

FOLDING FIRE BARRIER

Case Study and Capability



OVERVIEW

CLIENT - ROYAL AUSTRALIAN NAVY

CHALLENGE - RESTRICTING THE SPREAD OF DECK FIRE IN EVENT OF INCIDENT OR EMERGENCY

SOLUTION - GLOABL DESIGN WITH LOCAL MANUFACTURE EXCEEDING STANDARDS

BACKGROUND

The Australian Navy operate two large Amphibious ships, the HMAS Canberra and Adelaide. The Ships are designated as Landing Helicopter Docks or LHDs, and these ships provide a significant amphibious capability to deploy over 1000 troops by sea to support ADF operations. A key element of this capability is the ships ability to deploy with up to 18 helicopters and secure these aircraft below deck on two separate decks. To meet the seaworthiness requirements of deploying with such a large number of aircraft, Canberra and Adelaide Platforms are fitted with folding fire barriers within the hanger deck. In addition, a second folding fire barrier is fitted on the heavy vehicle deck. These fire barriers are Lloyds accredited and play a critical role in restricting the spread of fire in the event of an incident or emergency on either deck.

THE CHALLENGE

The folding fire barrier system was designed and built by Darchem, a UK based engineering & manufacturing company with over 40 years of experience supporting warships at sea. With the installation of the folding fire barriers in the Australian amphibious ships, the challenge was to develop robust support capacity in Sydney, where the ships are based. Darchem engaged New Design Technologies (NDT) to act as their local agent and represent Darchem for all folding fire barrier requirements. The additional challenge of having UK based technology fitted to the Australian ships was the significant lead time for supplying parts to undertake repair work. Due to the nature of the system, minimal inventory was held within Australia, and there was a strong reliance on manufacture and shipping from the UK.

THE SOLUTION

NDT quickly identified the need to develop a strong supplier network within Australia to manufacture critical parts to support the system. This action was taken with the full consent of Darchem. It was primarily driven to improve the supply time for critical components and support the Australian Government's strategic intent to further develop Australian Industry capability and not rely on overseas suppliers. NDT has successfully engaged several local fabricators to work collaboratively with Darchem to manufacture parts to meet the needs of the Australian ships. A recent maintenance period saw the successful installation of equipment that Darchem UK had designed, manufactured, and installed by NDT Australia and local partners. NDT continue to expand their local supply network to meet the expanding needs of the Royal Australian Navy.

