BOOM SOLUTIONS



Steel Mesh Boom

Our Steel Mesh Boom protects your site and the local environment by collecting, diverting, and controlling waterborne pollutants.



Product Summary

GEI Works Steel Mesh Booms are one of the strongest available options for debris exclusion, containment and deflection. Steel mesh booms are perfect for any location that requires increased containment of larger items where the debris is just below the surface or where water currents tend to push debris under a traditional boom line. Made from aluminum or stainless steel frames and expanded metal mesh along with polyethylene floats, these barriers are robust enough to handle larger items.

Floating and submerged debris created by wind, water currents and waves can damage your facilities and investments. Steel Mesh Boom are a durable, weather proof solution for some of these common nuisances: trees, branches, logs, cans, plastic, glass, vegetation, and other submerged debris.

Having a debris boom in place can drastically reduce the cost of clean up and help control pollution upstream, downstream or at the source.

Steel Mesh Boom Specifications

For Floating and Submerged Debris, Timbers, Vegetation, and Trash

| Model | Panel Length | Depth | Floatation |
|-----------------|---------------------|--|-------------------------|
| Aluminum | 8' (2.4 m) Sections | 2′, 3′ or 4′ (0.6 m, 0.9 m, or 1.2 m) | HDPE Foam Filled Floats |
| Stainless Steel | 8' (2.4 m) Sections | 2′, 3′ or 4′ (0.6 m, 0.9 m, or 1.2 m) | HDPE Foam Filled Floats |

Applications and Uses

- Boat Dock Protection
- **Containment of Heavier Items**
- Power Plants
- Log Containment
- Rivers and Lakes

- **Protection for Intakes**
- Dams
- Marinas and Harbors
- **Demarcation Barrier**
- Vegetation Control

Features

- High Impact Resistant
- 3/4" Expanded Mesh, Reinforced with 1" Square Tubing 8' Panels Connect Together to Reach Intended Lengths
- Marine Grade Materials
- Galvanized Steel Ballast Chain
- **Robust Exterior Floats**
- **Quick and Intuitive Installation**
- Wide Range of Debris Containment







What is a Floating Boom?

A boom is a floating barrier used to control the movement of substances that float on or just below the surface of water. Floating booms divert or contain floating debris, aquatic plants, trash and are used in emergency response to oil spills. Once collected, the materials can be extracted and in some cases recycled.

Do I Need a Boom or Curtain?

Boom is used to contain, deflect, demarcate (or block) substances (oil, trash, seaweed, logs, or other debris) floating on or just below the surface of the water. Whereas turbidity curtains are used to contain both floating debris and sediment suspended beneath the surface of the water. Our containment and oil boom utilizes round, polyethylene foam logs rather than square polystyrene flotation. The superior density, construction, and chemical properties of PE or hardshell floats provide a better choice for impact, safety, and compatibility.

What Can the Steel Mesh Boom Contain?

Floating debris brought in by wind, water currents, and waves can damage your facilities and equipment. Steel Mesh Booms are perfect for containment of larger items and debris just below the surface. Its ability to remain strong against currents, waves, and tides has made it a great choice for a wide range of debris containment, branches, plastic, and trash.

- Floating Plastic, Wrappers, Cups and Trash
- Trees Branches and Logs
- Leaves
- Vegetation
- Submerged debris (just under the surface)

What Site Factors Should I Consider?

In order to determine the right type of debris boom for your location, we recommend customers to consider several different factors that may affect the type of floating debris boom needed. Typical site factors required include:

- Type and Volume of Debris
- Site and Water Conditions
- Staging Areas and Collection Zones
- Ease of Use/Manpower to Deploy and Maintain
- Frequency of Recovery and Method of Debris Recovery

What Accessories Do You Recommend?

Depending on your application and site factors, we offer a variety of accessories to help install and maintain the performance of your boom:

- Anchor Kits
- Buoys
- Shoreline Connectors
- Tow Bridles
- Absorbent Boom for Oil

What Lengths of Boom Are Available?

It depends on the type of boom that your project requires. Nearly all of our boom is available in sections of 50 or 100 ft in length. Some are available in custom lengths. Boom sections are designed to interlock with ASTM Universal Slide connectors, so that you can connect them to form the length of barrier that your project needs.

Does Boom Come in Different Colors?

Our Boom come in our standard orange for high visibility as well as other colors available upon request. Customers with water-front property often choose boom in black, blue or green to blend in with the environment, whereas in a spill or marine environment where boating traffic exists, high visibility or international spill colors of orange or red may be required.

How Do I Install or Remove the Boom?

Installation instructions are boom-specific. Please see the installation guide from the product page of the type of boom you're considering. Boom removal reverses the process of installation. <u>All floating barriers</u> <u>should be removed prior to a significant storm event</u>. Boom systems are designed for 'typical' conditions, excessive forces during storm events are likely to cause the barrier system to fail, receive significant damage or become unmoored, posing fouling risks and damage to other aquatic life and property. Boom should be safely removed from moorings and stored until it can be re-installed after conditions return to normal.

Do I Need Lights for my Floating Boom?

You will want to check your local regulations for lighting requirements of floating barriers on public waterways. With boater safety in mind, it is common to have night-time lighting requirements and high-visibility colors or floating markers for barriers in public waters. This also helps protect your barrier. The USGC recommends marine lights be placed every 100' along the length of your boom system where marine traffic is present.

Do I Have to Maintain My Barriers?

All floating barriers, containment or spill response boom should be installed with a plan to maintain the system. It is not a 'set it and forget it' solution. It will require regular monitoring, and may require occasional re-tensioning, or resetting of the anchoring, and inspection of components and lines to ensure the current and boom are working congruently. In any marine environment, fouling will occur, and lines, hardware, and barriers should be kept free of overgrowth. Additionally, floating containment boom systems should be monitored for efficacy, to ensure there is not too much debris piling up against the system, or sinking below it. Maintenance plans should include regular inspection, cleaning, repair, retensioning or repositioning to work better with site conditions as required.

How Do I Determine the Depth of the Boom Skirt?

Boom skirts, or the 'draft' are frequently customized to the depth needed for a specific project. We can help you determine the best depth to ensure optimal performance for your project. Additionally, the 'freeboard', or height of the boom above the water is determined by the size of foam in the barrier for the type of surface pollutant to be contained, as well as the conditions and properties of the location.

Can a Boom Be Repaired or Reused?

Containment boom can be cleaned and reused but any contaminated boom or water has to be handled very carefully. For repairs, we have patch repair kits, hardware and accessories available, depending on the nature, location, and extent of the tear on your boom. If your boom experiences damage, please provide photos to assist. We can also offer advice on how best to maintain and care for your boom, to prevent damage and promote a longer use-life. Occasionally components or sections of boom should be replaced.

Using the Proper Number of Anchors

It depends on multiple variables such as the current, depth, and conditions of your project. We can help. Our representatives use several key factors to determine both the number and placement of the anchors for minimizing the load placed on your boom. Proper anchoring is crucial to your project's success and protects your investment and project.

Importance of a Tow Bridle

A tow bridle is used when towing the boom out into a body of water for installation, or when relocating the barrier. A tow bridle alleviates the stress by distributing force that towing can place upon the boom components, to avoid damage, and keeps the boom oriented at the surface with a bullet buoy.