

BOWHEAD – Ice Management System

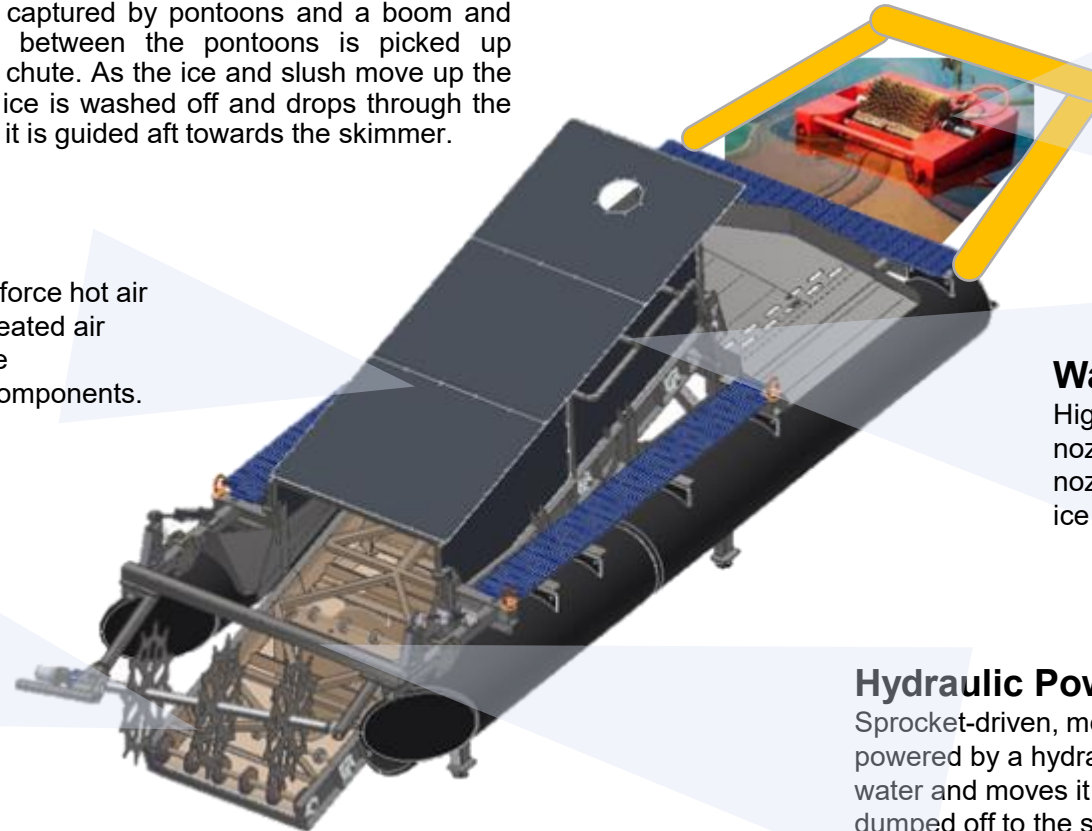
Serco's BOWHEAD ice management system is designed to be deployed off the side of a vessel. As the ship moves slowly forward, the oil is captured by pontoons and a boom and guided to a skimmer. Ice and slush that enters between the pontoons is picked up by a conveyor belt and dumped to the side via an ice chute. As the ice and slush move up the conveyor belt, any oil trapped in the slush or on the ice is washed off and drops through the mesh conveyor belt and between the pontoons where it is guided aft towards the skimmer.

Heated Enclosure

A 70,000 BTU heater is used to force hot air into the HDPE enclosure. The heated air within the enclosure prevents ice accumulation on the conveyor components.

Front-end Feeder

Rotating saw-toothed discs that can be hydraulically raised/lowered help direct ice onto the belt or can be rotated in reverse to clear ice jams.



Oil Recovery Skimmer

Any standard skimmer can be used to recover the oil collected in the boom behind the BOWHEAD

Washdown System

High-pressure washdown system with 3 spray nozzles each on 3 bars above the conveyor and 6 nozzles on one underneath, cleans oil off the ice and forces oily slush through the belt.

Hydraulic Powered Conveyor

Sprocket-driven, mesh conveyor belt powered by a hydraulic motor lifts ice out of water and moves it to the stern where it is dumped off to the side.