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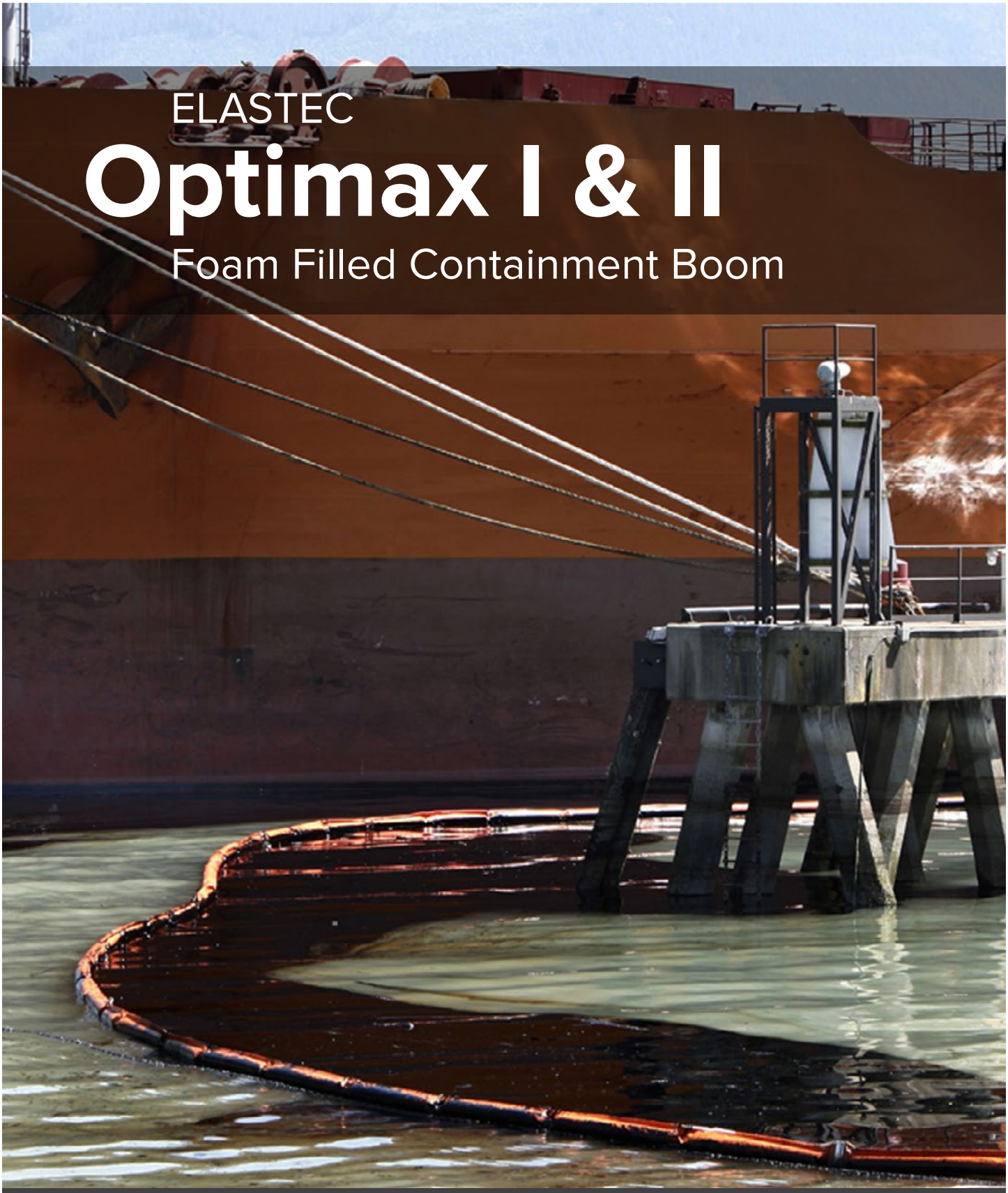
Optimax I & II

Foam Filled Containment Boom



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Oil Spill Equipment | Floating Barriers | Incinerators


Optimax deployed during oil spill response training.

Elastec Optimax booms are comprised of a solid foam log with an added tension member and a skirt. This oil and debris barrier is typically for protected water and fast current use. The top cable and bottom chain give the boom extra strength - holding the boom together even if the fabric becomes damaged.

Optimax is a strong, versatile containment boom meeting OPA 90* specification for use in rivers, streams and near shore environments. OptiMax II is the contractor's boom of choice for rivers and streams where conditions such as a fast current may exist that requires additional buoyancy reserve. In strong currents, shorter boom skirts are available to reduce drag.

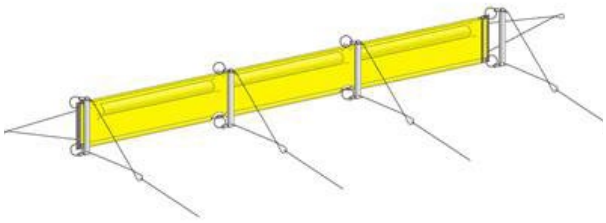
Optimax boom is an industry standard oil containment boom. The stable, closed-cell foam log provides high buoyancy reserve. Manufactured in coated polyester material (other fabrics on request), this boom is fitted with handles and anchor points, as well as being offered with a variety of accessories.

Optimax boom comes in standard section lengths of 50ft or 100ft (15m or 30m). Custom lengths are available upon request. The boom is supplied with ASTM compliant interchangeable end connectors for rapid coupling of sections. End connectors are fitted with sacrificial Zinc anodes.

Specification	Optimax I		Optimax II	
Height:	13 inch / 33 cm	19 inch / 48 cm*	14 inch / 35 cm	20 inch / 50 cm*
Freeboard:	7 inch / 18 cm	7 inch / 18 cm	8 inch / 20 cm	8 inch / 20 cm
Draft:	6 inch / 15 cm	12 inch / 30 cm	6 inch / 15 cm	12 inch / 30 cm
Top Tension:	5/16 inch / 8 mm Galv. Cable		1/4 inch / 6 mm Stainless Cable	
Bottom Tension:	Hot Dip Galvanized Ballast Chain		Hot Dip Galvanized Ballast Chain	
Weight:	2.2 lb/ft / 3.3 kg/m	2.3 lb/ft / 3.4 kg/m	2.3 lb/ft / 3.4 kg/m	2.4 lb/ft / 3.6 kg/m

Long term deployment of Optimax for debris containment.

An option, extra cable anchor loops can be fitted at regular intervals along the boom, top and bottom, to provide additional anchor points. A special tow bridle with spreader bar prevents the boom skirt from collapsing. Attached to the cable anchor loops with quick connect snap hooks.



Coated Fabric Properties	Reference Standard
Standard PVC (others on request) Oil Resistance After 7 days Crude Oil <3% Diesel <3% Gasoline <3% After 60 days Motor Oil <2% Diesel <3% Gasoline (+ ethanol) < 4%”	F715-07(2012) Standard Test Methods for Coated Fabrics Used for Oil Spill Control and Storage D471
Ply Polyester 1,300 x 1300 denier polyester	D751
Coated weight 22 oz/sq yard	D751-A
Tensile strength Warp 440 lbs / 1960 N	D751-B
Tensile strength 1 inch strip 285 lbs / 1268 N	D751-B
Tear strength Tongue 85 lbs / 378 N	D751
Ply adhesion 17 lbs per 2 inch / 76 N/5 cm	
Thermal Adhesion 17 lbs/ inch 30N/cm	D2136
Low temp - 20F / -29C	D1204
Hight temp continuous / Intermittent 160/180F / 71/82 C	D751
Puncture Resistance, 151 lbs avg.	D3884
Taber Abrasion, H18, 1000 gram - 3,000 Cycles to Exposure	

Mechanical Properties

		Reference Standard
Construction	Fully welded construction	
Float Pocket	Fully welded, fabricated to facilitate folding and reeling	
Flotation	Solid core up to 8 inch diameter. Closed-cell polyethylene foam rounds that are flexible, lightweight and buoyant, will not absorb or wick water. Chemically inert. Won't compress or deform if stacked in piles and can be put on reel. Compression recovery greater than 90%.	F268-07(2012)e1 Standard Guide for Determining the Buoyancy to Weight Ratio of Oil Spill Containment Boom ASTM C 1016 - Water Absorbtion ASTM D1622 - Density ASTM D 5249 - Compression Reovery ASTM D 5249 - Compression Deflection ASTM D 1623 - Tensile Strength
Connectors	ASTM compliant left handed Universal Slide fitted as standard, Z connector optional. Manufactured in 6061-T6 Aluminum alloy.	F962-04(2010) Z-Connector F2438-04(2017) Slide Connector Aluminum Association (AA) Standards
Anodes	1 plus year continuous service, KG3 Grade	
Toggle Pins	1 toggle pin with spring and lanyard per connector	F2538-04 Self locking pin, lanyard assembly, tensile test
Handles	UV resistant webbing mounted along the boom	
Anchor Points	Included	
Chain Pocket	Double layer, enclosed with drain holes, reinforced openings	
Anchor Shackles	Grade A, Class 3. Hot dip galvanized	Federal specification RR-C-271F
Chain	Hot dip galvanized	Manufactured to NACM standards, Q235 composition
Top Cable	Galvanized aircraft cable (GAC) grade or Stainless Steel	Manufactured to Mil-W-83420 Military Specification: Wire rope, Flexible, For Aircraft control
Tensile Strength	Optimax desctructive pull test 7,970 lb	F1093-99(2012) Standard test methods for tensile strength characteristics of oil spill response boom

Accessories

Repair	Standard fabric repair kits with hot air gun. Boom connector replacement kits
Anchoring and mooring systems available	Anchors - single / dual, Tidal compensator, pile tether, pile slider / cable anchor loops
Storage / deployment systems available	Reels (static or trailer), container systems
Customization	Light, radar reflectors, hangers, cable anchor loops, size, section length, fabrics
Colors	Yellow (standard), orange (optional)
Marking	Silk screening
Packing	Bulk, wrapped in filtercloth, boxes or crates

Other Standards and Federal Regulation

F2683-11(2017) Standard guide for selection of booms for oil spill response
F625/F625M-94(2017) Standard practice for classifying water bodies for spill control systems
F818-16 Standard terminology relating to spill response booms and barriers
F1523-94(2013) Standard guide for selection of booms in accordance with water body classifications
F2084/F2084M-01(2012)e1 Standard guide for collecting containment boom performance data in controlled environments
ISO 17325
Optimax complies with United States Code of Federal Regulation (CFR) 33.Pt 154. App.C for Rivers and Canals, Inland and Great Lakes. Boom with less than 18 inches height will only comply with CFR 33 for Rivers and Canals.
18 inch Optimax boom conforms with ASTM standard F1523 for calm water, calm water-current and protected water.
Phillipine Coast Guard approval
Meets USCG guidelines for fast water use

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