

### **GEA Westfalia Separator seaprotectsolutions**

GEA Westfalia Separator **Bilge**Master® **clean**design 5 ppm – new standards in bilge water processing

## cleandesign for All Performance Ranges

Separator performance above IMO standard



#### 15 ppm without a filter

GEA Westfalia Separator Group has set a further milestone in the field of bilgewater processing: The new generation of separators of the GEA Westfalia Separator **Bilge**Master® cleandesign system is designed for producing residual oil contents of 15 ppm in all

performance classes. Right through to the GEA Westfalia Separator **Bilge**Master®-E 5000 **clean**design, 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 with filter

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

GEA Westfalia Separator **Bilge**Master® **clean**design plus **Safety**Master – safe, powerful and efficient

GEA Westfalia Separator **Bilge**Master®-E 500 **clean**design

Separator type: WSE 5 Capacity: 500 l/h

GEA Westfalia Separator **Bilge**Master®-E 1200 **clean**design

Separator type: WSE 10 Capacity: 1200 l/h

GEA Westfalia Separator **Bilge**Master®-E 2500 **clean**design

Separator type: WSE 20 Capacity: 2500 l/h

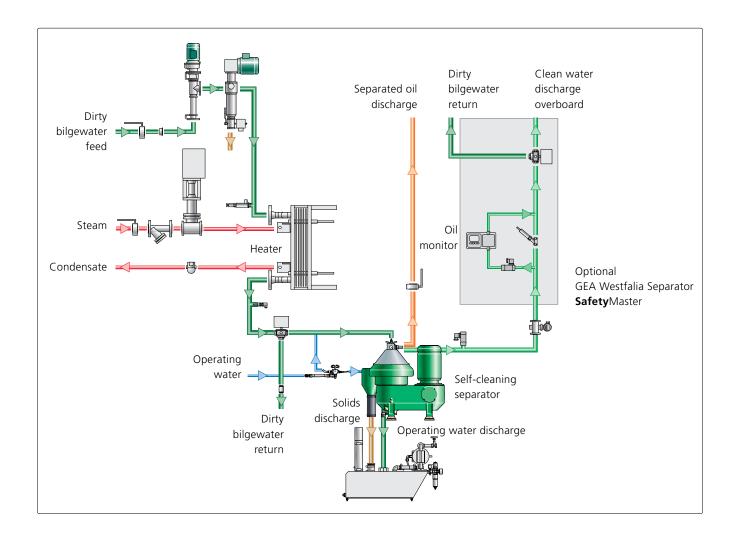
GEA Westfalia Separator **Bilge**Master®-E 5000 **clean**design

Separator type: WSE 50 Capacity: 5000 l/h



GEA Westfalia Separator  ${\bf Bilge}{\bf Master}^{\it \&}$   ${\bf clean}{\bf design}$  :

- $^{\circ}\,$  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 GEA Westfalia Separator SafetyMaster)
- · Use of E40 control with graphic display and touch panel
- Optional in combination with SafetyMaster: system-integrated or "stand-alone"
- · Retrofit for BilgeMaster®-E series possible
- · Retrofit with adsorption filter possible



### Integrated, Retrofitted or "Stand-Alone"

Customized configurations for all bilge water processing systems

The 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.

# GEA Westfalia Separator **Safety**Master - the gain in terms of safety

In addition to the high safety standard of the BilgeMaster® series, GEA Westfalia Separator Group has now developed

the 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 compo-



nents of the **Safety**Master system are mounted in a lockable cabinet which is protected against manipulation and installed on the separator unit.



#### We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA Group is a global engineering company with multi-billion euro sales and operations in more than 50 countries. Founded in 1881, the company is one of the largest providers of innovative equipment and process technology. GEA Group is listed in the STOXX® Europe 600 Index.

#### **GEA Mechanical Equipment**