



Coffee Break Training - Fire Protection Series

Portable Extinguishers: Wheeled Extinguishers

No. FP-2014-22 June 3, 2014

Learning Objective: The student will be able to explain why wheeled portable fire extinguishers are used to protect hazardous environments.

Portable fire extinguishers are employed in a variety of locations to serve as a “first-aid” device to suppress fires in the incipient stage. There are locations, however, where the potential for rapid and severe fire growth may exceed the capacity of typical hand-held portable extinguishers. In those cases, larger extinguishers must be employed. Due to their size, they are made portable by mounting the extinguishers on some sort of wheeled device.

National Fire Protection Association (NFPA) 10, *Standard for Portable Fire Extinguishers* addresses those conditions where wheeled extinguishers may be needed. According to the standard, wheeled extinguishers are desirable when a fire risk assessment reveals that high-hazard areas are present and limited response personnel are available. In those cases, the extinguishers should have a high flow rate, increased stream range for the fire extinguishing agent, and increased agent capacity beyond what can be carried normally by a hand-held extinguisher.

Wheeled fire extinguishers are available in capacities of 33 gallons (125 liters) for foam units and range from 30 pounds (lbs) to 350 lbs (13.6 kilograms (kg) to 158.8 kg) for other types of extinguishers. These fire extinguishers are capable of delivering higher agent flow rates and greater agent stream range than normal portable fire extinguishers. Wheeled fire extinguishers are capable of furnishing increased fire-extinguishing effectiveness for high-hazard areas and have added importance where a limited number of people are available.¹ Wheeled extinguishers may contain extinguishing agents, such as carbon dioxide, dry chemicals, clean agents or even pressurized water, depending upon the hazard that is being protected against.

Typical locations for wheeled extinguishers include aircraft refueling areas, industrial operations, bulk fuel-tank farms and transfer facilities, rail car loading and off-loading sites, and refineries where flammable or combustible liquids are processed.

For additional information on portable fire protection equipment, consider taking the National Fire Academy course “Fire Inspection Principles” (R0220) at <http://apps.usfa.fema.gov/nfacourses/catalog/details/47>.

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These wheeled portable fire extinguishers are in the standby position at a hospital helistop where medical helicopters transfer trauma patients. The wheeled cradle with tow ring enables them to be attached to an airfield vehicle and pulled to another site.

