent terminals. Underwriters' Laboratories state (*Oil Tank Vents - Hazards of Screens*, Card Data M60, Serial No UL-31) that "under some favorable conditions, screens of fine mesh may be effective in arresting flame, but their use in general is not dependable. Under service conditions, they are subject to clogging and freezing, when attempts are made to clean them there is danger of mechanical injury. The displacement of one or more wires renders the screen useless as a flame arrester."

Dependence should be placed on safe location of a vent so that escaping vapors will be properly dispersed and clear of ordinary