

Serious injury following inhalation of smoke in the engine room, Balticborg, Baltic Sea, 19 March 2019

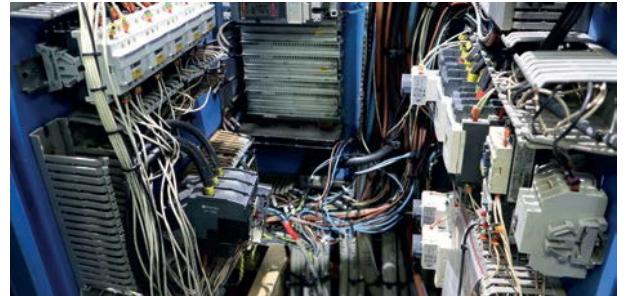
On Tuesday 19 March 2019, smoke was seen escaping from the main switchboard on the Dutch-flagged RoRo vessel Balticborg. At that time, the vessel was sailing in Swedish waters on the Baltic Sea between the Swedish ports of Sodertalje and Haraholmen, near Umeå. The smoke started in the main switchboard in the engine control room. The chief engineer lost consciousness due to smoke inhalation. Following first aid on board, the chief engineer was evacuated by helicopter to hospital in Umeå in serious condition.

To prevent ice forming in the exhaust gas cleaning installation, a mobile electric heater with an output of 9 kW was put into use. This heater was connected to a fixed mounted connection, intended for the electrical winch in the engine room. This connection had a maximum permitted load of 0.9 kW and was electrically protected up to that load level.

As soon as the heater was switched on, an explosion occurred in the switchboard in the engine control room, at the point where the connection was made to the main electricity distribution network on the ship via a protection relay. Shortly after the explosion, dense toxic smoke was generated by the melting of the cable insulation and (plastic) parts of various components in the switchboard. The explosion also caused a short circuit and total electrical blackout on the vessel, which was partly compensated for by the emergency power supply. Immediately afterwards, the ship's engineers set to work in the engine control room to isolate the short circuit and to restore the ship's electrical power supply. The chief engineer also entered the engine control room. Upon opening the door, he was exposed to thick smoke.

Following the accident, the Dutch Safety Board launched an initial investigation in collaboration with the Swedish maritime investigation organization, which included an investigation on board the ship. The Dutch Safety Board then decided not to carry out a full investigation.

Classification: Serious Injury



Main switchboard on the Balticborg. (Source: Dutch Safety Board)



0.9 Kw connection used for the electrical winch. (Source: Dutch Safety Board)



9 Kw electric heater. (Source: Dutch Safety Board)