# BoomVane Spray Dispersant System







The BoomVane is a device for deploying oil containment boom into rivers and other waterways by harnessing the power of the current. The BoomVane™ Spray is an adaptation of this well proven technology that now enables responders to apply oil spill dispersant in a totally new and effective way using their existing 1m BoomVane. It enables low displacement vessels - such as coastal fishing boats and workboats to be used for dispersant application. This system has been extensively tested and offers a number of advantages over conventional ship mounted units;

- Wider spray width than conventional arms (20m / 65ft)
- Dispersant is applied at correct droplet size and height for effective dispersion of the oil
- Dispersant is applied well away from the towing vessel and personnel
- Dispersant can be applied close into shore without putting vessel at risk (ideal for deep and high energy shorelines)
- High application accuracy

Dispersant application can be performed at 4 to 5 knots and in wind speeds up to Beaufort 5.

The system comes with a choice of dispersant pump sets or alternatively existing units may be integrated into the setup. Our pump set will apply neat or diluted dispersant from a 25m / 82ft nozzle hose assembly which is suspended between the vessel and the BoomVane mast. The 13 nozzle hose assembly is stored on an aluminium reel.



As the BoomVane is towed in the water, it swings out and away from the vessel, held by a single tow line. When in operating position off the vessel side, the nozzle hose is run out along a line to the masthead. The tilt prevention rigging inside the mast keeps it vertical when the load is applied.

The BoomVane is capable of supporting the mast and dispersant spray hose and line. The BoomVane is self-balancing, no adjustments or trimming is required. It is completely stable and insensitive to wave action. It may be used for towing booms when not being used in this setup.

The mast is mounted / dismounted from the BoomVane™ in minutes – it can also be retrofitted to 1m BoomVane™. The base plates for the Tow Tower and rigid stays need to be permanently mounted to the vessel from which the system shall be deployed – contact us for advise on how to do this, regardless if it's a steel, aluminum or GRP vessel. With the base plates in place, the entire system is mobilized on board in less than 30 min. As an option we can provide the entire system mounted inside a 10ft container, once secured to the deck the container provides the mounting point for the Tow Tower.



As an option we can provide the system mounted inside a 10ft container, once secured to the deck the container provides the mounting point for the Tow Tower.

The standard system features an electric start diesel pump unit with back up hand start and a capacity of up to 107 litres per minute / 28 gallons per minute, delivering concentrate or diluted dispersant. The pump is self-priming and can draw dispersant from tanks below decks.





### **Pump Set Specification**

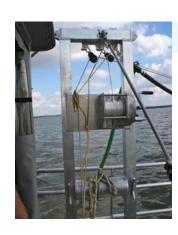
Engine:	6hp / 4.5 kW Tier 4 Yanmar electric start diesel engine w/back-up recoil start
	Pump driving self-priming Diaphragm pump
Pump Capacity:	28 gallons/minute / 107 litres/minute
Pressure:	0 to 58 psi / 0 to 4 bar
Dimensions:	36" x 26" x 37" / .92m x .66m x .94m
Weight:	111 lbs / 50 kg
Valves:	(4) brass ball valves (2 inlet, 2 outlet)
Flow Control:	Flow bypass with pressure relief valve, dispersant suction w/needle control
	valve, dual scale pressure gauge to monitor discharge
Frame:	Painted steel cage frame with central lift point



# **Nozzle Hose Assembly**

Hoses:	(4) 1 inch x 15 ft / 25 mm x 4.5 m suction/discharge
Accessories:	(1) barrel suction standpipe





### **Tow Tower**

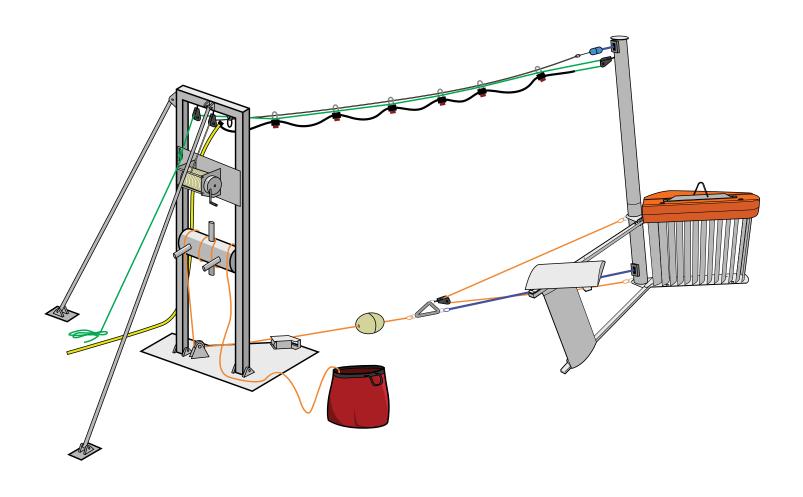
Adjustable stays and tension line winch, towline bollard and base plate kit for boat installation, rigging.

# BoomVane Specification (not included with system)

Vanes, rudder, wing, frame:	Marine grade aluminum
Float:	GRP, foam-filled (EPS & PU), in padded PVC carrying bag
Connector plate, pins, bolts:	Stainless steel
Shackles:	Stainless steel
Mooring/tow line:	150 m / 492 ft of 12 mm dia. Dyneema SK 75 double braid
	(break load >7000 kg), stainless steel thimble, PU float and PVC bag
Bridle line:	Dyneema SK 75 10 mm
Control line:	150 m / 492 ft 4 mm dia float line on reel
Blocks:	Ronstan industrial series
Control rudder return springs	s: Plastic coated GRP rods, aluminum holders
Draft:	1.1m / 43 inch

# **Optional**

Spares kit, spark arrester, Ayles Fernie pump set, 1m BoomVane, 10ft Container, IBC Tank





1309 West Main St.
Carmi, Illinois 62821, USA
+1 (618) 382-2525
www.elastec.com elastec@elastec.com