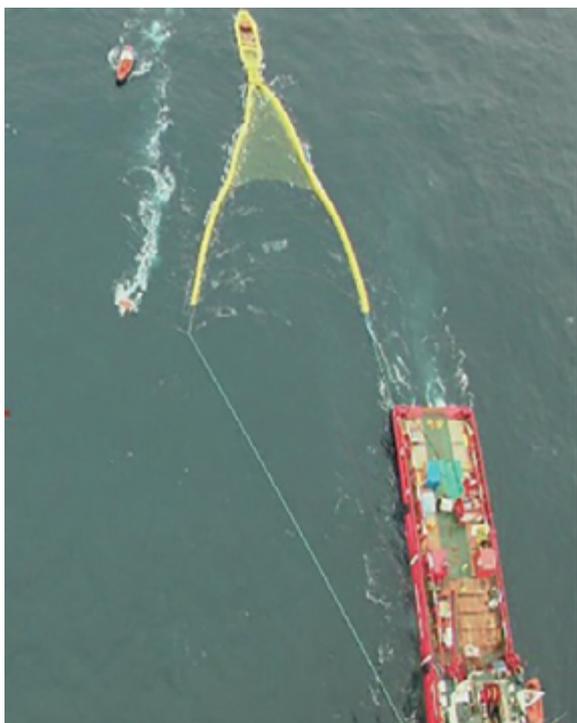


## COMBINED RECOVERY SYSTEM

### NOFI CURRENT BUSTER 6 (ALLMARITIM)



#### GENERAL DESCRIPTION

The NOFI Current Buster 6 is a high-speed containment, decanting and recovery system, designed to be operated from one single vessel only. The system consists of an inflatable boom with a decanting arrangement and a pump system for transferring the collected oil from the separator area on-board the vessel.

#### MAIN COMPONENTS

The NOFI Current Buster 6 system is composed of the following main components:

- 1 x NOFI Current Buster 6 with NorMar boom reel
- 1 x BoomVane 1.5 with dropback system
- 1 x Sea Anchor complete with kill line
- 1 x NorMar Pump Unit DOP250
- 1 x Diesel Hydraulic Power Pack 73kW ATEX II
- 1 x Set of spare parts and hoses (including hydraulic reel)
- 1 x NorMar Oil Transfer system for continued pumping from NOFI Current Buster's separator to vessel

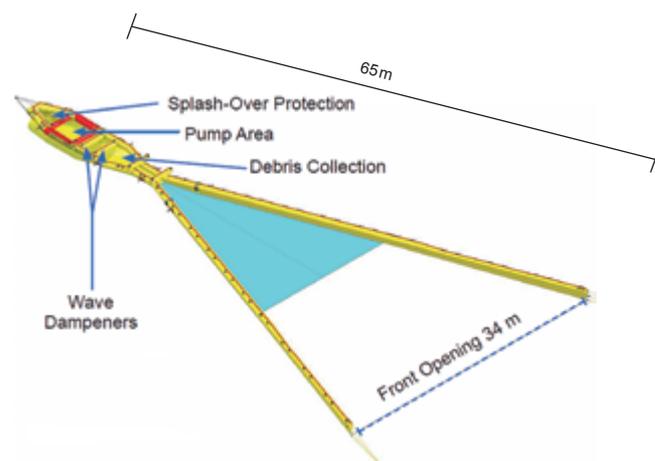
#### KEY CHARACTERISTICS

The NOFI Current Buster system ensures superior clean-up capabilities in tidal, wind and wave currents due to its high Speed Through Water (STW) capability. Given its design, the hydrodynamic shape reduces the drag force and allows the system to move more easily through water. Together with the optimised shape of the separator arrangement, it stabilises the movement of the liquids and the separator in the 70 m<sup>2</sup> temporary storage area. The system is also capable of operating more quickly than conventional oil boom configurations by using only one vessel in conjunction with a boom vane. This provides a significant advantage as it allows the system to achieve much higher towing speeds, of up to 5 knots. The key characteristics of the system are:

- Single vessel operation by use of boom vane
- Hydrodynamic shape ensuring optimal performance in wave conditions and low towing resistance
- Enhanced manoeuvrability due to single vessel operation
- Open separator arrangement allowing for debris to be easily removed, easy access for pumps and visual monitoring;
- When oil is contained in the NOFI Current Buster, it is stored in the separator tank until the pump is activated
- Build a layer of up to 1.5 meter with oil in the separator area, allowing oil and not water to be pumped into the vessel's tank
- Pump is pumping below surface to prevent debris from getting into the pump, allowing for significantly longer operational time between operational services of pumps
- Certified to operate in Hazardous Area Zone II in accordance with the ATEX Directive (ATEX 94/9/EC) or similar
- Suitable for any type of oil without any adjustments

## TECHNICAL SPECIFICATIONS

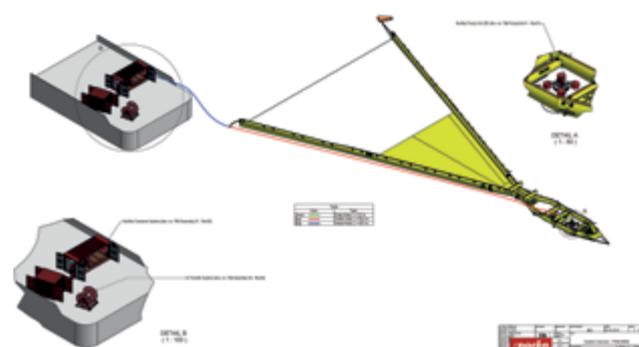
TOTAL LENGTH	65.0 M
SWEEP LENGTH	41.3 M
SWEEP OPENING (UP TO)	40.0 M
SEPARATOR GROSS VOLUME	70.0 M <sup>3</sup>
FREEBOARD	0.8 TO 1.0 M
DRAFT	2.6 M
SWEEPING SPEED FLAT WATER	UP TO 5 KNOTS
SWEEPING SPEED IN WAVES	2 – 4 KNOTS
PUMPING CAPACITY	100 M <sup>3</sup> /H (CONTINUOUS), 125 M <sup>3</sup> /H (INTERMITTENT)
WEIGHT	APPROX. 8.7T/20 FT CONTAINER, 4T/10 FT CONTAINER



## STORAGE & TRANSPORT

The NOFI Current Buster 6 system is fully containerised and is stored as follows:

- 1 x 20ft ISO container for the Current Buster system with reel, pump unit, power pack, hydraulic air blower and spare parts
- 1 x 10ft ISO container for the Boom Vane 1.5 system
- 1 x 10ft ISO container for floating umbilical for oil transfer from oil separator to vessel



## OPERATIONS

NOFI Current Buster can be towed with a single vessel in combination with a paravane named BoomVane, which eliminates the need for a second towing vessel.

The vessel suitable for single-vessel operation of the Current Buster must be directional stable and/or with ability for sideways movements (i.e. side propeller/thruster). This is because the BoomVane will pull sideways during operation. The vessel must also be suitable to act as a towing vessel and be able to tow with sufficient pull force (i.e. 15 tonnes in the speed range of 2 – 5 knots). In addition, the vessel will need to meet the following requirements:

- Stern opening of minimum 6 metres for safe deployment of the system
- Deck width of minimum 9 metres
- Deck space capacity to allow the storage of the containers (1 x 20 ft, 2 x 10 ft) plus a clear space of 10 meters from the stern for deployment purposes
- Crane on starboard side to deploy boom vane ( 400 kg lifting capacity when stretched out)
- Capstan at stern for BoomVane and sea anchor recovery

In order to deploy the system in a safe and efficient manner four people are recommended. The system can be deployed and retrieved in both directions (i.e. starboard or port side), although the standard configuration should be for starboard side.