

*Liquids to Value*



Westfalia Separator®  
**seaprotect**solutions  
cleandesign 

## Westfalia Separator® **BilgeMaster**® cleandesign

5 ppm – new standards in bilgewater processing



# cleandesign for All Performance Ranges

Separator performance above IMO standard



## 15 ppm without filter and chemicals

GEA Westfalia Separator Group has set a further milestone in the field of bilgewater processing: The new generation of separators of the Westfalia Separator® BilgeMaster® cleandesign system is designed for producing residual oil contents of 15 ppm in all performance classes. Right through to the Westfalia Separator® BilgeMaster®-E 5000 cleandesign, based on the self-cleaning separator WSE 50. Without an additional adsorption filter, without chemicals. This is achieved by means of modifications in the product feed of the bowl and the disc stack, resulting in a gentle product feed and a higher clarifying area.

## 5 ppm for future requirements

The requirements for the purity of bilgewater are constantly becoming more demanding – not least as a result of tighter national requirements throughout the world for sensitive areas of the ocean. In order to be in a position to meet potentially tighter requirements, many shipping companies are already demanding a guarantee of less than 5 ppm residual oil content in the processed bilgewater. GEA Westfalia Separator Group will also be able to meet these requirements.

# Optimized Process Safety

Westfalia Separator® **BilgeMaster® cleandesign** plus **SafetyMaster** – safe, powerful and efficient



Westfalia Separator®  
**BilgeMaster®-D 1000 cleandesign**

**Separator type:** WSD 8  
**Capacity:** 1000

Westfalia Separator®  
**BilgeMaster®-D 2000 cleandesign**

**Separator type:** WSD 18  
**Capacity:** 2000

Westfalia Separator®  
**BilgeMaster®-D 4000 cleandesign**

**Separator type:** WSD 35  
**Capacity:** 4000

Westfalia Separator®  
**BilgeMaster®-E 5000 cleandesign**

**Separator type:** WSE 50  
**Capacity:** 5000l/h

Westfalia Separator® **BilgeMaster® cleandesign**:

Residual oil content downstream of separator < 15 ppm

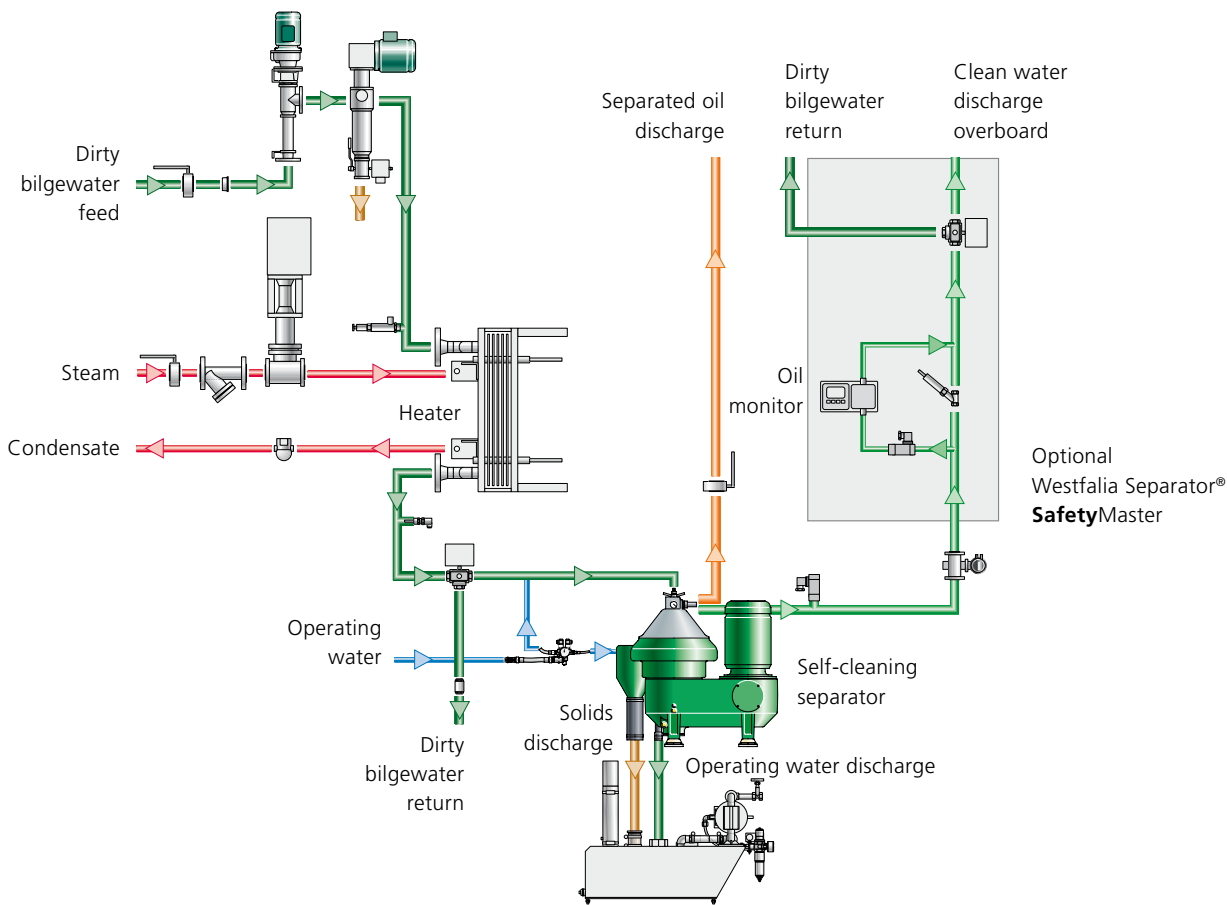
Residual oil content downstream of separator < 5 ppm  
by adjusting separating temperature and capacity

Constant monitoring of the overboard valve  
(similar to Westfalia Separator® **SafetyMaster**)

Use of E40 control with graphic display and touch panel

Optional in combination with Westfalia Separator®  
**SafetyMaster**: system-integrated or “stand-alone”

Retrofit for Westfalia Separator® **BilgeMaster®-D** series possible



## Integrated, Retrofitted or "Stand-Alone"

Customized configurations for all bilgewater processing systems

The Westfalia Separator® **BilgeMaster**® cleandesign systems feature a modular design. The main components: Feed pump, automatic filter, preheater, the self-discharging separator, oil monitor and the control panel are installed on two modules (feed pump/preheater unit, separator unit). These modules are assembled to form a complete unit, and can also be supplied as individual modules upon request. This means that the system can be customized to meet the local circumstances in an optimum manner even in restricted spaces. An adaptive speed regulating facility of the feed pump adapts the system to the considerably fluctuating feed conditions of the product.

Westfalia Separator® **SafetyMaster** – the gain in terms of safety



In addition to the high safety standard of the Westfalia Separator® **BilgeMaster**® series, GEA Westfalia Separator Group has now developed the Westfalia Separator® **SafetyMaster**. It prevents the unintentional overboard pumping of bilgewater containing excessive levels of oil by means of permanently monitoring the complete separating process including the overboard valve. An integrated data recorder saves all bilgewater processing information from the previous eighteen months. All components of the Westfalia Separator® **SafetyMaster** system are mounted in a lockable cabinet which is protected against manipulation and installed on the separator unit.



GEA Mechanical Equipment

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