Dry Chemical Powder System

■ Dry Chemical Powder System

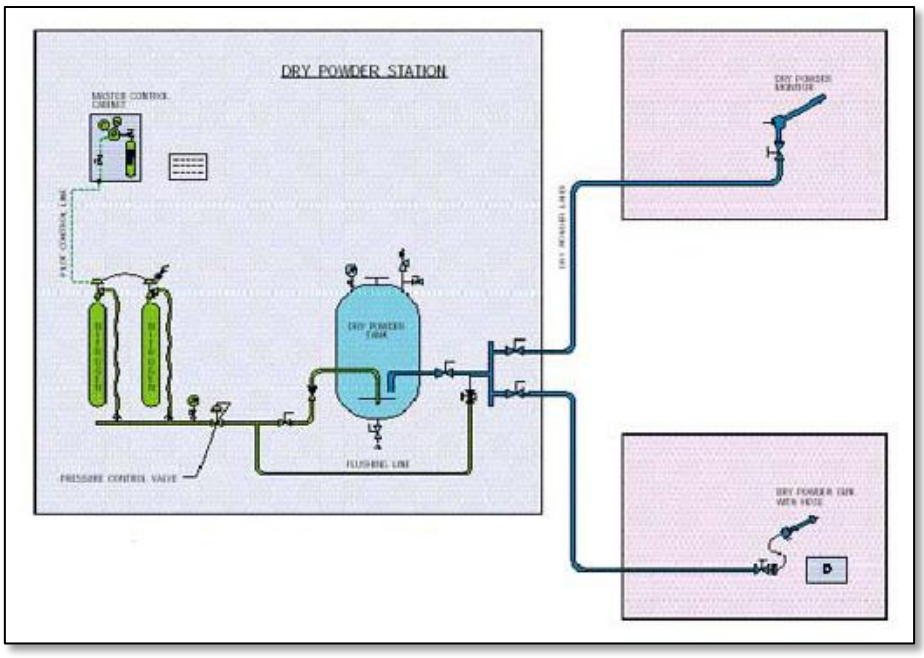
Ships carrying liquefied gas and certain chemicals/agents in bulk shall be equipped a fixed dry powder system ready for operation. DBM can provide fixed dry powder systems, which comply with the IGC and IBC codes from SOLAS.

■ Characteristics

Dry Chemical Powder, when introduced directly to a fire, causes the flame to go out almost at once.
The chemical used is in principle Sodium or Potasslum Bicarbonate (BC).
Various additives are mixed with the base chemicals to improve the storage, flow and water-repellent characteristics.
Dry Powder is available at both low and high temperatures.
BC powder is non-toxic, but due to the size of the particles (10 to 50 microns) temporary breathing difficulties may occur, and personnel must stay clear of the jets to avoid suffocation.

■ Application

DBM is specialised in the design, manufacturing and supply of dry powder extinguishing systems for the protection of vent stacks and tail pipes of safety valves on N2 storage tanks. In general these fixed dry powder systems are used for the attack on fires with gases. Dry Powder system has been developed to meet the increasing demands for large capacity systems for use in the extinguishing of fires involving bulk chemical agents and liquefied gases.
SOLAS rules (IGC and IBC) require that dry powder systems protect the entire deck area, cargo manifold, and connection areas from fixed monitors. In addition the system should be capable of supplying dry powder to any part of the cargo deck from at least two sources i.e., hand hose or hand hose line/monitor.
In order to design and calculate a system it is necessary to know the length, breadth, and format of the cargo deck together with details of any obstrctions such as tank domes, cargo storage, and handling facilities, etc.



DBM Total Fire Protection