

FIRE PROTECTION

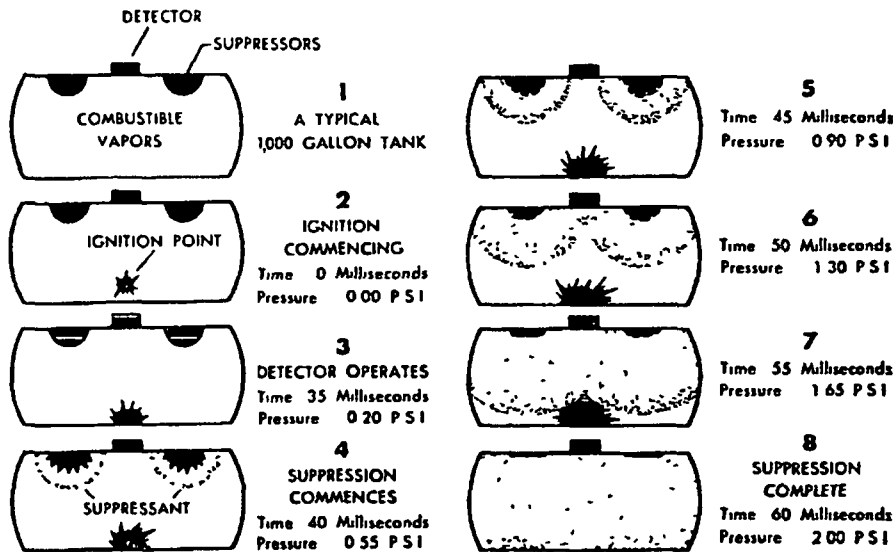


Fig. 33-16. Schematic diagram of suppression of an explosion in a large cylindrical tank.

Courtesy National Fire Protection Association

A hot work permit form or tag is generally used to administer the program. Although standard forms are available through insurance companies, many plants have developed special forms that specifically relate to their individual operation. Detailed information on hot work permit programs is contained in Industrial Data Sheet 522, "Hot Work Permits," available from the National Safety Council.

Flameproofing wood and fabrics

Fireproofing wood. Wood cannot be made fire resistive, but it can be treated to *retard* both the rate of flame spread over its surface and the rate it contributes fuel to the fire. There are two methods for treating wood: impregnation and use of fire-retardant coatings. Water-soluble treatments are not suitable for exterior use.

Fire-retardant coatings are less effective and less permanent than the best pressure impregnation methods, but they do reduce the hazard from small fires in existing structures. Only those makes listed by Underwriters' Laboratories, Inc., should be

used.* Effective impregnation can usually be done only by companies equipped to do this work.

Fire-retardant coatings on wood should be applied in accordance with the application specifications which produce the desired degree of reduction of flame spread. They usually have to be renewed at frequent intervals, especially if the wood is exposed to rain or excessive moisture. Ready-mixed fire-retardant paint is commercially available, but especially mixed preparations can also be made. Regardless of the treating method employed, engineering data can be obtained from the supplier of the treated wood or the manufacturer of the treating chemicals.

Flameproofing fabrics. Fabrics cannot be made noncombustible, nor even resistant to

*Underwriters' Laboratories, Inc., 207 East Ontario St., Chicago. Fire Protection Equipment List.