# **ShipArrestor**



The **ShipArrestor** is a unique system for gaining control of a drifting vessel and is brought to the casualty with the speed of a helicopter.

# It consists primarily of a **Lasso**, a **Towline** and a large **Para Sea Anchor (PSA)**.

The Lasso is deployed over the windlass of the casualty by the helicopter to establish the connection. The PSA is then dropped into the water, turning the bow up against the wind and significantly reducing roll motion and drift speed. The Towline connects the PSA to the Lasso and to the casualty.

The ShipArrestor also provides an established towline for the first arriving tug. The pick-up system allows the tug crew to retrieve the ShipArrestor directly from the water and use it to tow the casualty to safety.



Independent of crew aboard the casualty, the ShipArrestor can be used even if the ship is abandoned. Once the connection is made, the system is fully autonomous.

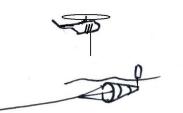
The ShipArrestor concept has been developed by a consortium of European companies led by Miko Marine and funded by the European Union. It is manufactured by Coppins Sea Anchors Ltd, which is a world-leading producer and developer of sea anchor systems.

Miko Marine is now a proud supplier of two ShipArrestor units to the Norwegian Coastal Administration.

Step 3

## INSTALLATION PRINCIPLE

<u>Step 1</u> Helicopter secures tow cable to ship drifting without crew or power





Rescue tug picks-up sea anchor with cable and tows ship to safety

#### Step 2

Helicopter then pays-out and drops tow cable with sea anchor. Anchor turns ship into wind and slows drift.



## DETAILS

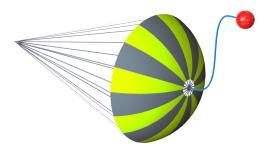
During helicopter transport, the ShipArrestor is carried in two connected packages; a **Connector** and a **Deployment Bag**.

The Connector consists of a light-weight chain carried inside a pressurized hose (the Lasso) and a second chain (the **Forerunner**), which is attached to the outside of the hose.

The Lasso is lowered around the windlass or similar strong-point on the deck of the vessel. The Forerunner is designed to pass over the gunwale of the vessel without being damaged by chafing.

The Deployment Bag is an aerodynamic container for the Towline, Para Sea Anchor and Pickup System, and is suspended above the connector.





When the Deployment Bag hits the water, the Para Sea Anchor will open and turn the bow of the vessel up into the wind. This will reduce the drift rate by up to 50% and almost eliminate any rolling motion.

As a result, valuable time is created for a tug to arrive before the casualty hits the shore, while the wave-induced stresses on the structure are significantly reduced.

When the tug arrives, the crew can use the Pickup System to retrieve the line from the water and use the ShipArrestor to tow the casualty to safety.

Total Weight Approx. 1 000 kg

Max. Flying Speed 60 kts

Min. Break Load 100 tonnes

Lasso Ø 6 m

Sea Anchor Ø 27 m (in deployed condition) **Length of Tow Line** 200 m

Reduction of Drift Speed Up to 50%

**Length of Forerunner** 20 m

Length of Pickup Line 150 m

# CONTACT

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