



Port Security - First Line Defence

Dunlop have been building boat barriers for in excess of 15 years. The product makes use of composite technologies originally conceived at Cambridge University, England.

The November 2000 attack on the USS Cole by a suicide bomber in the Yemen led to a global review of port side security. The Dunlop boat barriers were physically tested as an anti-terrorist device by the US Navy in San Diego Harbour in May 2001. The units were successful against the threat for which they had been designed. However, it was thought prudent to enhance the design, making the units larger and more robust to combat a broader range of threats. Dunlop GRG anti-terrorist boat barrier systems are currently being installed around the world. The Dunlop inflatable anti-terrorist boat barrier is a cost effective and highly visual deterrent. Its design is such that it can be adapted to any port situations, naval, or commercial and also for the protection of land based assets which are vulnerable to sea attack. for example coastal nuclear power plants.



The unit once installed requires little maintenance and can be expected to have a life of 20 years or more. A barrier system currently in service was inspected on its 15th anniversary and certified as fully functional.

The units currently being manufactured are of 25m length and 2.4m diameter. These pneumatic units operate at around 70mbar (1Psi) and are shackled together with buoys and anchor systems at pre-determined intervals. A series of units as also designed to operate as a gate system where access is required. The gap between the connecting buoys is dependant upon geography, climate and tides etc. Being low pressure, the units' first function if attacked by a boat is to absorb the energy, an internal steel cable then comes into play causing the energy, now multiplied to return to the boat inflicting major damage.

All ancillary metal fitments are designed to operate with a long life in a marine environment. Units are delivered to the site deflated in crates, unpacked with a fork lift truck, inflated to 70mbar (1Psi) and subjected to a final inspection before being launched and tied to the mooring system.

We can offer a full turnkey package including initial site survey, design of the system with moorings and buoys, together with full installation and training.

A range of sonar, radar and camera equipment can be installed to provide a more comprehensive protection package.