#### **Welcome to GEA**

Company Portrait & Marine Products GEA Westfalia Separator & GEA Utilities

MICHAEL FIBBE MAY 2017





#### Systems from one source







NEW

\*ScrubberMaster® for scrubber

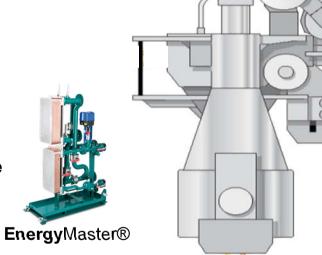


for \*Membrane Bioreactor (MBR) Systems

Centrifuges f. HFO, MDO & LO



Visco Booster Units Engine Visco Booster Units Boiler



ultraV



**Ballast**Master® ultraV & 250 - 500 m<sup>3</sup> **Ballast**Master® marineX 150 - 1500 m<sup>3</sup>



**Bilge**Master® cleandesign 200 – 5000l/h



**Safety**Master®



SludgeMaster® 300l/h



**sea water distiller** evaporator 5-30t/day



Provision refrigeration plant, Cooling compressors for refrigerator rooms, HVAC, etc









## GEA Westfalia Separator Visco Booster Units

Fuel Oil Conditioning



#### Operational Reliability with Fuel Oil Conditioning System



- We offer you Visco Booster Unit from Westfalia Separator
- For you that means:
  - Tailor made solution
  - The engineering is under the responsibility of Westfalia
  - The unit is ready to run
- Your benefits are:
  - No resources needed for the engineering
  - The units are designed to the requirement of your engine room
  - You get plug and play solution



#### Operational Reliability with Fuel Oil Conditioning System



#### Features of Visco Booster Unit:

- Achieve the required injection viscosity (10-25 cSt)
- Provide a constant pressure at inlet of the injection pumps (pressure range from 6-10 bar)
- Complete Unit and tailor made design
- Ready to connect
- Completely piped and wired and in fully accordance with all class requirements

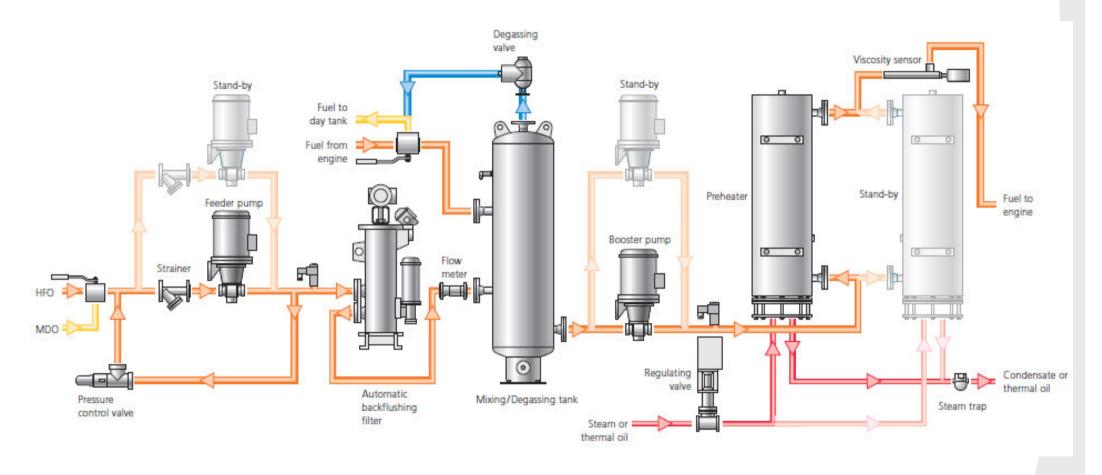






#### **Arrangement of VBU (Standard Marine Design)**

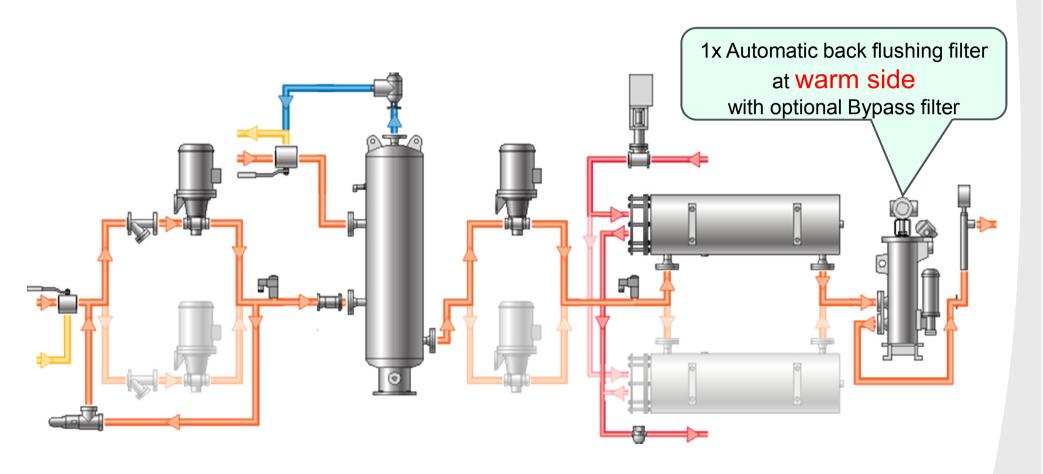
#### Marine design - cold side





#### **Arrangement of VBU (Standard Marine Design)**

#### Marine design – warm side





#### Fuel oil consumption meter (positive displacement meter)



### Consumption totalizer CUB 5

- 8 digit display
- Indication in m³/h (totalizer) or in l/h (current consumption)
- Resetable

Consumption

Local indication of consumed fuel oil



#### **Control Cabinet**



#### 3-part control cabinet:

- Process control & monitoring
   E40 with Graphic Display
- Two independent power supply with restarts function after black out
- Emergency stop button for the compl. Visco Booster Unit
- Feeder and Booster pump control with change over function
- Viscosity and Temperature control (automatic / manual operation)
- Consumption counter
- Selector switch for trace heating
- Indication lights

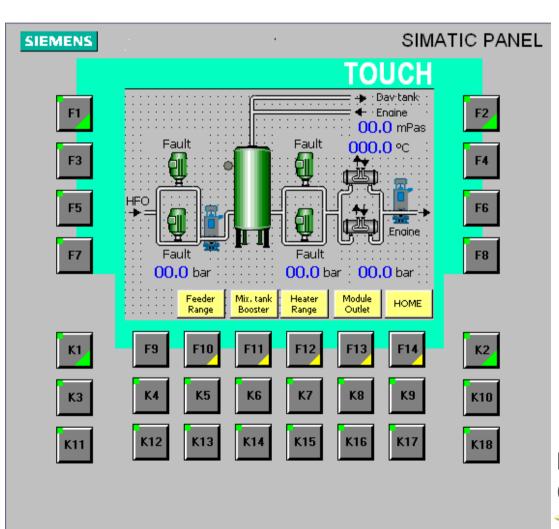
#### Technical data of control panel:

Protection: IP 54
Double In feed system
Ambient temperature up to 45°C



#### Remote operation

Installation of a 2nd control unit E40 in ECR enables a remote control of our VBU



#### **Functions:**

- Start / stop pumps
- Adjusting viscosity / temperature
- Monitoring viscosity / temperature
- etc.

Bus connection (WS standard: Profibus DP)

# engia

## engineering for a better world

