FOGMAKER
INTERNATIONAL AB

CO_2 - Used by Fogmaker

What is a CO_2 system and how does it work?

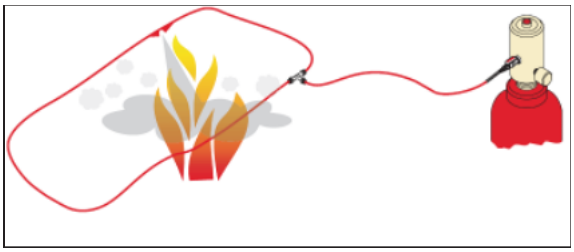
CO_2 systems extinguish fires by displacing oxygen, lowering the oxygen content to below 15%.

For this to work, the gas concentration must build up and stay at a sufficiently high level for a certain time. The CO_2 is stored under pressure in liquid form in the agent container, and as soon as the valves open, the CO_2 turns into gas form. When deployed, the gas has a temperature of -78ºC and has a slight cooling effect, but the extinguishing takes place through choking the fire.

The use of CO_2 systems require a sealed protection area without ventilation, open windows, or hatches.

The system used by Fogmaker

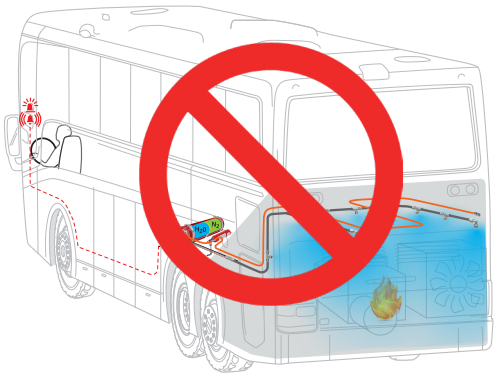
Fogmker uses a CO2 system that can cover up to 0.8m3.



Where does Fogmaker use CO_2 systems?

The CO_2 is a complementary solution to the Eco 1 water-mist systems in areas where the use of water mist isn't recommended, for instance minor or larger electrical panels within Material Handling or Mining.

CO_2 doesn't affect all sides of the fire triangle like the regular Fogmaker system, and it will not be used for protecting areas where water mist is possible. It will only be used for smaller protection volumes, for instance, electrical panels up to 0.8m³. Room protection is not applicable, because CO_2 is dangerous to humans and other living creatures at extinguishing concentrations.



Not for engine compartments or other places where the regular Fogmaker system can be used!

Function

The CO_2 system will be in a very simple but suitable set-up.

Detection system: Pressurized detection tube - same as for the NOVEC systems

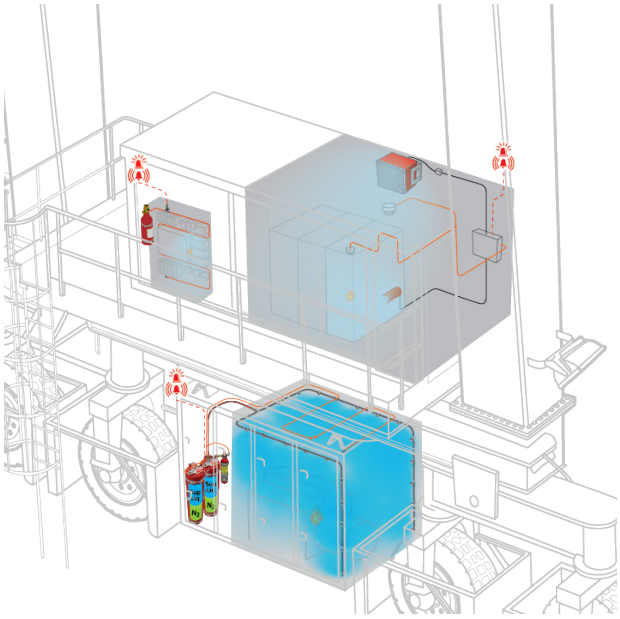
Distribution system: Pressurized detection tube. The CO_2 will be distributed through the bursting part of the detection tube. No nozzles or piping. If required, a pressure switch can give a status signal.

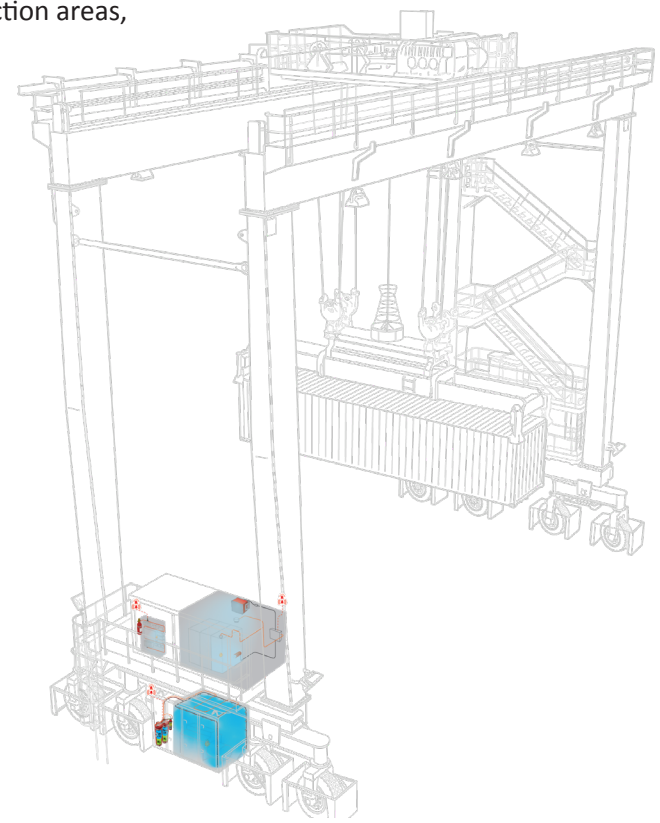
Advantages of the CO_2 system:
- No clean-up required
- Available everywhere in the world
- No-corrosive
- PFAS-free
- Independent of electricity

Disadvantages of the CO_2 system:
- Sensitive to airflow and open spaces
- No cooling of hot components
- Dangerous for humans and other living beings

It is important to apply the CO_2 system only in defined protection areas, and make use of the full capacity where it is most efficient.

System Configuration





Application	Fogmaker FSS	Fogmaker Mini FSS	Aerosol	CO2	Comment
Diesel Engine	X				
Electric Cabinet			X	X	
Wire Harness	X				
EV Components	X		X		Water mist is more suitable when IP>66
Smaller Control Unit				X	
Diesel Heater	X	X			
Electric Heater			X	X	Water mist is more suitable when IP>66
E-Room			X		

Note: For Aerosol and CO2, protected areas must be sealed