

Semco Maritime provide Inert gaseous extinguishing systems for room protection. The Inert Gas systems can be made as Stand Alone- or Distribution- systems.

The systems are designed by use of key components supplied by the manufacturers/license holders for these gaseous systems.

Extinguishing with Inert Gas means reducing the oxygen content within a room to the point at which fire can no longer burn (typically to 12-13 % oxygen), but without compromising the safety of individuals present. (Amount of oxygen in the air we breathe is approx. 21%).

### **Inert Gasses**

All inert gasses are found naturally in the atmosphere. They are harmless to personnel at the design concentration, and there are no toxicological factors associated with the use.

Inert gasses can be used to extinguish fires in almost all flammable materials. It is suitable to extinguish fires in flammable liquids and is not electrically conducting and therefore excellent for extinguishing fires in electrical equipment.

## **Description of system**

The system consists of more cylinders linked together through a common discharge manifold arrangement (a cylinder bank). The cylinder bank contains a sufficient number of cylinders to hold the required amount of gas to establish the required design concentration within the protected enclosure/room.

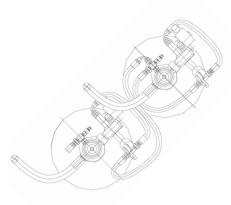
After the release gasses have passed through the restrictor, it passes through a dedicated distribution pipe network to the nozzles which distribute the gas in the room, which must be fully protected.

The room should be evacuated before the discharge in order to guarantee both the extinguishing effect as well as human safety.

The Gaseous System will be designing for Residual Oxygen Level (ROL) of 10-12% consequently the employees can vacate the area for 3-4 minutes.

#### **Nozzles**

Discharge nozzles are installed convenient at ceiling level within the protected enclosure for given an even distribution of the discharged gas i.e. the number and size of the nozzles will be installed where they will be most effective and where the jet will cause no harm to personnel or damage to equipment.





# **Gaseous Systems**

# **ISO Listed Inert Gases**

Extinguishant	Chemical	Formula	Trade name	Standard
IG-01	Argon	Ar	Argon Argotec Argonfire	ISO 14520-12
IG-100	Nitrogen	N2	-	ISO 14520-13
IG-55	Argon 50% Nitrogen 50%	Ar N2	Argonite	ISO 14520-14
IG-541	Argon 40% Nitrogen 52% Carbon Dioxide 8%	Ar N2 Co2	Inergen	ISO 14520-15





For further information, addresses, email addresses and phone numbers - please see our website:

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