

MARINFLOC Neptumatic MOC & Retro

Type/Capacity Scenarios & Guidelines

Neptumatic MOC & Retro models were designed using the following wastewater scenarios and capacity assumptions:

Wastewater on ships originates from the following activities and installations:

- Flushing Toilets and Urinals (**Black Water/Sewage**)
- Food Preparation and Ware-washing in Galleys and Pantries (**Galley/grey water**)
- Laundry Operations (**Grey water**)
- Cleaning, Scuppers, Washbasins, Showers, etc. (**Grey water**)

Volume of wastewater is influenced by:

- Type of flushing system, save flushing (vacuum) or conventional system
- Type and size of the ship
- Number of water using devices installed
- Geographic trade of the ship
- Annual season
- Ship's mission profile.

Type and Volume of Water Produced:

The volume of water to be treated varies to a great extent from ship to ship. Outlined below are estimated figures of **production on a per person/per day** basis:

Type	Volume (per person/per day)
-All Black (Conventional), Grey and galley water to be treated:	250 litres
-All Black (Vacuum), Grey and Galley water to be treated:	195 litres
-All Black (Conventional) and Galley water to be treated:	130 litres
-All Black (Vacuum) and Galley water to be treated:	75 litres
-All Black (Conventional) water to be treated:	70 litres
-All Black*(Vacuum) water to be treated:	15 litres

* **Note!** In this case the Black water has to be diluted by min. 25 litres of grey water.

-Black water (Conventional) production:	70 litres
-Black water (vacuum) production:	15 litres
-Grey water:	120 litres
-Galley water:	60 litres

Guidelines

In order to facilitate the selection of the appropriate size of Neptumatic MOC & Retro, the following guidelines have been prepared:

A

All water (Black(conventional flush), galley and grey) to be treated.

250 lit./person/day

<u>Number of Persons Onboard</u>	<u>Suggested Model</u>
49 persons	MOC 12
81 persons	MOC 20

121 persons	Retro 30
181 persons	Retro 45
201 persons	MOC 50
301 persons	MOC 75
401 persons	MOC 100
531 persons	Retro 130
612 persons	Retro 150

B.

Black conventional flush or black water vacuum system + galley water to be treated: 75 lit./person/day

<u>Number of Persons Onboard</u>	<u>Suggested Model</u>
171 persons	MOC 12
286 persons	MOC 20
429 persons	Retro 30*
642 persons	Retro 45*
715 persons	MOC 50
1,071 persons	MOC 75
1,430 persons	MOC 100
1,844 persons	Retro 130*
2,127 persons	Retro 150*

* For ships with an existing holding tank, the **Retro** model would be a suitable alternative considering its compact dimensions. Optional to the use of an existing tank, a combination tank with automatic coarse screen can be installed for a complete system.

There are also other alternatives for treating of Black, Galley & Grey water than those provided above. We at **MARINFLOC AB** are always at your service in helping you to find a suitable solution to your wastewater needs.
