

EXPANDI



EXPANDII 

WHEN EVERY SECOND COUNTS

EXPANDI is one of the pioneers of oil spill world. We invented and developed the Self-Inflatable Oil Boom early in the 1970's. Now more than 800.000 m are in service around the world.

EXPANDI

Today, EXPANDI is a growing and developing organization with production facilities and engineering capacities in Sweden and Spain and with sales and service representatives worldwide. We provide a wide range of high quality oil spill response equipment as well as offer incident response consultations to assist our clients in designing the most efficient and effective spill response. Together with our partners we offer innovative solutions within all significant areas of oil pollution control.

Today, EXPANDI is a growing and developing organization with production facilities and engineering capacities in Sweden and Spain and with sales and service representatives worldwide. We provide a wide range of high quality oil spill response equipment as well as offer incident response consultations to assist our clients in designing the most efficient and effective spill response. Together with our partners we offer innovative solutions within all significant areas of oil pollution control.

EXPANDI continues to design and engineer new products to improve your effectiveness and response to both large and small spill incidents.

Jon A. Nygaard
CEO Expandi Systems

The logo for EXPANDI, featuring the word "EXPANDI" in a bold, white, sans-serif font with a stylized wave graphic to the right, set against an orange background.

1 You're welcome

2 Index

A teal-colored header box containing the text "SELF INFLATING BOOM SYSTEM" in white, uppercase, sans-serif font.

5 Intro

6 Self Inflating Boom

8 Roto Pac

10 Lifting Slings

12 Sea-Sledge

A dark teal-colored header box containing the text "CONTAINMENT" in white, uppercase, sans-serif font.

15 Intro

16 Single Point Inflatable Boom

18 Inflatable Oil Boom

20 Rubber Boom

22 Fast Current System

24 Fence Boom

26 Cylindrical Booms

28 Rapid Boom

30 Permanent Boom

32 Shore Sealing Boom

34 Manuflex

A dark grey header box containing the text "RECOVERY" in white, uppercase, sans-serif font.

37 Intro

38 Multi Skimmer

40 Weir Skimmer

42 Vacuum System

A blue header box containing the text "STORAGE" in white, uppercase, sans-serif font.

45 Intro

46 Floating Tank

48 Frame Tank

50 Self Raising Tank

Index

CHEMICAL DISPERSION

- 53 Intro
- 54 Dispersant Sprayer

AUXILIARIES

- 57 Intro
- 58 Reels
- 60 Power Packs
- 62 Container System
- 64 Air Blowers
- 66 Tidal Compensator
- 68 Floating Umbilical Hose

SORBENTS

- 71 Intro
- 70 Sorbents
- 72 Sorbent Booms
- 74 Skirted Sorbent Boom

ALUMINUM BOATS

- 77 Intro
- 78 Aluminium Boats

COMMISSIONING

- 83 Intro
- 84 Commissioning



SELF INFLATING BOOM SYSTEM

When an oil spill happens, minimizing the time response is crucial in order to reduce the impact of the pollution in the environment.

One of the key points to perform a quick response is having the right tools and an experienced team.

Expandi, in the early 70s, designed the self-inflating oil boom system which has been improved year after year. With this system, we minimize the response time, as the system is always ready for use by any person.

With no need for power pack, air compressor or other auxiliary equipment for effective deployment, this system guarantees reliable performance.

Self Inflating Boom

EXPANDI Self-Inflating Oil Boom is the most compact, easy to handle and rapid deployment oil boom system available internationally. In packed condition, it requires very little space and is always ready for immediate deployment. With no need for power pack, air compressor or other auxiliary equipment for effective deployment, this system guarantees reliable performance. EXPANDI Self-Inflating Oil Boom has outsold all other oil boom with more than 900.000 meters in service worldwide today. The boom is self-inflating and expands as it is released. The boom has internally bound pliable frames which are pre-sprung with stainless steel springs. A patch of thick urethane rubber is placed outside each frame corner for increased durability. The sections are divided into air-tight compartments, 1.5 m – 2.0 m long or more depending on the model. Each air compartment contains airtight bladders – “air-traps”- for reserve buoyancy in case of damage.

Two boom models are available: M4300 and M3000 with 1100 mm and 770 mm as total height, respectively.

SELF INFLATING BOOM SYSTEM

Self Inflating Boom

CONTAINMENT

RECOVERY

STORAGE





CHEMICAL DISPERSION

AUXILIARIES

SORBENTS

ALUMINUM BOATS

COMMISSIONING



**SELF INFLATING
BOOM SYSTEM**

Roto Pac

CONTAINMENT

RECOVERY

STORAGE

Light-weight, compact and easy to use.

Roto Pac

Rolled up booms can easily be removed; *One Rotopac is enough for rolling up endless length of booms.*

The Roto Pac system is a reel system specifically designed to be used with the EXPANDI Self-Inflating Oil Boom.

The Roto Pac boom deployment and retrieval device incorporates flexibility, mobility and requires minimal manpower. This extremely compact and easy to handle reel can be operated from an offshore platform, the deck of a vessel, a pier, or the shore.

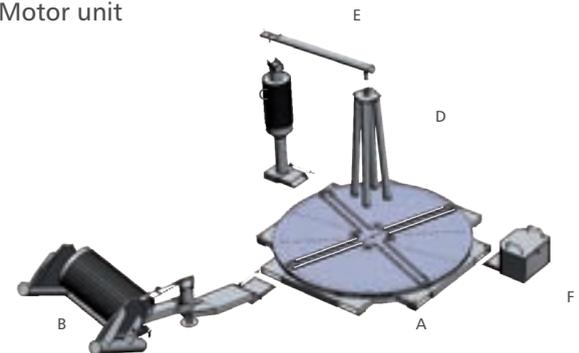
Deployment is done only using the Roto Cassette, which does not require any additional machinery or power supply. Besides, any personnel even with no training can operate the reel system if necessary.

The complete Roto Pac is assembled by two people, without using any tool, in less than 5 minutes.

The EXPANDI Roto Pac is made in marine grade aluminium and is available with electric or hydraulic motor.

The Roto Pac mechanism includes:

- A Roto Cassette
- B: Lead drum
- C: Side roller
- D: Stabilizer
- E: Motor unit



MODEL	Stowing capacity M3000 (m)	Stowing capacity M4300 (m)
RP1900	200	152
RP2300	250	197.6
RP2450	300	243.2
RP2700	375	304
RP3200	500	395.2

Ready for immediate response.

Reaching distant and critical areas efficiently.

When an oil spill occurs, response time is crucial to minimize the damage caused by the spill.

Lifting Slings

The Expandi Crane Sling and the Helicopter Sling provides significant flexibility, efficiency and cost savings as sections of our Expandi Self-Inflatable Oil Boom may be moved quickly and be deployed without any boom reel, power pack or any other auxiliary equipment.

This way the user with a helicopter can reach remote, distant and critical areas very quickly and efficiently.

The Expandi Self-Inflating Oil Boom is designed with sufficient positive buoyancy – even with no air in the air chambers, a boom bale can be dropped in water. The lifting slings are provided with an easy-to-use release hook which leaves the boom roll floating on water ready to use. After that, 1-2 men in a small boat can deploy the boom section just by pulling out the towing rope of the boom bale.

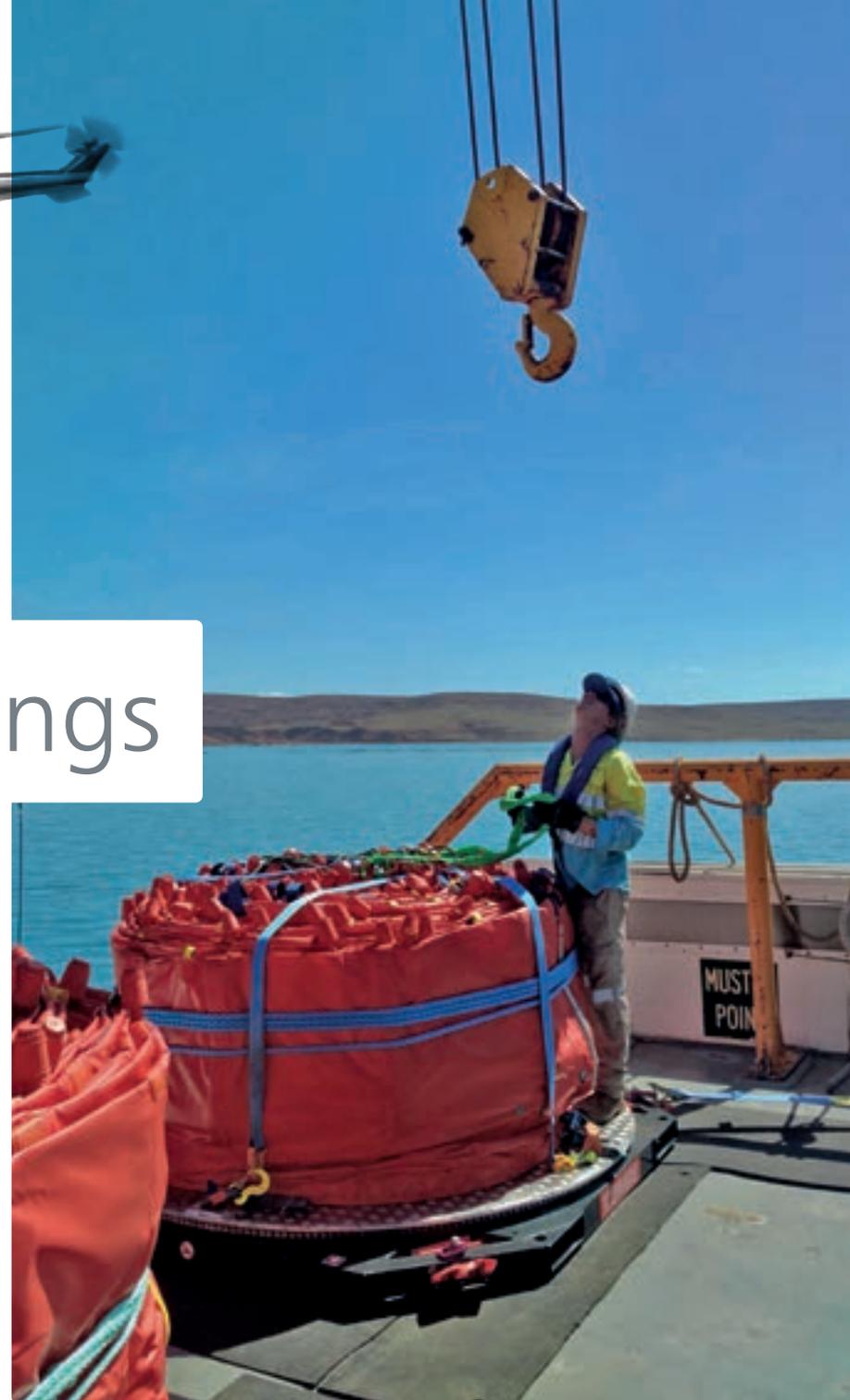
SELF INFLATING BOOM SYSTEM

Lifting Slings

CONTAINMENT

RECOVERY

STORAGE







**SELF INFLATING
BOOM SYSTEM**

Sea-Sledge

CONTAINMENT

RECOVERY

STORAGE



An excellent solution to reach the spill site.

Can be towed up to 30 knots.

Can be fitted with an inboard engine.

Sea-Sledge

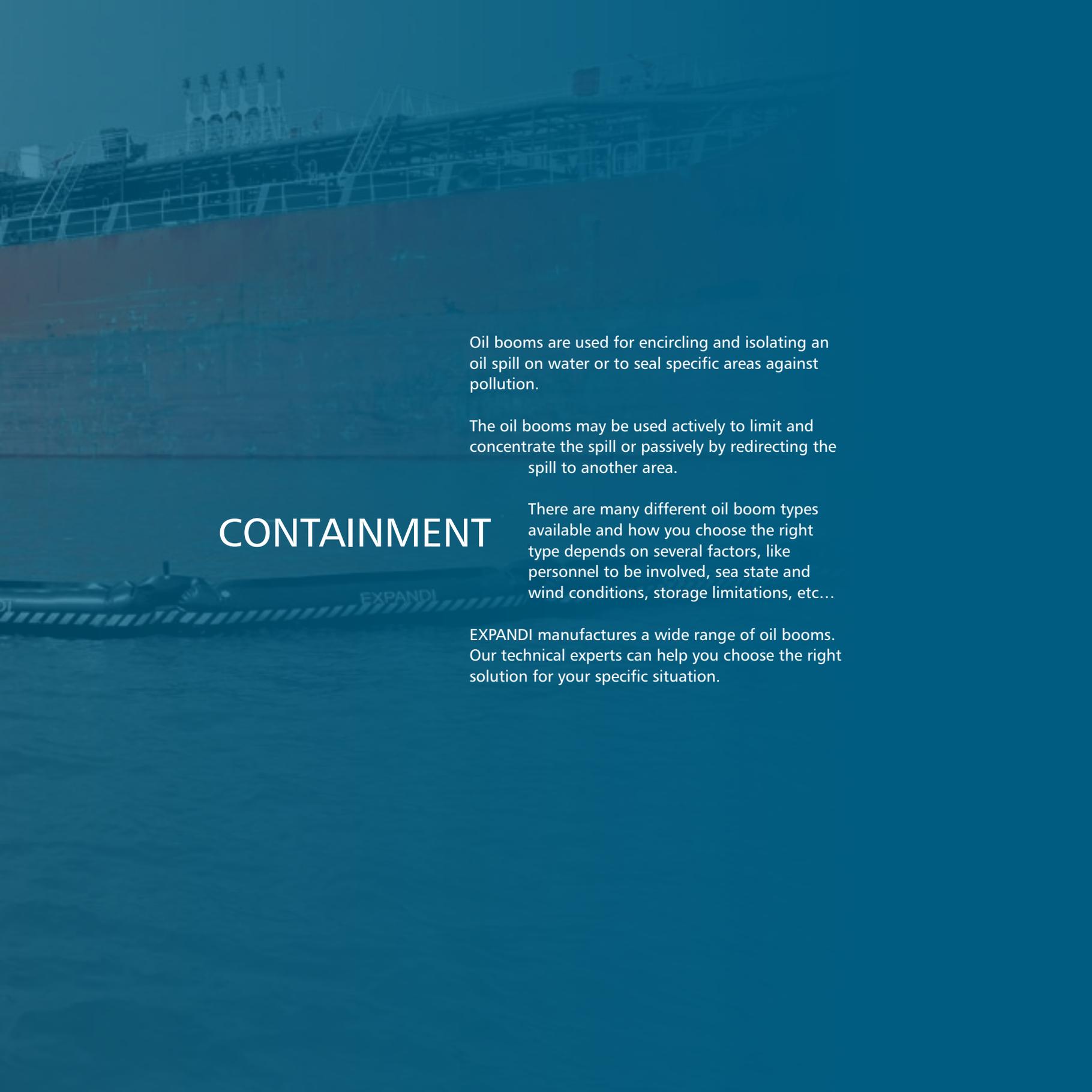
The EXPANDI Sea-Sledge is an excellent solution to reach the spill site and quickly deploy all kinds of oil spill response equipment.

Two rolls of 250 meters of EXPANDI booms can be interconnected aboard an aluminium hull that can be towed up to 30 knots. An automatic release device allows the deployment of 500 m of booms without any need of power supply and without the assistance of crew members.

The Sea-Sledge systems can be manufactured tailored to the needs of our customers with all the necessary equipment to deal with an oil spill. Once the boom is deployed, the system can be used for transporting equipment, personnel or collected oil during an oil spill scenario by skimmers or suction pumps.

An inboard motor engine can be fitted making the sea-sledge a robust and versatile working boat.





CONTAINMENT

Oil booms are used for encircling and isolating an oil spill on water or to seal specific areas against pollution.

The oil booms may be used actively to limit and concentrate the spill or passively by redirecting the spill to another area.

There are many different oil boom types available and how you choose the right type depends on several factors, like personnel to be involved, sea state and wind conditions, storage limitations, etc...

EXPANDI manufactures a wide range of oil booms. Our technical experts can help you choose the right solution for your specific situation.

Secure deployment: no personnel needed for air filling.

Single Point Inflatable Boom

EXPANDI has developed two types of Single Point Inflation Oil Boom, one is inflated directly from the reel and the other is inflated through the towing end connected to the first boom section. Both are rugged and strong oil containment booms.

In both cases, the booms have individual floatation chambers, which are connected to the common rail air filling system through non-return air valves. The booms can also be delivered with replaceable air chambers.

Each chamber has a high capacity valve mounted for deflation when recovering the boom, but they may also be used as a backup inflation solution, like that of the standard air inflating booms.

The booms can be tailor-made with different fabrics, sizes and connectors as per customer's requirement.

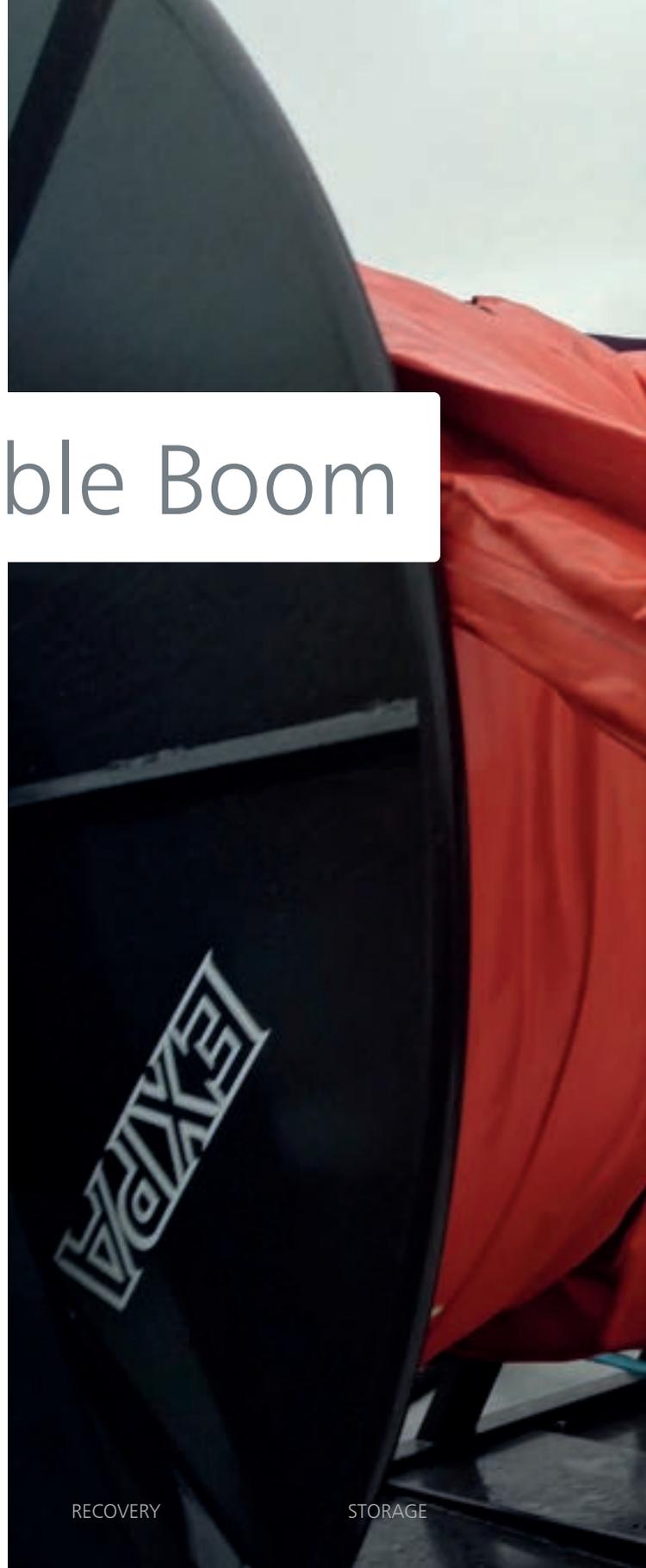
Models are available from 600 mm to 2800 mm as total height when inflated.

CONTAINMENT

Single Point Inflatable Boom

RECOVERY

STORAGE







CONTAINMENT

Inflatable Boom

RECOVERY

STORAGE

High buoyancy and excellent wave response.

Constructed from strong and flexible fabrics.

Independent buoyancy chambers. Internal replaceable floats as an option.

Inflatable Boom

EXPAND! Air Inflatable Oil Booms are heavy duty oil booms, inflated section by section, by means of an air blower. As standard, a minimum distance of 6 m is required from the reel to the edge of the harbour jetty or to the stern of the vessel for placing the air chamber which has to be inflated.

Each section includes separated buoyancy chambers. The inflatable booms can also be delivered with replaceable air chambers.

The strong oil resistant fabrics enable the boom to withstand challenging wave, wind and current conditions. The booms can be tailor-made with different fabrics, sizes and connectors as per customer's requirement.

Models are available from 400 mm to 2800 mm as total height when inflated.



Models are available from 400 mm to 2800 mm as total height when inflated.

Constructed from strong and flexible rubber coated fabric.

Independent buoyancy chambers with single or multi point inflation system.

Compact storage on reels.

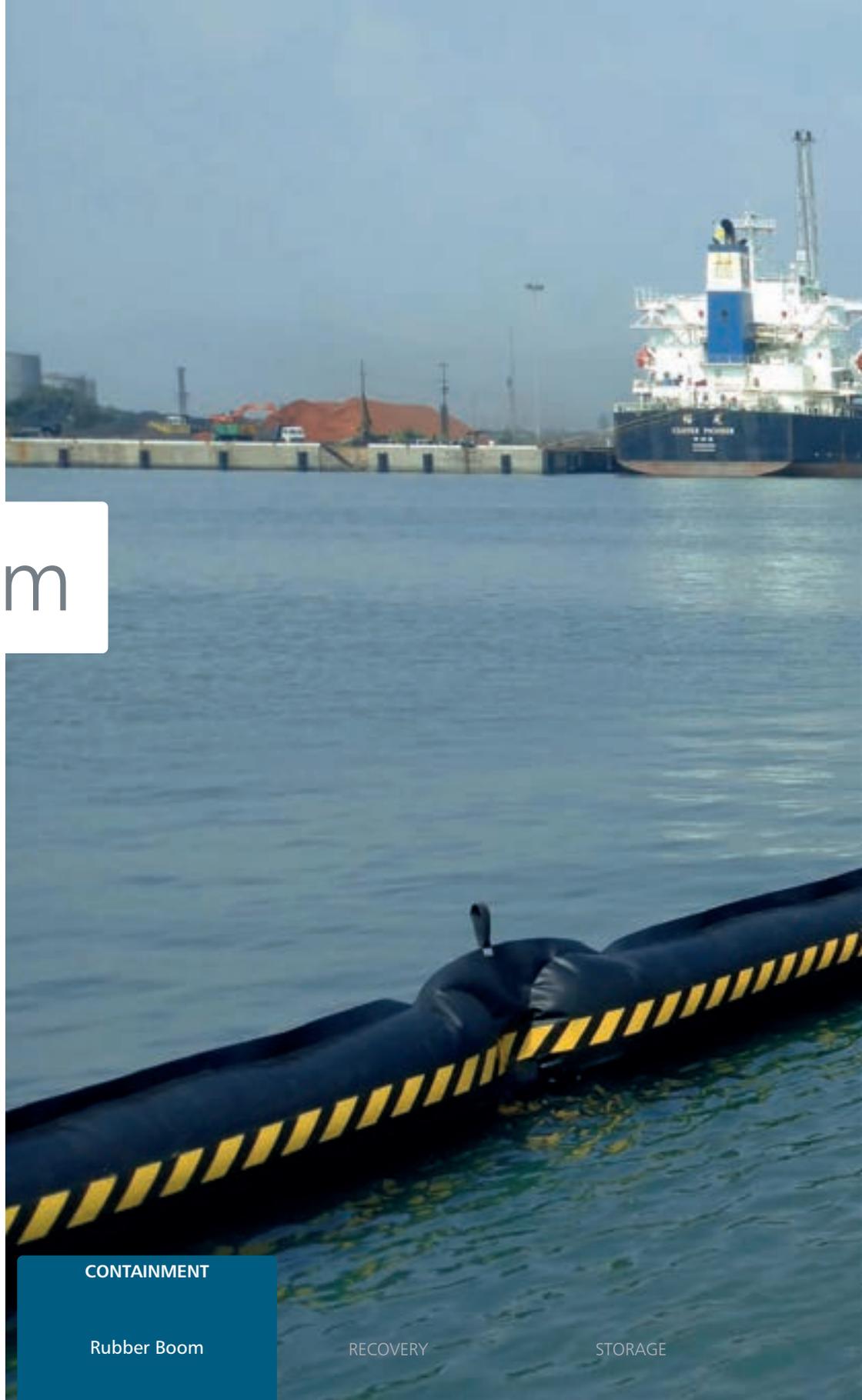
Rubber Boom

The Expandi Single Point Inflatable Boom and the Inflatable Boom are also manufactured with rubber fabric, resulting a heavy-duty oil containment boom.

The booms can be manufactured with Neoprene or Hypalon fabrics.

Each section includes separate air chambers fitted with Monsun XII or Monsun XG air valves.

Models are available from 400 mm to 2800 mm as total height when inflated.



CONTAINMENT

Rubber Boom

RECOVERY

STORAGE



Dynamic oil spill recovery system.

Can operate with current speed up to 4 knots.

Fitted with guide booms for a large V shape configuration.

Fast Current System

EXPANDI Fast Current Boom System is an advanced V configured system that can contain, store and recover the spilled oil at speed up to 4 knots.

The system consists of:

Two guide boom arms of desired length with different diameters; they create a V configuration in the system that drives the spilled oil from its entrance towards its apex, making a funnel. The guide booms have internal buoyancy chambers, and a skirt which is gradually getting shallower when approaching the collection tank. This geometry gives high buoyancy minimizing the turbulences generated around the skirt and the pulling force required for towing equipment.

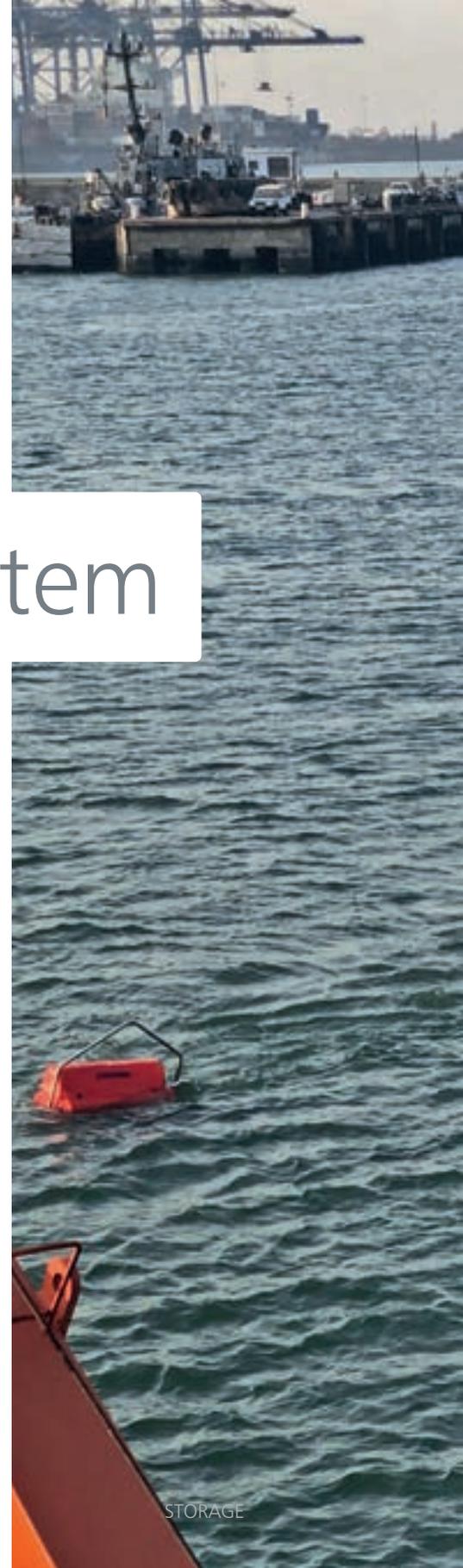
An integrated storage tank (closed bag or open barge), placed at the apex of the guide booms, acts as an oil/water separator. It separates the spilled oil from the water by leading the water out of the tank through an opening at the bottom while storing the separated oil. The closed bag version is fitted with an inbuilt skimmer to ease the extraction of the collected oil while the open barge system can work with an independent pump or skimmer.

CONTAINMENT

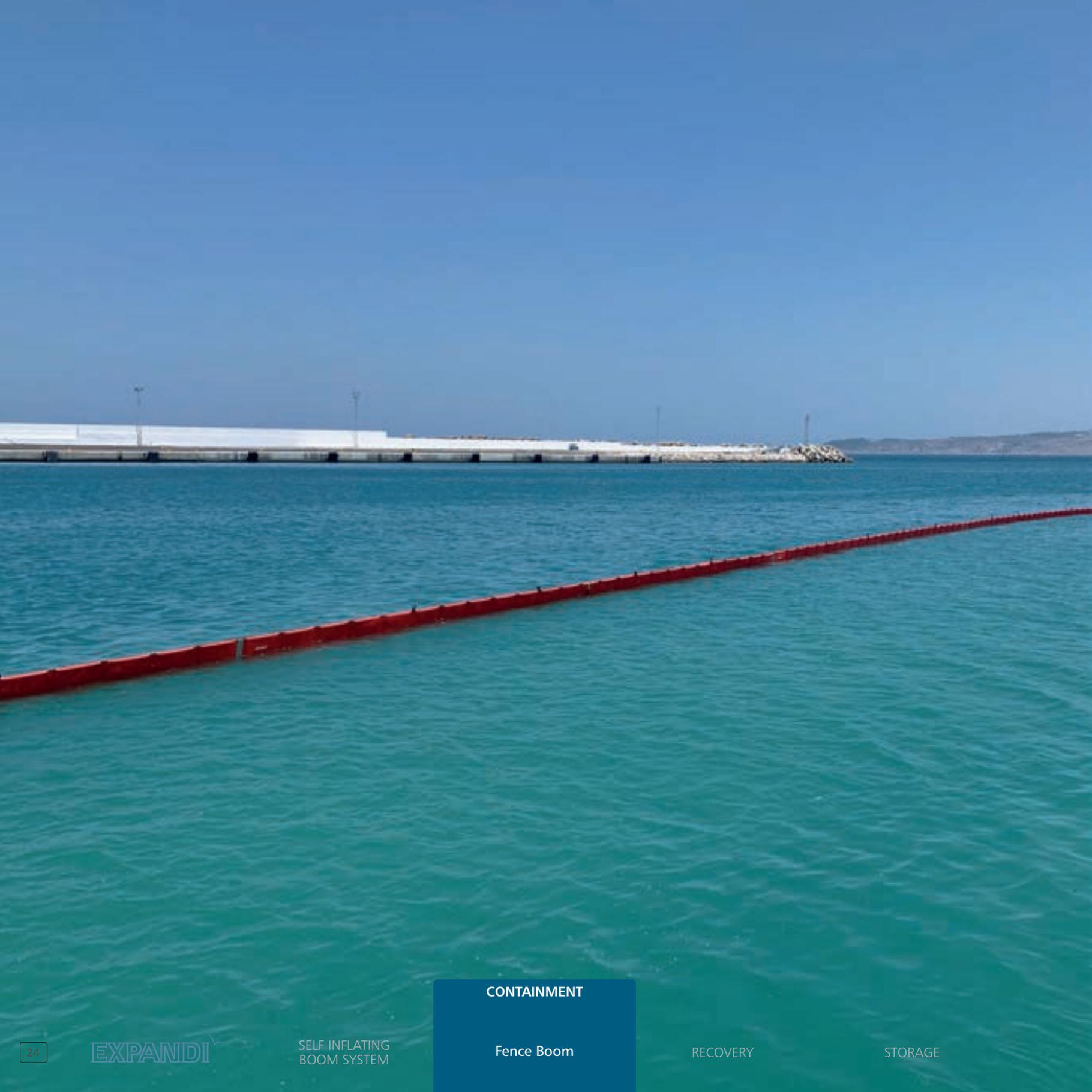
Fast Current System

RECOVERY

STORAGE







CONTAINMENT

Fence Boom

RECOVERY

STORAGE



Fence Boom

For use in harbour and sheltered waters.

No inflation needed. Internal closed cell foam floats.

Deployable from reels or crates.

This efficient oil boom with flat, fixed flotation elements are ready for use without the need for any additional equipment. It can be delivered on pallets, into containers, on trailer, into storage frame or on reels.

This type of oil boom is recommended for sheltered waters. As standard, in all the Expandi booms, all manufacturing materials used in the boom are corrosion resistant: stainless steel bolts and nuts (secured) and hot dip galvanized steel chain.

The boom can resist outside storage conditions. The boom can be tailor-made in different fabrics and of different sizes as per customer's requirement.

Models are available from 400 mm to 1100 mm as total height.

Stable in winds and currents with a very good wave response.

No inflation needed. Internal closed cell foam floats.

Easy to deploy.

Cylindrical Booms

The Cylindrical Booms are manufactured with independent closed cell foam floats. The boom is ready to be used without any need of additional equipment. Sections are easily connected to desired total length.

The use of strong oil resistant fabric enables the boom to withstand challenging wave, wind and current conditions.

The boom can be stored in Big-Bags, on pallets, in crates or in containers for quick deployment. The boom can be tailor-made in different fabrics and of different sizes as per customer's requirement.

Models are available from 300 mm to 1000 mm as total height.



CONTAINMENT

Cylindrical Booms

RECOVERY

STORAGE





CONTAINMENT

Rapid Boom

RECOVERY

STORAGE



Reliable and economic self-inflating oil boom.

Rapid deployment with no ancillary equipment required.

Compact storage; in bags, crates or containers.

Rapid Boom

The first few minutes following the accident in any oil pollution are vital and that's why the compact and lightweight EXPANDI Self Inflating Rapid Boom has been proven effective. It is one of the most rapid, compact and easy-to-handle oil boom systems available. Its rapid response means substantial money savings.

It is always ready for immediate deployment. In packed condition, it requires very little space. With no need for power pack, air compressor or other auxiliary equipment, this system guarantees reliable performance.

The boom is inflated automatically as it is pulled into the water. The floatation chambers keep the stability and shape through semi-rigid lightweight hoops integrated in the boom wall. The hoops are evenly distributed along the boom. The sections are divided into separated airtight compartments.

Each air compartment contains airtight bladders or air-traps for reserve buoyancy in case of damage.

Each air chamber is fitted with a 2-position valve; inflation & deflation. When the boom is deployed, all the valves are in the inflation position; the air comes into the boom but no air goes out. When the boom is recovered, the valves must be turned to the deflation position to bleed the air from the buoyancy chambers.

Models are available from 500 mm to 1200 mm as total height.



CONTAINMENT

Permanent Boom

RECOVERY

STORAGE



Ideal for long-term deployment.

Long life service with minimum maintenance.

No inflation needed. Hard floats filled with closed cell foam.

Permanent Boom

The Permanent Boom has significantly greater durability than conventional oil booms during long term deployment. The boom can withstand rough handling and operation over sharp quay fronts and rusty ship hulls. The boom can be deployed all year round, even being completely icebound is no problem. This boom is an excellent choice in environment where welding work is being performed and where sparks can occur.

The floats are high density fully enclosed polyethylene shells/floats. Floats are completely filled with closed cell foam and are fully sealed to increase effectiveness and the life span of the float. All edges of the float are rounded to prevent the floats from gouging the barrier fabric during flexing of the boom, allowing the fabric to handle the stress of flexing with minimum wear.

Standard colours are orange or black floats on black or orange fabric. The boom can be tailor-made in different fabrics.

Models are available from 400 to 1000 mm as total height.

Ideal for intertidal areas.

Water filled twin ballast tubes for a constant seal between the land and the water.

Shore Sealing Boom

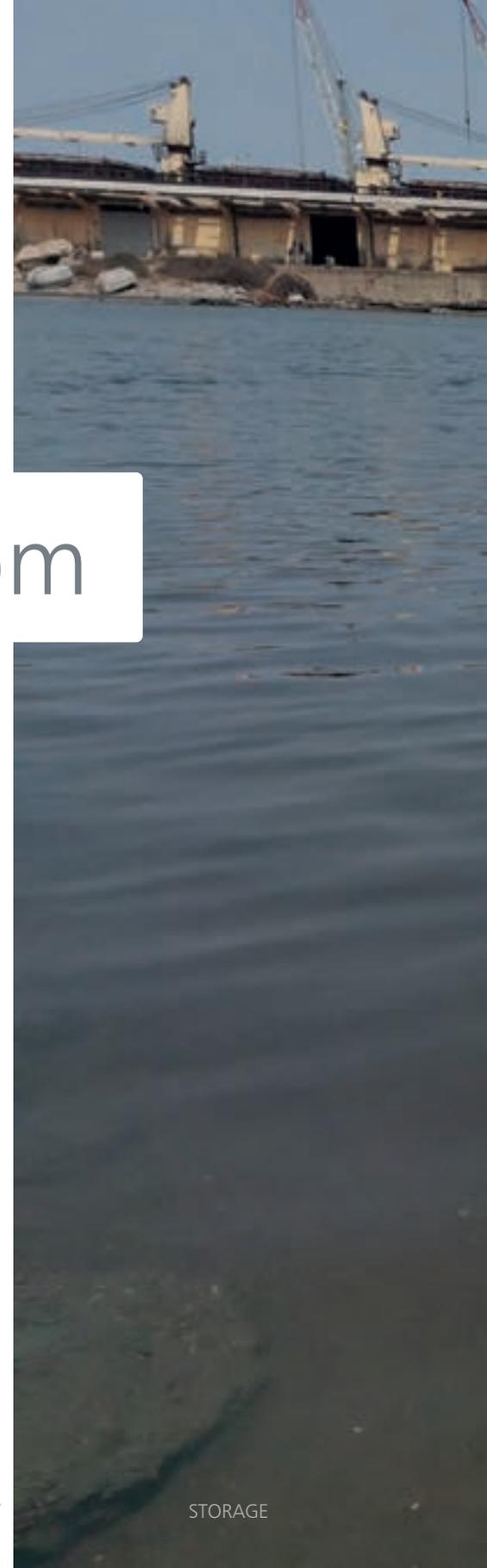
Shore-Sealing Booms are deployed in inter-tidal areas or riverbanks where water level is expected to fluctuate and where it is necessary to ensure a seal is maintained at the waterline as the water level rises and falls.

Shore-Sealing Booms operate by using twin water-filled ballast chambers at the bottom and an air-filled floatation chamber at the top which adjust automatically to changing water levels.

Shore-Sealing Booms are most effective when used in muddy or sandy areas. Proper care must be taken before deploying on sites with boulders, sharp protrusions, riprap, or other challenges that may damage the boom.

The boom can be tailor-made in different fabrics.

Models are available from 400 mm to 800 mm as total height.





Low cost boom for bunkering operations.

Suitable for ship to ship or quayside operations.

Simple, compact and effective.

Manuflex

During bunkering operations, minor oil spills can occur just around the cargo hoses area. The Manuflex Boom can easily close and isolate the small area between the quay and the hull of the vessel.

The boom is ready for use without the need of any auxiliary equipment. Thanks to its flexibility, the boom keeps the containment protection regardless the variation of the gap between the hull of the vessel and the quay.

The boom is reinforced by double fabric layers besides some thick rubber pieces at critical spots.

Models are available from 500 to 800 mm as total height.

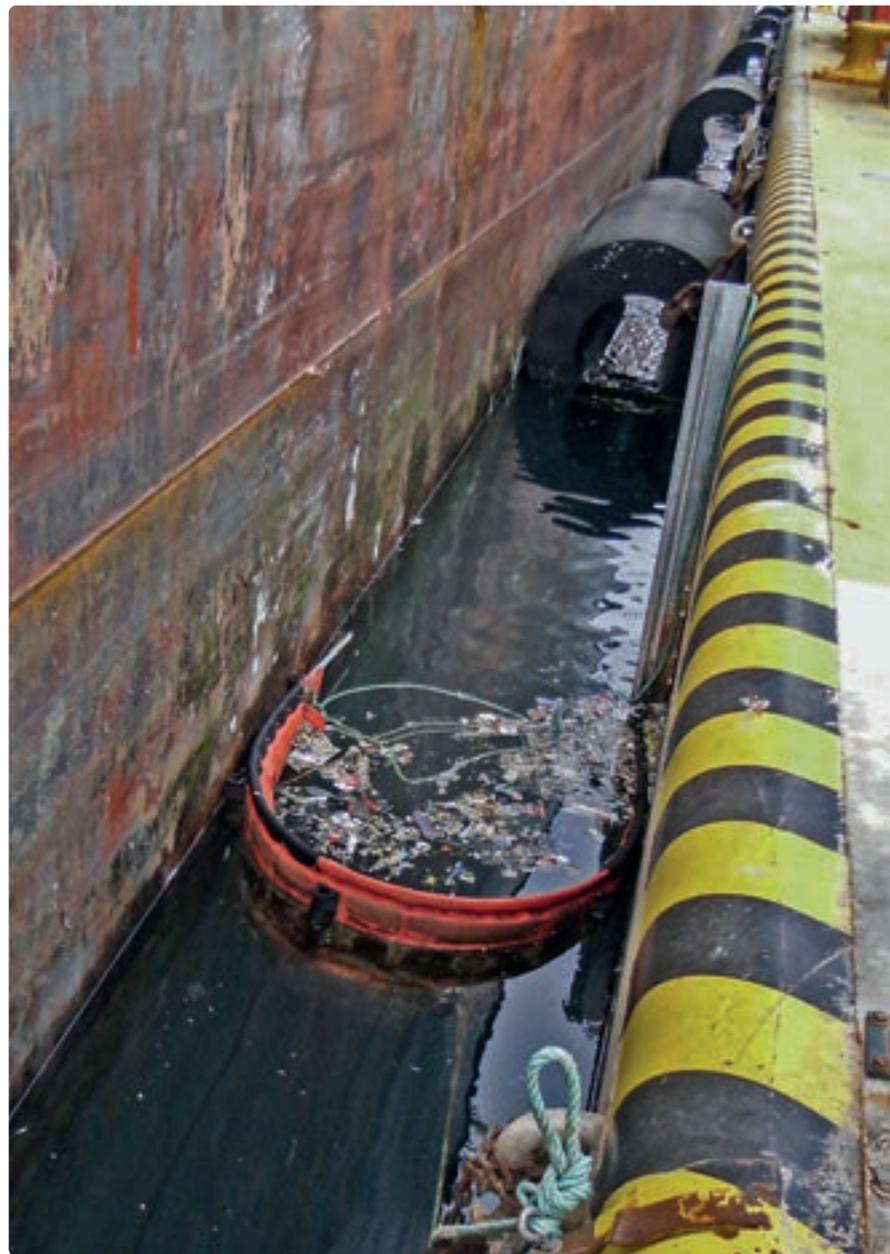


CONTAINMENT

Manuflex

RECOVERY

STORAGE





The background of the page is a dark, semi-transparent image showing an oil spill cleanup operation. A boat is visible with various pieces of equipment, including what appears to be a skimmer or recovery device, being used on the water's surface. The overall tone is somber and professional.

RECOVERY

During an oil spill, a quick and safe action saves money. The cleaning operation is much more difficult and expensive if the spilled oil reaches the coastline.

Our range of recovery equipment will help you and will make your work more efficient.

During any oil spill, protecting the people, environment and the ecosystem is crucial. With our different equipment you can react quickly minimizing the impact of the spill.

Different options are offered by Expandi for recovery of the oil.

High oil recovery rate with low water content.

Interchangeable recovery modules: brush, drum or discs.

Integral or separate transfer pump.

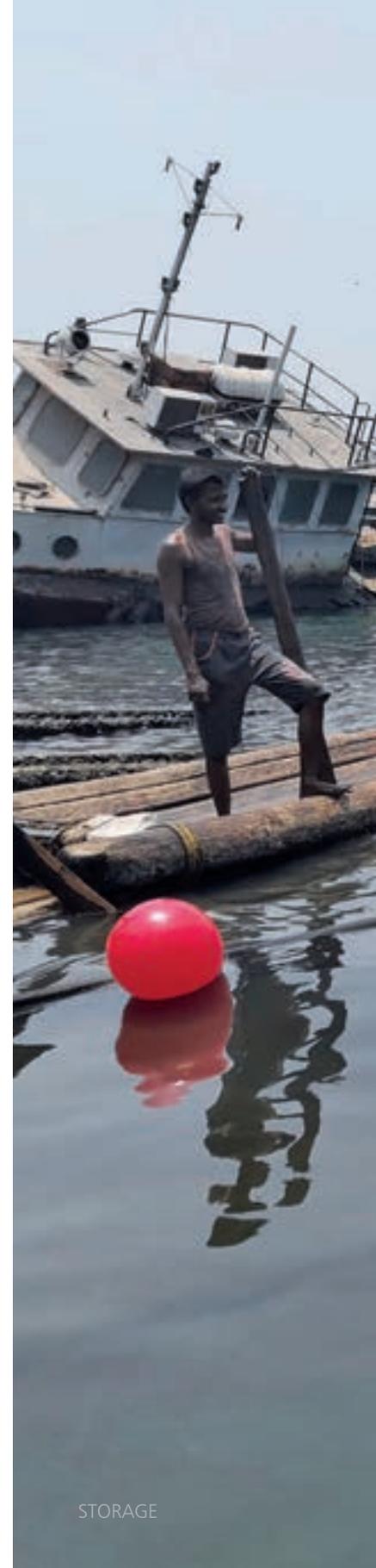
Multi skimmer

Multi-Skimmer is a combination of three different types of cassettes i.e. drum, discs and brush. These cassettes are interchangeable, and it allows you to recover a wider range of viscosities as you switch between different recovery principles. Drum and discs are used for spills of light to medium viscosity oils while the brush is used for medium to high viscosity oils.

Optional auxiliary equipment includes:

- Aluminium top cover for the cassettes.
- Water steam injection in suction and/or delivery.
- Water steam rail with injectors aiming at the cassettes to reduce the viscosity of the cargo.
- Protection grid to keep debris out of the cassettes.
- Onboard thrusters to move the skimmer towards the slick.

Models available from 5 m³/h to 200 m³/h capacity.



RECOVERY

Multi skimmer







High fluid recovery rate.

Integral or separate transfer pump.

External floats for a good wave response.

Weir skimmer

The Weir skimmer is a very rugged oil skimmer with a structure made of aluminium or stainless steel. A simple floating weir guides the top layer of fluid (floating oil on water) into a hopper from which it is transferred by a pump.

Generally, this type of skimmer takes more water when compared to brush, drum, or disc skimmers. In spite of this, the weir skimmer is the most widely used when operating with high volume and thick oil spills. This is due to the simple design, low cost and fast recovery.

Smaller models are operated with external pump while the larger skimmers have in-built pump, and may also be fitted with onboard thrusters to move the skimmer towards the slick

Models available from 10 m³/h to 200 m³/h capacity.

Designed to recover waste oil and dirt on land or water.

High vacuum capacity into a compact and easy to transport equipment.

Vacuum System

The vacuum pumps are designed for safe, quick and mobile applications in the most varied industrial operating conditions. Over years, this unique pumping system has been successfully used world-wide for more and more applications.

The pump is coupled with a diesel engine which makes the system self-sufficient. Expandi vacuum pump can also be used as a transfer pump. The design of these pumps enables changing of pumping hose and all components within shortest period of time without any additional special tool.

The basic vacuum cleaning system consists of a vacuum pump coupled with diesel engine, a stainless-steel suction pipe, a suction hose, a stainless-steel transport drum, a vacuum hose and two discharge hoses.

Other accessories (suction fork, suction shovel, preliminary filter vessel, etc.) are available as an option.



RECOVERY

Vacuum System

STORAGE







When working during any oil spill, it is essential to have space enough where the recovered oil can be pumped and stored.

STORAGE Expandi offers different versatile tanks from 2 to 250 m³ storage capacity.

High storage capacity, low volume when not in use.

Constructed from strong and flexible fabrics with air filled or closed cell foam floats.

High towing speed.

Floating Tank

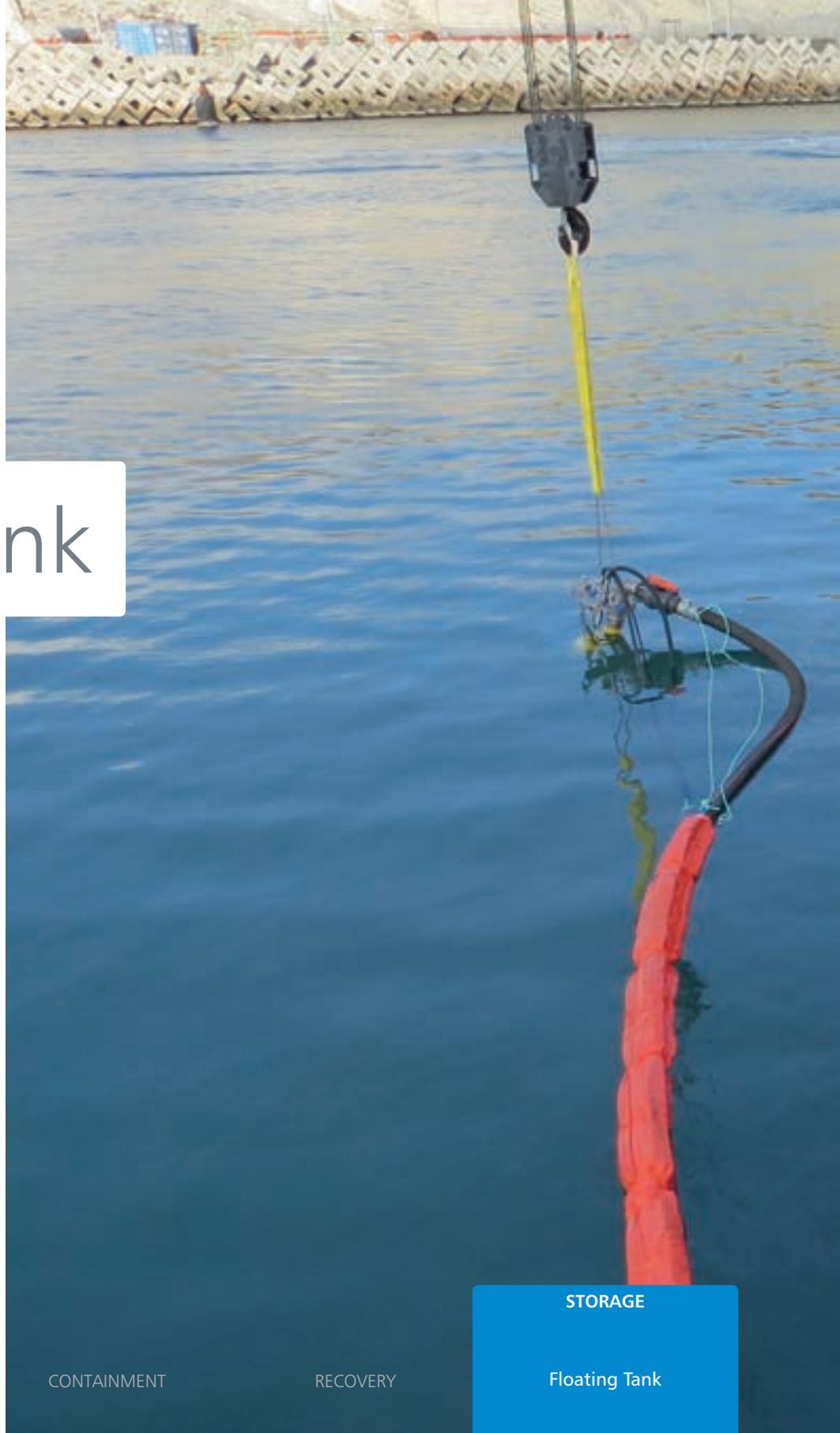
Expandi Floating Tanks are high quality, durable and towable tanks designed to store and transport recovered oil. These tanks provide the best solution for the lack of storing volume on vessels during any oil spill operation.

The floating tanks can be made of PVC, PU or Rubber coated polyester fabric.

The tanks are easy to tow, having air or foam filled floatation elements, fitted with several Camlock couplings on top of them to facilitate the transfer of products. A floating anchor is also supplied to provide stability to the towing operation.

The tanks are available in different sizes and capacities and can be tailor-made to suit the customer's requirement. These tanks can be delivered in shipping bags, boxes, crates, containers or rolled onto reels.

Models available from 5 m³ to 250 m³ capacity.



STORAGE

Floating Tank



CHEMICAL DISPERSION

AUXILIARIES

SORBENTS

ALUMINUM BOATS

COMMISSIONING

**Constructed from strong and flexible fabrics.
Lightweight aluminium frame.**

Easy to assemble without tools.

Frame Tank

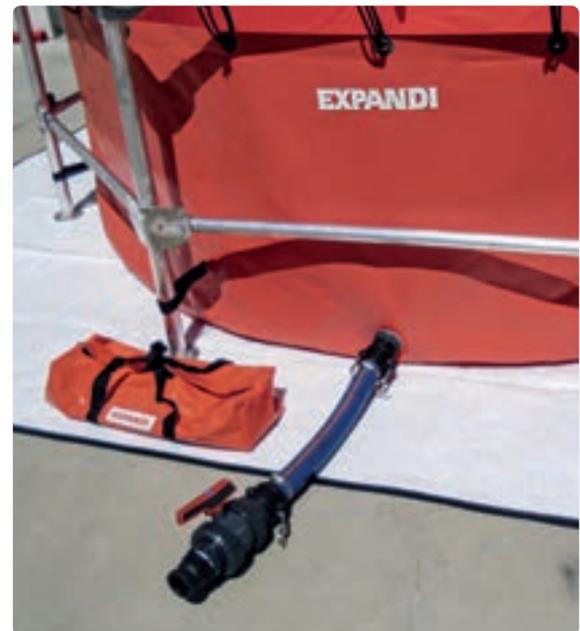
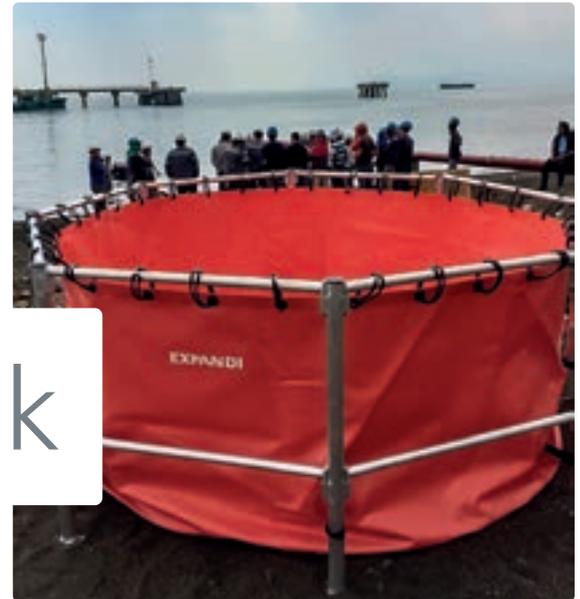
The Frame Tanks are a good solution for on-site, temporary storage during spill response or emergency operations. Oily water, hydrocarbons, sewage or material containing rags, sorbents, etc. can be stored prior to final disposal. These tanks are made of PVC or PU coated polyester fabric; the outer support is made of aluminium.

The main features are:

- Folded design for easy transportation
- Compact storage.
- Fast and easy assembly without any need of tools.

A wide range of optional accessories are available: drain valves, loading/offloading valves, top offloading elbow, detachable tarpaulin roof and anti-abrasion mat.

Models available from 5 m³ to 50 m³



STORAGE

Frame Tank



Constructed from strong and flexible fabrics.

Easy to set-up.

Self Raising Tank

The Self-Raising Tank is lightweight, foldable and portable with high durability. It can be used as temporary storage unit for oily water, sewage or hydrocarbons prior to the final waste management.

The height of the Self-Raising Tank adjusts using the floating top ring.

The tank is made in PVC or PU coated polyester resistant to sun light, sea water and hydrocarbons.

Different sizes of ball valves can be installed to match a variety of hoses. Custom reflective labels can be applied for ownership identification or content warnings. The tanks come with tarpaulin attachment connectors and positioning web handles and can be inverted for decontamination.

Models available from 2 m³ to 30 m³ capacity.





CHEMICAL DISPERSION

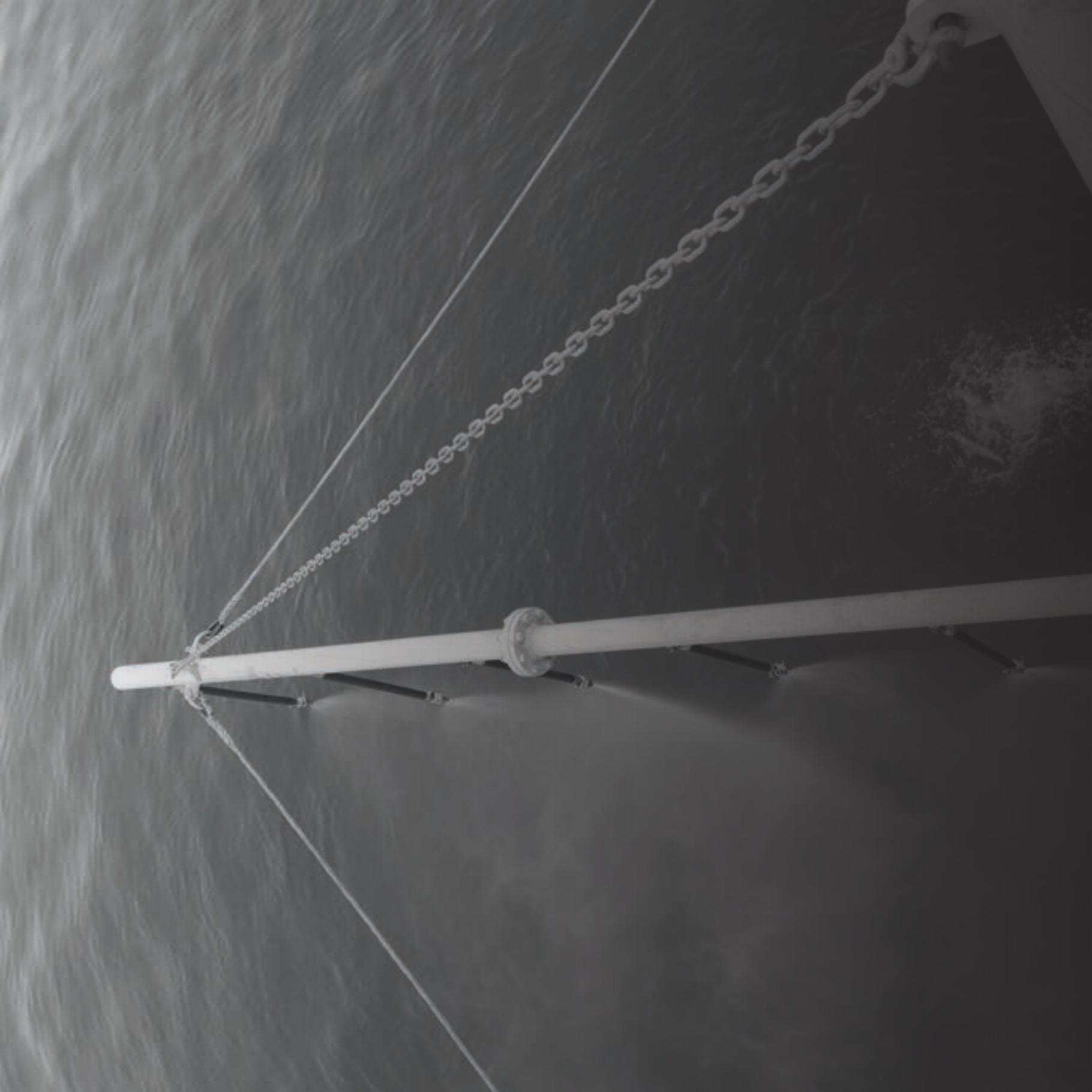
AUXILIARIES

SORBENTS



ALUMINUM BOATS

COMMISSIONING



CHEMICAL DISPERSION

Chemical dispersion can reduce the response time during an oil spill, thus reducing the chances that the oil will move further on the water surface and thereby protecting sensitive areas.

Rapid dispersion of oil spill dispersant can prevent the oil from reaching shorelines, which are difficult to clean and where the most serious environmental damage caused by oil spills occurs.

Be aware that dispersant do not remove oil from environment!

Lightweight aluminium spray arms.

Floating paravane system for a spray width up to 20 m.

Ship based dispersant spray system is a portable and light weight equipment that can be easily mounted on any kind of pollution control craft. It can work with dilute or neat dispersant.

The dispersant spray system consists of:

One pumping unit comprising: a positive displacement pump driven by an air-cooled diesel engine, relief valve, interconnecting pipework, one water inlet, one neat dispersant inlet and two outlets fitted with shut off valves. All inlet and outlets are fitted with camlock quick connectors. The pumping unit is mounted on a corrosion resistant frame.

Two corrosion resistant spray arms with nozzles giving a flat, uniform spray of droplets, not a fog or mist. Each arm is supported by a post and fitted with nozzles. Additionally, hand lances and two nozzle system can also be supplied.

Expandi ship based dispersant system can also be used with the Paravane. It is an easy and efficient way to quickly create a wide spray pattern for Oil Spill Dispersant. The system consists of a paravane, a diesel driven oil dispersant pump, a hose system with nozzles and ropes and shackles for attaching the hose system with nozzle to the Paravane.



Dispersant Sprayer



CHEMICAL DISPERSION

Dispersant Sprayer

AUXILIARIES

SORBENTS

ALUMINUM BOATS

COMMISSIONING



AUXILIARIES

Oil containment booms and oil recovery equipment may be hard to use without the right tools. Expandi offers a wide range of products to help the user work safely during any oil spill operation, minimizing the time response.

Stowing capacities from 4 up to 20 m³.

With chain or gear drive technology.

Reels

Hydraulically driven reels are developed for storage and deployment of oil booms.

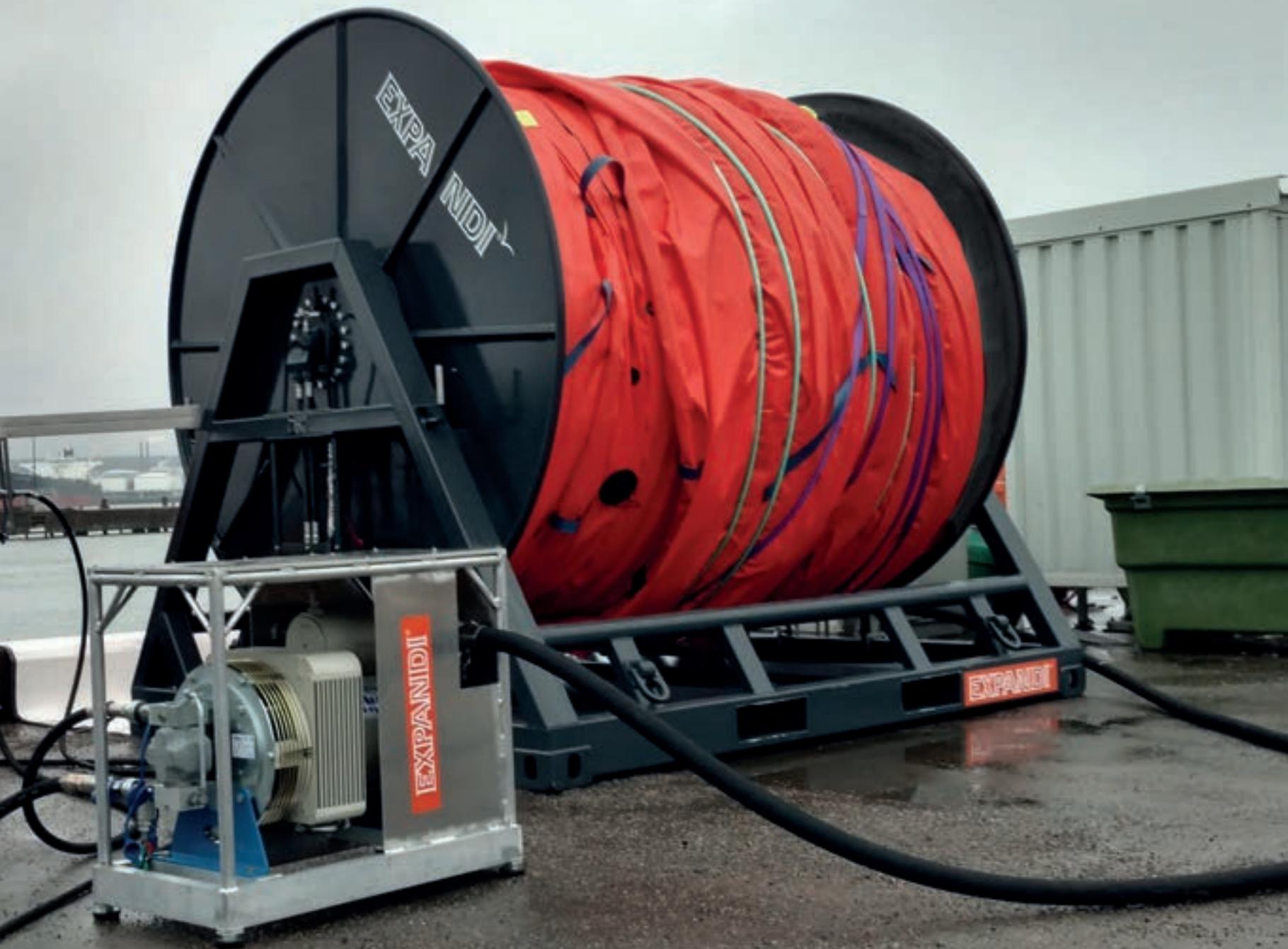
The equipment is easy to handle and secures a safe and effective launch and retrieval of oil booms. It is fitted with a distributor valve to control the deployment and the recovery operation. As an option, reels can be driven by an electric motor controlled with a variable frequency drive.

Hot dip galvanization or marine grade paints are used to achieve the best corrosion resistance of the equipment.

Reels are delivered with forklift channels and certified lifting points for crane operation.

Reels are supplied with mounted corner plates for fastening to container or quay. Alternatively, reels can be delivered with ISO corners and Twist-Locks.





AUXILIARIES

CHEMICAL DISPERSION

Reels

SORBENTS

ALUMINUM BOATS

COMMISSIONING

Gives power to reels, skimmers, transfer pumps and any hydraulically driven auxiliary equipment.

Up to 200 kW power units fitted with independent hydraulic circuits.

Power Packs

Hydraulic power packs are designed to drive reels, skimmers, transfer pumps, etc. Basically, they are composed of one hydraulic pump (fixed or variable displacement) engaged to an engine (petrol or diesel) or electric motor and a flow control system.

Frame and tanks are made of aluminium or stainless steel for an utmost corrosion resistance. Different accessories such as wheels, folding handles, forklift tunnels, radio control and low-noise enclosure can be fitted.





AUXILIARIES

CHEMICAL DISPERSION

Power Packs

SORBENTS

ALUMINUM BOATS

COMMISSIONING

Safe storage of all you need for a safe and quick oil spill response operation.

Easy to mobilize where required.

The logistics is very important in an oil spill situation. Proper storage and preparation of the oil spill equipment is essential for a successful response. The equipment should be packed properly in ready-to-ship units in order to assure that the right equipment reach each site.

Container System

The EXPANDI Container System is designed for rapid oil spill response. Containers are available for first intervention, beach cleaning and office modules.





EXPANDI

AUXILIARIES

CHEMICAL DISPERSION

Container System

SORBENTS

ALUMINUM BOATS

COMMISSIONING

Safe and fast inflation of the containment booms.

High air flow, minimizing deployment time.

Air Blowers

Backpack Air Blowers are driven by petrol engine and are suitable for inflating standard inflatable oil containment booms. They are light weight and their ergonomic harness guarantees user's comfort and mobility during operation.

Blowers driven by hydraulic motor or diesel engine are more powerful so that they can be used for inflating and deflating single point inflation booms from the auxiliary towing boat.

Hydraulically driven air compressors are the most powerful equipment used to inflate single point inflation booms through the boom reel.





AUXILIARIES

CHEMICAL DISPERSION

Air Blowers

SORBENTS

ALUMINUM BOATS

COMMISSIONING



Tidal Compensator

Securing the oil tightness of the boom configuration during the change in water levels.

Tidal compensators are anchoring devices that allow containment booms to float with the changing water levels and prevent the oil from bypassing the booms.

The system comprises a rail (permanently fixed to the wharf) made of stainless or hot dip galvanized steel and a slide (connected to the boom) made of stainless steel or aluminium and fitted with plastic rollers.

The size and the type of connector of the slide is adapted to the boom to be connected. Rails length is selected to allow for any height variations between the high and low water in the area.



A floating assembly, grouping together hydraulic and discharge hoses for an easy and safe handling.

Floating Umbilical Hose

Hose sets (hydraulic and discharge hoses) are usually tied together and fitted with separate buoys. Handling these sets is uncomfortable and entanglement risk is always present.

The Floating Umbilical Hose is an enclosed sleeve that hosts the discharge hoses and a variable number of hydraulic hoses, depending on the pump or skimmer type to drive. The buoyancy can be achieved by either inflatable or solid closed cell foam floats.

The Floating Umbilical Hose can be opened to have full access to the hoses inside for inspection, repairing or cleaning. Once these operations are finished, the Floating Umbilical Hose can be closed to be fully operational.



AUXILIARIES

< Tidal Compensator
Floating Umbilical Hose >



Spills can prove disastrous to the environment, people and businesses. Being prepared for spills is a good management practice and even a legal requirement in many countries.

SORBENTS

Sorbents are an excellent control tool for either water-based or land-based spills that can be deployed to absorb and/or contain spills.

These products are used in machine shops, assembly plants, power stations, airports, harbours, open water or wherever a spill may occur.





**For removing almost any kind of spill or leak
For using on land or water.**

Made of synthetic or natural sorbent fibres.

Sorbents

Expandi produces four types of sorbents. The use of each type depends on the nature of the spilled liquid.

Universal – Maintenance sorbents are made of 100% melt blown polypropylene hydrophilic fibres. They absorb spills of oil, gasoline, diesel, hydraulic fluids water, glycols and most chemicals.

Universal – Chemicals sorbents are an evolution of the Universal-Maintenance sorbents due to their enhanced chemical resistance. They are ideal for controlling hazardous and aggressive fluids.

Oil-Only - Synthetic fibre sorbents are made of 100% melt blown polypropylene hydrophobic fibres. They absorb spills of oil, gasoline, diesel and hydraulic fluids while repelling water-based liquids. They are the ideal solution for outdoor operation and for collection of oil spills on water. They are the right choice for long term deployments and aggressive fluids.

Oil-Only - Natural fibre sorbents are made of biodegradable and naturally renewable fibres. They are water repelling and oil absorbing products. They are a good solution for outdoor operation and for collection of oil spills on water. They are more cost-effective than the synthetic version and their absorbency is even better. They are not recommended for long term deployments.

SORBENTS

Sorbents

Easy way to contain and remove smaller oil spills.

Made of oleophilic material. Synthetic or natural sorbent fibres available.

Sections fitted with quick links for easy connection into any length.

Sorbent booms

This is an excellent solution to contain and absorb oil spills. The booms are available in special treated hydrophobic and oleophilic natural or synthetic polypropylene fibres.

Effective quick couplings allow rapid connection of sections to desired lengths. The products are inexpensive and must be considered disposable. Time consuming, costly and unpleasant cleaning is not required.

The booms are equipped with reflective strips SOLAS (Safety of Life at Sea) to enhance visibility of the sorbent booms during night-time, or low-light conditions when illuminated by a spotlight or other light source.

Booms are delivered in large, durable bags with four lifting points for easy handling. The bags are designed for temporary disposal of used sorbent booms.





SORBENTS

Sorbent booms

CHEMICAL DISPERSION

AUXILIARIES

ALUMINUM BOATS

COMMISSIONING

73



©Picture: Geir A. Carlsson, Frediksstad Blad



The skirt stops the oil from escaping under the boom.

The skirted sorbent booms can complement or even substitute for conventional oil containment booms in some cases.

Skirted Sorbent Boom

The Expandi Skirted sorbent boom is an excellent solution for responding to smaller spills. It contains and absorbs the spill. The skirt stops the oil from escaping under the sorbent boom. The effective quick couplings allow rapid connection of sections to achieve the desired lengths.

The sorbent material, natural or synthetic fibre, is extremely water repelling while it absorbs oil containing fluids effectively. The products are inexpensive and can be considered as disposable. Time consuming, costly and unpleasant cleaning is not required.

The skirted sorbent boom is fitted with two tension members (top, central) and a ballast chain that hold all the forces due to wind, waves and currents when it is deployed on water.

The booms are equipped with reflective strips SOLAS (Safety of Life at Sea) to enhance visibility of the sorbent booms during night-time, or low-light conditions when illuminated by a spotlight or other light source.

Booms are delivered in large, durable bags with four lifting points for easy handling. The bags are designed for temporary disposal of used sorbent booms.

SORBENTS

Skirted Sorbent Boom





ALUMINIUM BOATS

Aluminium is light and dense, strong and robust, it is a very light material with an excellent strength to weight ratio. It is twice as strong as fiberglass, four times stronger than ABS thermoplastic and up to ten times stronger than plywood.

The Expandi aluminium boats are very light weight, offering outstanding sailing experience.

Very durable and strong boats made of aluminium.

Shallow draft for reaching non accessible shorelines.

Aluminium Boats

In any oil spill scenario, the most essential part is how we reach the spill site or how we deploy and use the oil spill control equipment for minimizing the time response.

The Expandi boats can be fitted with onboard or outboard engines or with jets as powerful as you need.

Our fully hand welded boats are made with special alloys that give light weight, maximum strength and exceptional loading capacity.

Their shallow draft makes the boat ideal for reaching non accessible shorelines.

The Expandi boats may be customized with small cranes, bow ramp, working lights, seats, special mooring points for fixing oil spill equipment, cabin, etc.





CHEMICAL DISPERSION

AUXILIARIES

SORBENTS

ALUMINUM BOATS

Aluminium boats

COMMISSIONING

79





COMMISSIONING

Customer safety and satisfaction is important for Expandi and putting customer first has been the bedrock for more than 50 years of experience worldwide.

Experienced people not only minimize the time response, they also minimize the economic impact of the oil spill.

Keep your staff trained and updated in the use of the equipment.

Keep the equipment ready to use with our annual maintenance program.



Commissioning

Having the right, trained and experienced staff is as important as having the right tools to face an oil spill scenario. Our technical people will help you to keep your personnel updated.

We can undertake commissioning for the equipment supplied by us to familiarize your crew and explain the know-how of the equipment. We will also make them understand the operating procedure and most importantly, tricks for operating the equipment easily.

We also undertake Annual Maintenance contract for all the Pollution Control equipment, supplied by us or anyone else across the globe. We have experience of handling all different makes and models of equipment.

Operating and maintaining the equipment is very critical as all the equipment is for emergency response and we need to be very sure that all the equipment is operational and can be trusted for operation during any emergencies.

We have experienced trainers for providing Pollution Response Training (OPRC OSR Level 1 & Level 2 – IMO equivalent). We are accredited by The Nautical Institute, UK for providing the above-mentioned courses. We have loads of experience in the field of Oil pollution, both theoretical and practical and we would like to share the same with all our clients and training is one of the best ways to do that. We are open for conducting certified training in-house or at our client's place as suitable for the clients.



COMMISSIONING

CHEMICAL DISPERSION

AUXILIARIES

SORBENTS

ALUMINUM BOATS

EXPANDI 

WHEN EVERY SECOND COUNTS

EXPANDI[®] 

EXPANDI SYSTEMS

Norway: + 47 47 90 34 99

Spain: + 34 876 71 63 00

Sweden: + 46 31 308 82 13

India: + 91 8657432557

expandi@expandi.com

www.expandi.com