



Flight Deck Edge Safety Nets

High Performance Cordage-Deck Edge
Nets (HPC-DEN)

QinetiQ US's high performance cordage deck edge safety nets (HPC-DEN) provide safety and fall protection at sea and on land. The lightweight and durable nets are typically installed around the perimeter of helicopter landing pads on maritime vessels, offshore installations, and building rooftops.

High-Performance Design

HPC-DEN cord construction consists of a high strength fiber inner core, a protective outer sleeve for ultraviolet and abrasion resistance plus a coating for added environmental protection. The cord is machine woven into bulk netting, can be fabricated into a square or diamond pattern and cut to a variety of shapes and sizes. HPC-DEN cordage is light enough to float on water, making it ideal for marine rope and cordage applications. Because the fibers are hydrophobic, they will not absorb moisture or deteriorate in water.

Flight deck edge safety nets are approved for use by US Navy Drawing Number 8436625 "Safety Nets, Deck Edge, Aluminum Frame, Synthetic Net" and are currently being installed on maritime vessels including the US Navy Littoral Combat Ship (LCS) fleet.

Key Features and Benefits

Lightweight—floats on water

Durable: made with high performance materials

Adaptable design

Improved sightlines—optional patterns

Increased service life compared to nylon netting and improved protection against UV and weather

Six year durability (estimate based on field test aboard US Navy DDG vessel)

Provides protection and safety to crew



Nylon Net



HPC Deck-Edge Net

Descriptions	HPC-DEN	Nylon DEN
Service Life	6 years ^a	1.5 - 2 years
Installations (per 6 yr cycle)	1	3-4
Static Weight Test Naval Sea Systems Command STD DWG 803-5184097 Rev "B" General Note #23 (1000 lbs for 10 min)	Every 3 years ^b	Every year
Damage from maritime environmental exposure (UV & moisture)	Low	High
Frame uplift & drag during green sea submersion (violates Naval Air Systems Command height restrictions and causes costly frame damage)	Very Low	Moderate
Abrasion (netting damage)	Low	Moderate-High (requires chaffing strip)
Net shrinkage (impacts sag and tautness)	Low	-High

^aService life based on in-service shipboard testing and post in-service testing (Static Weight Test)—six years. Prototype nets were outfitted on USS Howard (DDG 83) and successfully field tested for six years.

^bInitially every two years (pending technical warrant approval), with a projected goal of every three years to coincide with CRES wire rope net testing.

Collaborating with QinetiQ

At QinetiQ we bring organizations and people together to provide innovative solutions to real world problems, creating customer advantage. Working with our partners and customers, we collaborate widely, working in partnership, listening hard and thinking through what customers need. Building trusted partnerships, we are helping customers anticipate and shape future requirements, adding value and future advantage.

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For further information please contact:

350 Second Avenue
Waltham, MA USA
+1 781 684 4000
Survivability@US.QinetiQ.com