

SELF-DISCHARGING VESSEL

*** MARY ***

Side-tipper and rock carrier



SPECIFICATION OF THE VESSELS.



	mv MARY
Call sign	TFSS
IMO no.	8857148
Class	Bureau Veritas
Flag	Iceland
Port of reg.	Kopavogur
Length	49,90 m
Breadth (b)	9,80 m
Draught, max	2,20 m
Gross tonnage	473
Cargo capacity	270 m3 / 560 ton
Main engine	2 X deutz 174
Speed load/ballast	7,5 knots/hour
Fuel consumption	1.860 ltr./24 hour
Propulsion	Kv 2 x schottel

SIDE-TIPPER - ROCK CARRIER

A fantastic vessels suitable for various purposes. On the last page in this prospect there are 3 youtube links to drone videos showing how the vessel can be used.

The vessel will help to avoid the expensive double handling. The material can be tipped directly and precisely below and above the water level.

Loaded draft is only 2,20 meters and LPP of less than 50 meters, highly maneuverable with two rudder propellers, operated with a small crew. In short, they solve all challenges when water depth is an issue.

Cargo capacity is approximately 560 ton. The vessels can in principle load more in tons, but the limitation is the volume or the capacity in m3.

Vessel have been converted to carry marine construction material, especially rock of different grading, and can handle material from sand to more than 10-ton block size and all between. Tipping in same position will end up leaving the heap on top of the water surface.

Compared to bottom discharge options the vessel needs much less depth on discharge area, meaning smaller onsite machinery if materials will be recovered or handled. Possible to discharge above the water level.

The vessel can enter and tip the materiel on almost no water – depending on the seabed or bottom conditions.

Main key points:

- reducing double handling on site
- reducing breakages
- flexibility in dumping locations
- tipping below and above the water level
- an environmentally friendly delivery option
- possible to transport materials from Quarry with bigger self-discharger vessels. Discharge from them directly onto the “side tipper”. Tip the material directly in the water.
- (maybe even save harbor dues).

Lately been lately used for:

- Moving dredging material, sand, aggregates, and rock armourstone
- onsite machine transport etc.
- logging transport vessels where self-discharging system may be possible to utilize.
- construction works, such as delivery of armourstones for erosion protection, breakwater construction material delivery, mass changes on marine construction sites and removal of underwater mining materials as well dredging materials.

If you want to know more about the vessel do not hesitate to contact us:

BGM Marine ehf

Brian Søndery
Managing director
+45 2999 4000

WAYS TO USE THE VESSEL

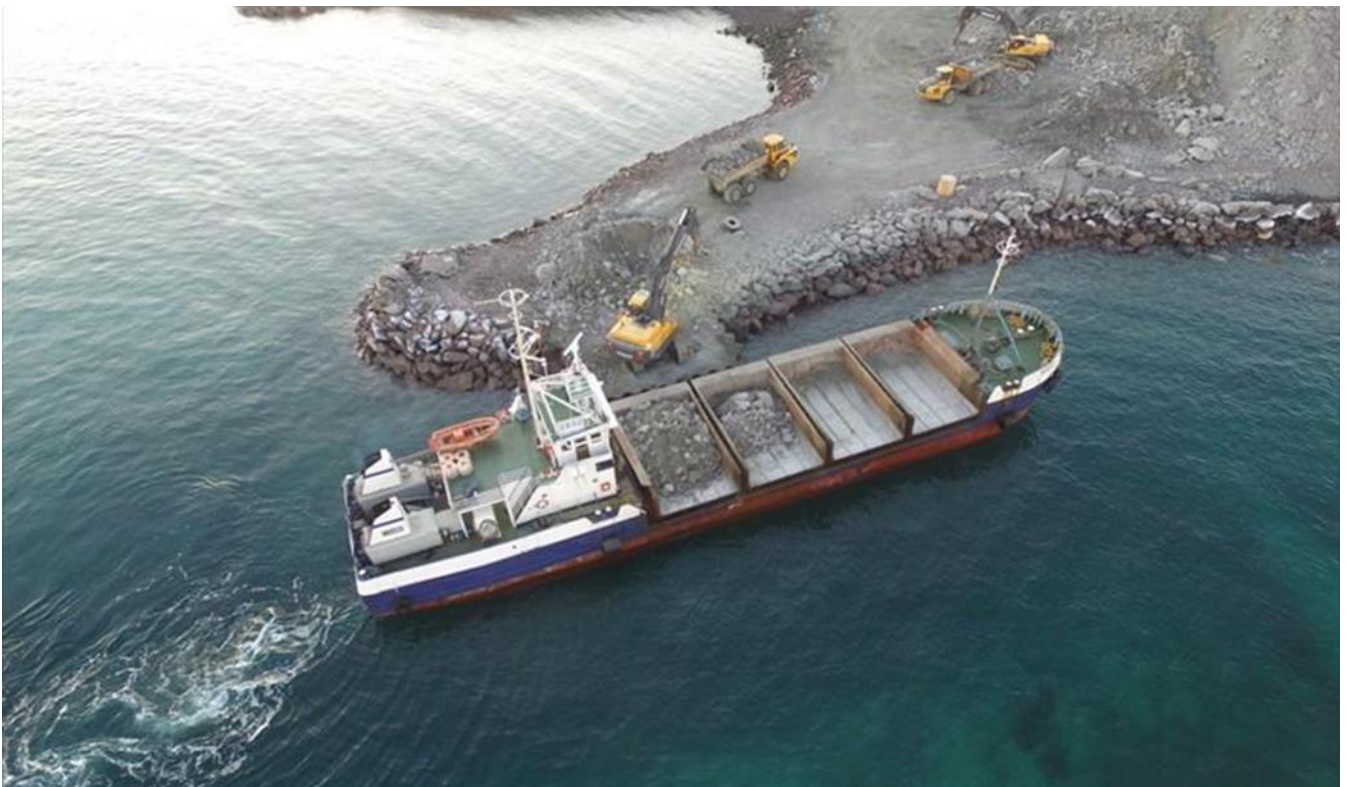
EXAMPLE 1:



Sailing rocks from the Quarry with a large self-discharger to the working plot. Discharge the rocks onto the vessel ready to use.

EXAMPLE 2

Sailing rock form land to tipping area – normally on GPS-spots (see example 7)



EXAMPLE 3:



Tipping the rocks directly on site – below and above the water, where the rocks must be used.

EXAMPLE 4:



The vessel tipping on almost no water – of course depending on seabed and bottom conditions.

EXAMPLE 5:



Material is taken directly from the cargo holds without tipping.



EXAMPLE 6:

Project in Harstad, Norway. Below there are some drone videos where the vessels are working.

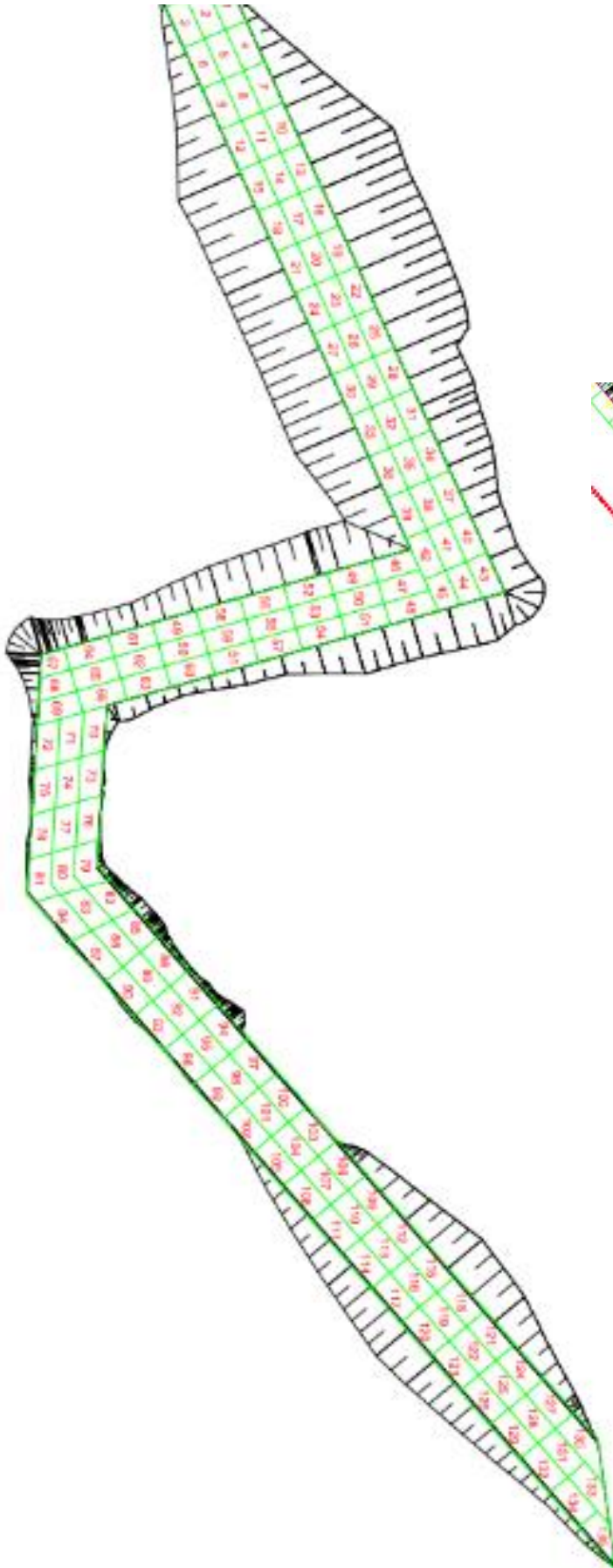
All materials tipped accurately based on GPS positions



EXAMPLE 7:

How material is tipped with GPS-positions

Example - layout as boxes.



We receive a card with GPS-positions. On the right side an example showing GPS-position drawn as boxes where to tip the materiel.

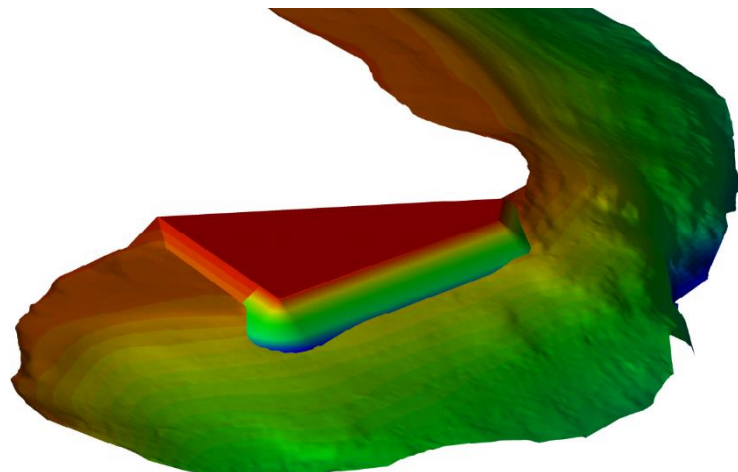
Below there is a link to youtube, where it is possible to see how it works – remember to look at the computer screen in the video, where you can see the vessel are slowly moving into GPS-defined boxes

<https://youtu.be/xGKuGBb5VDs>.

Example – dumping layout for one specific dumping in one box.



Example – final result



YOUTUBE – VIDEO:

Below 4 drone videos showing the beginning and an almost finished project in Harstad, Norway, and a project where dumping big rocks on the beach in England.

You can click on the youtube link to see the video:

- <https://youtu.be/OSazuwtLTPM> - from the beginning of the project, where material is being tipped.
- <https://youtu.be/xe6yTDzy0kw> - from the beginning of the project, where material is being tipped.
- <https://youtu.be/9YxVuUuSo4k> - from an almost finished project.
- <https://www.youtube.com/watch?v=adXdL0l8YFU> – timelaps dumping rocks on the beach
- <https://youtu.be/4FOfNHS7CHo> - rocks on the beach – how it works