

THE AUSTRALIAN BOOM & BAFFLE CO

PRODUCT OVERVIEW

Background

The ever changing climate together with variations in sea level and weather have severely impacted ocean and waterfront shoreline once considered safe and secure.

In recent years there has been increasing use of flexible geosynthetic systems in providing rapidly deployed, versatile and effective countermeasures to the spreading of pollution and the erosion of shorelines.

The Australian Boom and Baffle Company (ABBCo) specialises in the design, manufacture and installation of these structures. Hydraulic and coastal engineering principals are used as an integral component in the design and construction of these systems which include:

- Marine environmental controls
- Portable shore hazardous material containment
- Revetment, breakwater and dune cores
- Underwater grout structures
- Mine, water treatment and site dewatering

As an independent manufacturer of these products ABBCo has available a wide commercially available range of primary products for their construction and is therefore able to specify the most appropriate components for a specific application.



Installation by the manufacturer ensures client confidence in a one stop shop solution to the manufacture, supply and installation of the systems.

Where practical and available, locally manufactured components are used in all products.

Manufacturing

ABBCo operates a specialist fabrication facility for the configuration of foreshore protection geotextile products in Botany NSW Australia. This enables the close management and oversight of the quality of components and the production

process.

During the fabrication process extensive use is made of field testing equipment to ensure that required component and fabrication standards are maintained.

Latest state of the art equipment used in the seaming of geotextiles and coated fabrics is employed together with purpose designed heavy material handling equipment to maintain OH&S standards

What we do:

- Marine Environmental Protection
- Marine Erosion and Sediment Control
- Field Fabrication and Installation
- Reclamation Separation and Capping
- Closed Water Dredging
- Contaminated Soil and Dredge Spoil Containment
- Geotextile Dewatering Systems

Special points of interest:

- Silt Curtains
- Rock placement over tubes
- Lateral movement control
- Onshore protection
- Parallel protection of shorelines
- Offshore protection
- Management of dredging unsuitables

Turbidity Curtains

The Australian Boom & Baffle Co manufactures a range of floating silt and turbidity curtains. The Contractors Silt curtain is the most commonly requested product.

Manufactured from premium products to ensure serviceability and durability. Closed cell foam floats don't crumble like polystyrene.

Fully configured with floats and ballast chain integrated into boom and

skirt furlled and tied to floats for easy deployment.

Supplied as preassembled lengths for immediate deployment

Use of marine zips to join skirts ensures positive containment of turbidity

15m segments lengths easily managed and allow flexibility for removal and replacement

Anchor attachment

points at segment joins

Anchor kits, light buoys and other accessories available



Water Treatment Baffle Systems



ABBCo custom designs and manufactures floating baffle systems for detention ponds, process water ponds and storm-water outfalls.

Constructed from heavy weight PVC, Elvaloy or

PU coated materials using either integrated foam or rotationally moulded floats they are purpose designed for applications and environments.

Product Summary

HDPE Float Assembly

SS wire top Tension

SS or Gal Ballast Chain

Flow through windows

Mooring assemblies and hardware



Open Ocean Sea Curtains



Float: Rota-moulded HDPE Hi Viz yellow foam filled.

Strength: Additional Reinforcement in 2 of 60kN webbing below float

Skirt: Material: 100-200 kN PET or 80kN PP or knitted polyolefin From 1m to 18m skirt depth.

Ballast: Weight: 8-20mmmm galvanised standard link chain

Pocket: Optional 900gsm PVC rein forced pocket with 60kN webbing reinforcing

Joining: Float: Extruded shackle connector

Skirt: 15mm marine zipper

Ballast: >20mm D Shackles

Fittings: Stainless steel or marine grade aluminium.



Fence Booms

The General Purpose Fence (GPF) Type Containment Boom is a light weight easily managed containment barrier that is ideal for operations in coastal ports and harbours and inland waterways.

They can be quickly deployed without the use of blowers and other powered equipment and their compact construction eases transportation requirements to deployment locations.

The GPF450 and 500 booms are commonly incorporated into spill response trailers for response to inland waterway spills.



Weed Booms



Floating filter curtains are available in a wide range of float and skirt configurations and are used for the control of debris, aquatic organisms such as jelly fish, noxious aquatic weeds and to slow the velocity of particle transmission in waterways. The most common product supplied in this class are our noxious weed control booms. Over 20km of this cost effective management system has

“Fit for purpose silt curtain systems reduces maintenance and non compliance

Portable Containment Bunds

Portable bunds are in use for:

- Temporary bunding of tanks in remote or difficult locations
- Drive in drive out truck bunds for DG transfer operations
- Pump, compressor and fuel storage in mines
- Drill casing cleaning trays in remote locations and on oil platforms
- ISO tank temporary bunding

Product Range

- Drive over bunds
- Portable wash pads
- Pop up bunds
- Flexible spill trays
- Door seals
- Industrial screens



Constructed from heavy weight PVC or Elvaloy coated materials they are purpose designed for applications and environments.



Rock Revetments & Armouring



Sand pumped tubes are used to form the basis for rock groynes and breakwaters

Laminated mattresses consisting of a combination of non-woven and woven extra heavy duty geotextiles can be manufactured to provide a durable basis for rock revetments.

Specially designed anchoring systems are employed to ensure that the cores structure of the revetments remain in position prior to, during and following rock placement.

Offshore and ocean Engineering have extensive experience in the provision of Marine and Civil Erosion Control structures.



Groyne pumped to predetermined by the project coastal



Shore anchor trench into which the heavy geo-textile tube is placed.

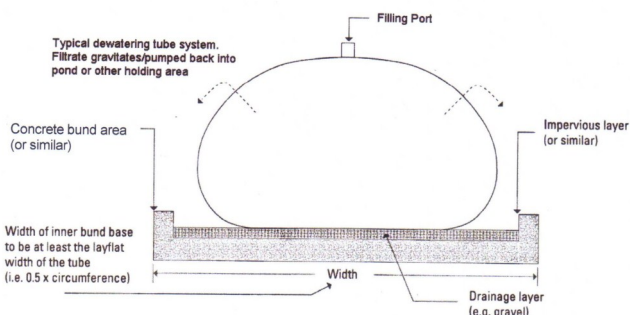
“Geotextile structures expand the scope of solutions for foreshore & coastal engineering”

De-Watering Bags

- Dewatering effluent sludge
- Dewatering manure ponds and abattoir waste
- Dewatering storm water retention pond sediments
- Mine tailings dewatering
- Groynes and foreshore consolidation
- Recovering of waterborne particles in production processes
- Alum dewatering
- Coal fines dewatering



- All longitudinal seams are configured using 4 rows of 10,000 denier polyester thread at 3.5 SPI
- All lateral seams are configured using 6 rows of 10,000 denier polyester thread at 3.5 SPI
- Filling ports are 1.5m x 300mm diameter from the tube material sewn in at between 1/4 and 1/2 of the tube length from one end
- Tubes over 20m have more than one filling port
- Webbing (3000kg BS Polyester) handles/tie downs are fitted at 1.5 to 3m intervals on longitudinal seams and 1.5m intervals on lateral seams



SPECIALISED DREDGE SPOIL MANAGEMENT

Dredge Spoil/Turbidity Containment

In line with growing environmental awareness and the imposition of stricter guidelines on construction operations, ABBCO is able to pass on systems and processes developed for our own use to the marine construction community.

The Australian Boom and Baffle Company is able to design, manufacture and install

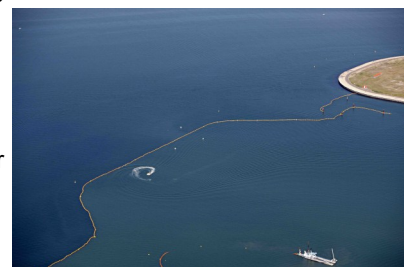
Silt (turbidity) curtains and environmental control systems specially configured to a projects' requirements.

Products range from economical light weight systems for inshore and sheltered water applications to heavy duty high strength products for deep open water applications.

ABBCO also manufactures underwater grout bags and mattresses including

pipeline saddles and other structures incorporating retention systems to minimize blending of grout to the surrounding water.

To assist clients in ensuring compliance we are able to install and maintain water quality monitoring systems fitted with tolerance alarms to background levels either monitored or pre-set.



Contaminated Dredging Spoil

Geotextile bags for use in split hopper barges enable the encapsulation of unsuitable dredged materials.

These bags are manufactured from heavy duty woven polypropylene geotextile materials and are designed to provide permanent long term encapsulation of non-suitable materials.

Offshore and Ocean engineering has available:

- Bag deployment equipment
- Specialised field seaming equipment
- Trained personnel to complete works

