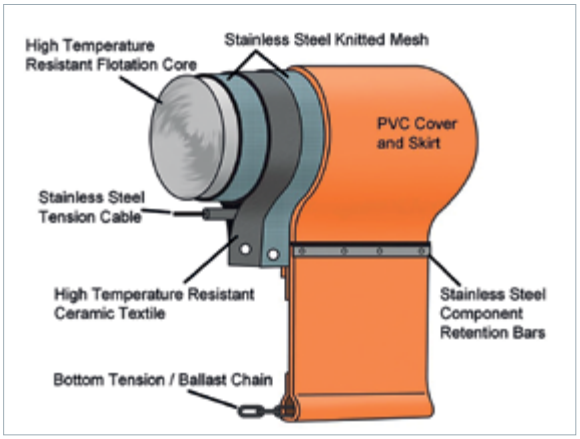
FIRE BOOM WITHOUT COOLING SYSTEM

AMERICAN FIRE BOOM MKII (ELASTEC)



GENERAL DESCRIPTION

The American Fireboom MKII is a floating containment barrier that looks and behaves like a conventional boom but can support deliberate controlled combustion. The boom is manufactured in high temperature resistant materials including stainless steel knitted mesh, ceramic flotation/fabric, built in stainless steel tension cable (below the water) and covered with sacrificial PVC fabric.

KEY CHARACTERISTICS

Each section of the boom consists of seven segments, each of which has a high temperature resistant ceramic core flotation surrounded by two layers of stainless steel knitted mesh and high temperature resistant textile fabric that can withstand temperatures from -53°C to more than 1260°C (continuous). The ceramic foam has a density of 32 to 40 kg/m. The segments of the boom are encased in tubular PVC outer cover that is extended to form the skirt. Ballast is provided by a galvanized chain. A stainless steel internal tension cable runs the length of the boom section. The sections can be connected using interlocking stainless steel connectors that are built to easily connect and disconnect while the boom is in water.

TECHNICAL SPECIFICATIONS

SECTION LENGTH	15 M
OVERALL LENGTH	150 M (10 SECTIONS)
TOTAL HEIGHT	30 INCH / 760 MM
FLOAT	300 MM
SKIRT	450 MM
GROSS BUOYANCY TO WEIGHT RATIO	3.8:1
STORAGE VOLUME	2.2 M^3 PER SECTION
WEIGHT	APPROX. 4.9 T/20 FT CONTAINER

STORAGE & TRANSPORT

The fire boom, which comes as standard in one set of 150 m of 760 mm American Fireboom MKII, is supplied inside a standard 20 ft ISO container together with all required ancillaries for its independent deployment and operation (i.e. 2 x tow bridles, 2 x tow ropes, 10 igniters). This way of storing the boom prolongs the life of the boom, facilitates deployment and allows accessories such as towing equipment and ignitors to be stored together with the boom.
The container is equipped with a system to suspend the boom from four longitudinal rails. The longitudinal rails are adjustable to accommodate any spacing configuration desired. Glide assemblies are provided to hang the boom in the container and fit into the longitudinal rails to suspend the boom from the rail in a vertical configuration.
Retaining devices in the ends of the longitudinal rails prevent the boom and roller assemblies from shifting or damage during transit. During deployment operations, the retaining devices are removed from the longitudinal rails and the roller assemblies removed from the boom hooks as the boom is unloaded.

OPERATIONS

The boom can be deployed from container or tray by two to four persons. It can simply be pulled manually out of the container into the water by a small vessel (such as a fishing boat). This is facilitated as the boom is hanging in a container or if the entire 150 m is pre-connected and laying on the deck. Deployment can be achieved in approx. 45 minutes or less. Once the boom is in the water it can be towed in a straight line to the operational area where it can be operated by two separate vessels in order to achieve a “U” formation. For retrieval a crane will be required to hoist segments out of the water.
If the response vessel does not have the space to accommodate a 20 ft container the boom can be piled on deck. The vessel will need to accommodate the container (8 ft x 20 ft) plus another 20 ft in front of the container to allow for connecting of towing equipment/segments. If the boom is stowed back in the container as it is retrieved on board this space will suffice. The crane will need to be able to reach over the side of the vessel and swing the boom onto the deck. The boom weighs 12 kg/m, so if the crane elevates one section (15 m) the deadweight will be 180 kg.
The boom can operate in 1 to 1.15 m waves and 20 knot winds.