

CANARIE Boom



The Canarie boom is designed to be used in open coastal waters, in estuaries and in harbours to contain the spread of hydrocarbon contaminants.

A boom element comprises hollow elements fitted with spacing floats made of polyethylene foam housed within a double skirt and completed with a tension/ballast chain which takes up the tensile stresses.

Each element is fitted with a ridge band for handling.

PROPERTIES OF THE CANARIE BOOM

The main feature of the CANARIE Boom is its great flexibility: this means that it follows the surface water movements and maintains its upright position in the event of cross-currents.

The tensile stresses are absorbed by the ballast chain.

The Boom has been designed to withstand use at sea, in harsh weather conditions, UV light and very damp environments.

The CANARIE Boom can be used in extreme and difficult conditions:

- Water temperature between -2°C and +33°C
- Air temperature between -10°C and +45°C



THE FLOAT

The float is made of hollow elements fitted with foam spacers.

FOAMS

The material used is a closed cell polyethylene foam, both flexible and resilient, which adapts to all distortions.

Polyethylene is characterised by:

- good resistance to oily products and hydrocarbons,
- a very low absorption of humidity,
- good properties in a marine environment.

The foams are fixed inside the boom using polyamide clamps. This type of assembly means floats can be replaced by a non-specialist maintenance team.

RIDGE BAND

Each element comes fitted with a ridge band used for handling and which contributes to absorbing the tensile stresses placed on the boom.

It is sewn onto the boom at each sub-element.

The fabric used is a black 50mm wide polyester band with a breaking load of 5 tonnes.

Polyester thread is used: this is highly resistant to UV light.

Each joining point between the ridge band and the boom can withstand 500 daN of tensile stress.

BALLAST AND TENSILE STRESS

The float is extended by a double skirt.

The lower part of the skirt is fitted with 2 seams onto which eyelets are attached.

This reinforcing system confers a minimum tear resistance of 400 daN on the eyelets.

All fastenings are of A4 stainless steel with locknuts.

CONNECTORS

Each end of an element is finished using a Nylon cord housed within a welded seam.

The connectors are made of PA6 8mm thick, 60 mm wide polyamide plates:

1 pair on the air draught and 1 pair on the water draught.

Polyamides are some of the most highly resistant thermoplastics with excellent abrasion properties. They are highly resistant against a large number of chemicals and unaffected by oils, hydrocarbons and fuels. The joining plates come fitted with A4 stainless steel fastenings comprising 12TH screws, M12 washers and locknuts.

The ballast chain sections and ridge bands are joined by a highly resistant hot-dipped galvanised connecting shackle. The connecting system is also available in ASTM.



USE

All of RCY's booms can be fitted with a towing system made up of a piece of tubing and two slings with sizes adapted for towing the boom.

The towing system can also be used to moor the boom once in position.

TOWING KIT

2 towing kits are supplied. This equipment is for transporting the boom to the working area and is used for

towing and mooring the boom.

The towing system consists of:

- 1) A hot-dipped galvanised piece of tubing;
- 2) Two 14mm diameter stainless steel towing cable slings;
- 3) A welded galvanised ring linking the two towing slings;
- 4) Two HR hot-dipped galvanised shackles;
- 5) A float for the towing system's own buoyancy.

MAINTENANCE AND REPAIR KIT

1 spares kit including:

- 2 X 5/8" ballast shackles, SWL 3.25T
- 2 X 1/2" tensile stress shackles, SWL 3.25T
- A ballast chain replacement kit for one section
- A set of foam fixing clamps
- 2 complete connectors with fastenings i.e. 4 pairs of plates and the nuts and bolts required for fitting them.

1 repair kit including:

- Glue for the fabric used, sufficient for 1m² of repairs
- 1m² of boom fabric
- Sand paper
- Brushes
- One bottle of GCM cleaner

TECHNICAL DATA SHEET CANARIE BOOM

	Canarie PM	Canarie GM
Freeboard (mm)	500	580
Draft (mm)	700	870
Boom overall height (mm)	1 280	1 530
Colour	Orange	Orange
Fabric	PVC - PU - PUB (blend: PVC/PU)	PVC - PU - PUB (blend: PVC/PU)
Foam	Polyethylene foam with closed cells	Polyethylene foam with closed cells
Length of a segment (m)	10 - 25 - 50 m	10 - 25 - 50 m
Weight / ml (kg)	7,6	10
Storage volume	7 m3 for 100 ml	10 m3 for 100 ml
Ballast	Galvanized chain 15T breaking strength weight 4 kg / ml	Galvanized chain 30T breaking strength weight 5.8 kg / ml
Chain connection	Galvanized HR bow shackle WLL 3T25	Galvanized HR bow shackle WLL 6T5
Ridge strap connection	Galvanized HR bow shackle WLL 2T	Galvanized HR bow shackle WLL 2T
Boom connection	PA6 polyamide plate 60 mm Th. 8 mm - ASTM option: Profiled aluminium	PA6 polyamide plate 60 mm Th. 8 mm - ASTM option: Profiled aluminium
Handling point	Ridge strap	Ridge strap
Overall tensile strength	15 Tons	30 Tons