



POLAR BEAR – ICE SKIMMER - New Generation of Ice Skimmers developed in cooperation with SINTEF Material and Chemistry in Norway.

PROVEN OIL SPILL TECHNOLOGY

POLAR BEAR – ICE SKIMMER

The design of the POLAR BEAR Ice skimmer has benefited from a continuing development programme over nearly 3 years. The resulting system is a very versatile, reliable, powerful and seaworthy oil skimming system that can be used in ice-infested waters.

The POLAR BEAR is a powerful offshore ice skimmer which because of its compact hexagonal design ensures optimal contact with the surface surrounding the skimmer.

The POLAR BEAR is equipped with an Archimedes screw pump, the DOP 200 DUAL (or other DOP Pump) for offloading the oil and smaller lumps of ice.

The POLAR BEAR Ice Skimmer has integrated floats which gives the skimmer a very good ability to float.

It is very easy to remove and replace a module on the Ice Skimmer.



Advantages - Polar Bear Ice Skimmer:

- Compact hexagonal design - Optimal contact with the surface surrounding the skimmer.
- 6 individual collecting brush modules - enables the skimmer to collect in a range of 360°
- 6 individual collecting brush modules driven by 6 individual hydraulic motors in two separate circuits - ensures a uniform rotation, enables each side of the skimmer to be individually operated.
- Removable brush modules - easy to remove and replace.
- Long brush bristles when rotating slowly - limits the actual pick up of ice.
- DOP DUAL 200 Pump - for offloading oil, smaller lumps of ice and cutting up debris.

TECHNICAL DATA

DIMENSIONS

Length:	2.25 m
Width:	2.50 m
Height:	1.85 m

WEIGHT, DRAUGHT AND BUOYANCY

Weight:	750kg approx
Draught:	1.0 m
Buoyancy from internal floats:	1.05m ³

BRUSH MODULES

Number of brush modules:	6 pcs.
Number of Brush wheels :	9 pcs/module
Outer diameter of brush drum:	290 mm
Width of each brush module 900 mm	
Bristle length:	100 mm
Bristle material:	PA 6
Bristle hub material:	POM
Scraper/sealing device:	Stainless steel/nitrile rubber

HYDRAULIC SYSTEM

Brush-Module Hydraulic motor:	OMP200 (200 cc) 6 pcs.
Hydraulic flow *):	0-10 l/min
Hydraulic pressure:	210bar (max)
Hydraulic quick couplings**):	1/2" TEMA male/female (Return/Supply)
Hydraulic motor speed:	0-50 rpm

Off-loading pump

Hydraulic motor:	OMTS160
Hydraulic flow *):	0-130 l/min
Hydraulic pressure:	210bar (max)
Hydraulic quick couplings**):	3/4"TEMA male/female (Return/Supply)
	3/8"TEMA male (Drain)
Hydraulic motor speed:	0-800 rpm

*) : IMPORTANT: The hydraulic flow must be adjustable within the range given.

**): Other types available on request.

INTEGRATED OFF-LOADING PUMP

Designation:	DOP 200 DUAL (or other DOP Pump)
Type:	Archimedes screw pump
Pump casing :	Seawater resistant aluminum
Pump suction :	Free open end-suction
Replaceable sealing discs :	10 Polyethylene HD
Sealing ring :	Polyethylene HD
Wear plates:	Stainless steel
Plate wheel :	High tensile steel
Screw shaft :	High tensile steel
Debris size through pump :	1½" (Ø 38 mm)

For more information on Oil Spill Response systems, please visit www.desmi.com

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