

Information Data Sheet

Category Marine Mines and Minefields

Description During WWI, approximately 128,000 No. mines were laid in the sea around the coast of the UK.



At the beginning of WWII the Admiralty ordered the laying of further extensive minefields around the coast of England. This included both defensive mines on beaches in order to prevent enemy landings, as well as approximately 100,000 No. marine mines laid at sea to destroy enemy ships.



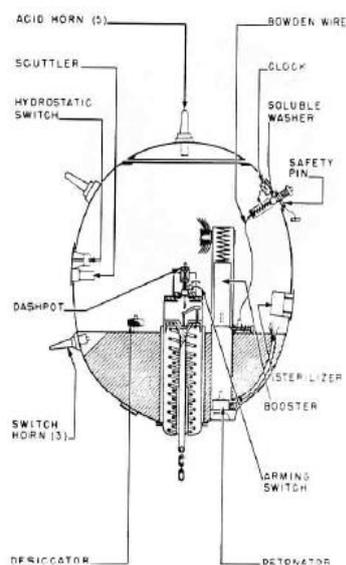
Buoyant mines, designed to drift free, float or sit just below the surface, were the most commonly deployed marine mines. They were typically moored, or tethered to the seabed with an anchor or wire.

After deployment, cables or anchor systems designed to keep the mine at predetermined depths often failed, allowing previously moored mines to be moved from their original locations by currents. They could also be moved by later fishing activity such as trawling.

Generally spherical in shape, the mines were comprised of 2No. hemispheres connected with a cylindrical mid-section.

Marine mines typically carried 100 to 500lbs (50 to 250kg) of explosive. They were detonated by contact (being struck) or by influence (a vessel interfering with the mine's electromagnetic field).

Marine mines deployed during WWI were mostly activated by contact mechanisms, those during WWII were activated by either contact or influence mechanisms, or a combination of both.



German ground mines (Luftmine) were air-deployed naval mines which were also modified for deployment from submarines and surface craft. Although primarily designed to lie on the seabed, many were also moored or buoyant. Designed as an anti-shipping weapon, the WWII Luftmine was also often used on land based targets.

Luftmines typically comprised a cylindrical body with a hemispherical nose and tapered tail, with charges weighing between 675lbs and 1,500lbs (305 to 680kg).

Some German marine mines were composed of aluminium or manganese steel depending on the variant, whereas British mines were typically made of steel.

Hazard It is generally accepted that less than 30% of the total number of marine mines laid during WWII were recovered due to migration from their initial locations in tidal currents. The recovery rate for anchored submerged mines is likely to be higher but accurate records regarding the clearance of these minefields is not readily available.

As a result there is a possibility that some remain in the marine environment and a mine can be washed up on a beach or found drifting in the water around any part of the UK's coastline.

Air-dropped German mines that did not detonate may remain unexploded in coastal areas around the UK, in addition to in lakes and reservoirs, and rivers.