



BilgeMaster200

IMO / MARPOL certified Oily Water Separator
from GEA Westfalia Separator



Mechanical Separation / Westfalia Separator

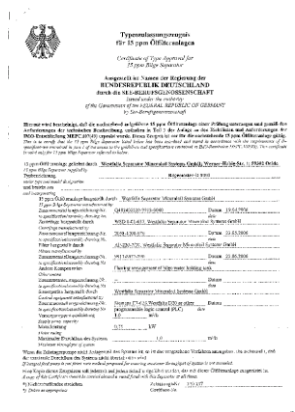


Continuous treatment of
Bilge water / Oily water

Don't change filters
Change technology instead

With solids-retaining
Centrifugal Separator

Fully IMO / MAROL and
US Coast Guard certified



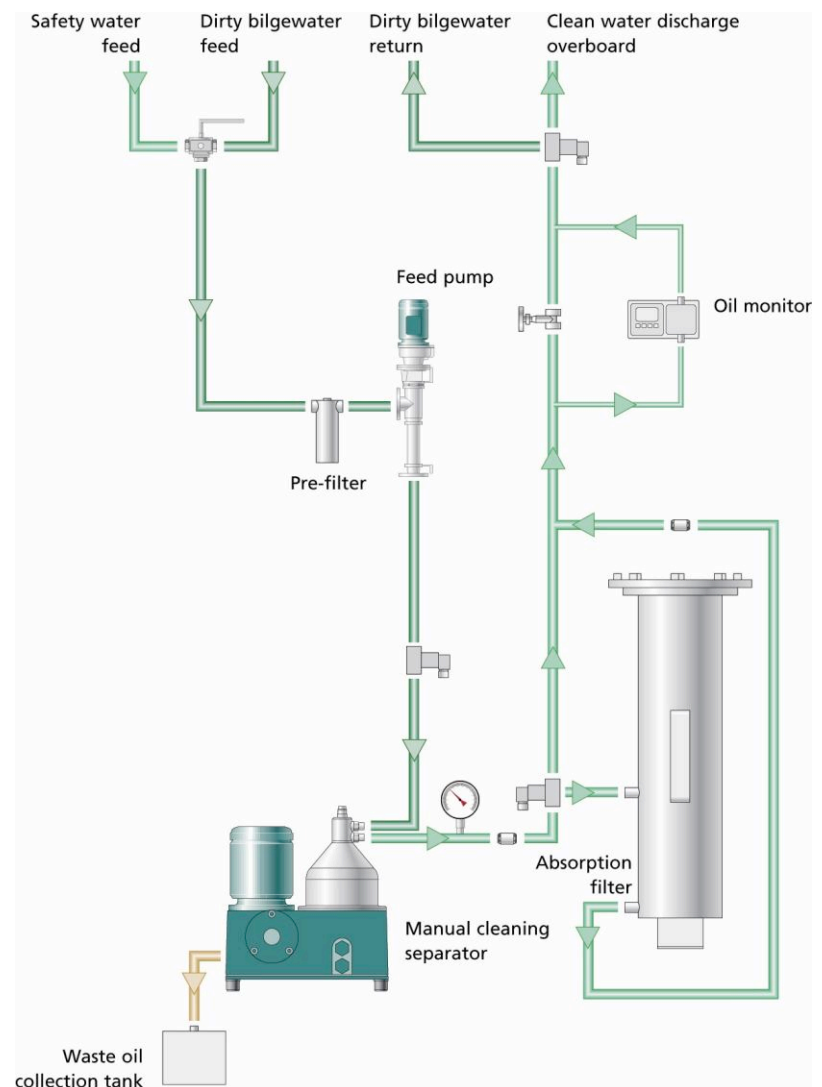


The BilgeMaster200 has an effective continuous treatment volume of 200 l/h on a close to 24/7 base. The BilgeMaster200 can easily keep up with common static coalesce type oily water separators which may have a stipulated capacity of 1000l/h. The reason for the effective treatment of the BilgeMaster200 is the centrifugal separator which can reduce the oil content down to less than 15ppm. Unlike the static separator which send the bulk of dirt and oil to the coalesce filter, the centrifugal separator uses centrifugal force of over 5000g to separate all kinds of oil, dirt and other liquid and solid contaminants from the water. The result is that only very small amounts of stabile emulsified oil have to be separated by the absorption filter and that guarantees a lifetime of over one year for the filter cartridges. You can be sure that you do not have to dispose onshore any extensive amounts of water in the waste oil which can be very costly.

BilgeMaster200 for treatment of bilge water / oily water

Bilge water is a mixture of fuel, lube oil, cooling water and seawater leakage that collects in the engine room of a ship as well as the effluent that is produced during cleaning processes. Water with a considerable seawater content accounts for the most part. Bilge water is heavily contaminated with partially emulsified oil. Impurities are largely bonded in the oil phase. Centrifugal technology efficiently separates these products into their main constituent's water, oil and solids.

The new bilge water treatment system with the Westfalia Separator minimaXx separator type WTC was specially designed for rough conditions on board. The product is fed by the feed pump into the centre of the separator bowl and the product is separated into heavy water phase, light oil phase and solids. The heavy water phase is separated from the finest oil droplets and dirt particles and then conveyed under pressure by the centripetal pump to the discharge. If the oil concentration on the clean water outlet of the centrifuge exceeds 15ppm, the water is led through an absorption filter. The lighter oil phase flows to the centre of the bowl and is discharged continuously by gravity to a waste oil buffer tank on the skid and gets pumped to the ships waste oil tank. The separated solids sludge is collected in the solids holding space and must be removed by hand after a certain period. An intelligent control and monitoring system assures problem free, round the clock, unmanned operation. It also ensures that only water with oil content lower than 15ppm or even 5ppm is released into the environment.



The main components of the system are:

- Manual-cleaning centrifugal separator
- Feed pump (mono pump)
- Feed pre filter
- Control panel
- Oil monitor for 5/15 ppm bilge alarms
- Base frame with sludge tank
- Sludge transfer unit
- Absorption filter (optional for advanced system < 5ppm)

Benefits of the BilgeMaster200

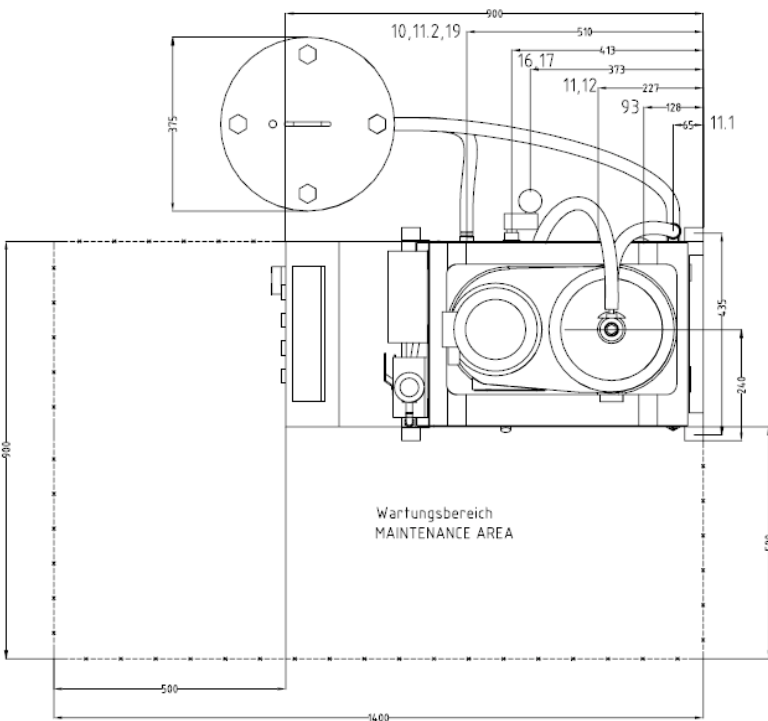
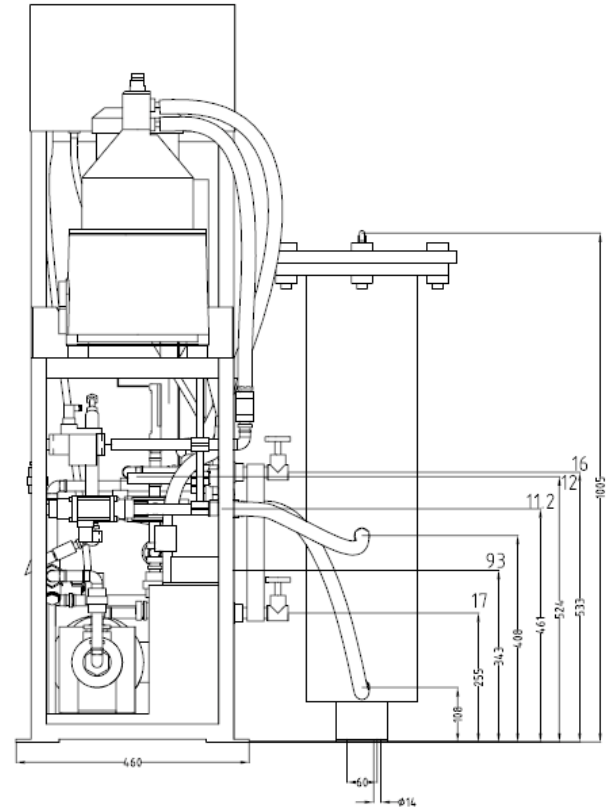
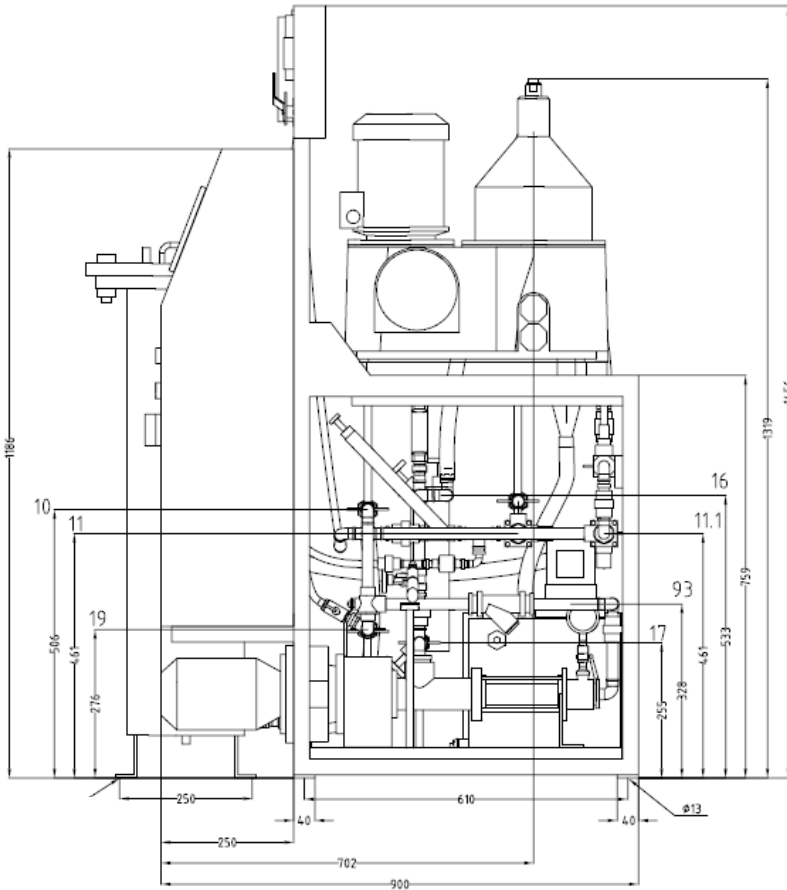
- The system is approved and certified by the latest IMO regulations Res. MEPC 107 (49) and U.S. Coast Guard
- **Less maintenance**
 - Complete technical documentation
 - Less bowl parts
 - Belt drive instead of gear drive
 - Mono pump as feed pump
- **Low and flexible space requirement**
 - Compact design
 - Modular design
- **Low noise level**
 - Rubber cushions
 - Less vibrations due to belt drive
- The BilgeMaster200 Yacht Version and all periphery equipment can be delivered in white painting and polished hood so that it all fits visually in your engine room
- **Cost saving**
 - Less labour cost due to easy and quick cleaning procedure (approx. once a week by 20 h/d operation)
 - No frequent change of expensive filter elements
 - No frequent disposal of used filter elements
- Continuous operation and therefore less required flow rate capacity than comparable static coalesce separators
- Heavy phase discharge under pressure and therefore no need for additional pump
- Less wear, abrasion and erosion because all product-contact parts are made of stainless steel. The bowl material is stainless steel which is resistant to seawater
- **Easy installation**
 - Plug & Play with Compact Unit (skid mounted) design
 - Flexible hose connections
 - Complete technical documentation
 - Commissioning service by technicians from Westfalia Separator available
- **Easy maintenance, operation and cleaning**
 - Synergy effect - less required tools; the tools and most spare parts of the oily water separator are absolutely similar to our fuel oil separator
 - The crew is familiar with the technology and the manual cleaning procedure which is exactly the same as the fuel oil separator OTC
 - Complete technical documentation
 - Spare part kits for one or two years
 - Service intervals up to 16,000 h
- **Complete technical documentation**
 - Instruction manual
 - Installation and cleaning Manual
 - Maintenance and spare parts list
 - Piping & Installation drawings
 - Dimension drawings
- **Worldwide service**
 - Fully equipped repair, service center and spares stock in Melbourne and world wide
 - Service engineers throughout Australia and world wide





The bilge water treatment system will be supplied as a skid mounted unit. The dimensions and weights of the components are restricted so that they can be easily transported into each engine room. The single component can be installed on a common base frame as well as individually. The modular concept can be retrofitted to an existing system.

The lifecycle costs for a BilgeMaster200 are restricted to an annual service of the system which can be executed by the crew itself and would require spare parts less than five hundred AUD a year. The filter cartridges of the backup absorption filter should only be replaced once a year or even just every second year depending on the oil content and oil type mostly treated in the system.



Technical data			BilgeMaster 200
Bowl	Speed	min-1	10,000
	Volume	l	2.2
	Solids holding space	l	1.2
Three-phase AC motor	Power	kW	1.1
	Speed at 50 Hz	min-1	3000
	Speed at 60 Hz	min-1	3600
Centripetal pump	Light liquid phase	bar	-
	Heavy liquid phase	bar	0.5
Capacity	Effective throughput for oily water treatment	l/h	200
Weight	Module complete	kg	265
Dimensions	Length	mm	900
	Width	mm	725
	Height	mm	1200