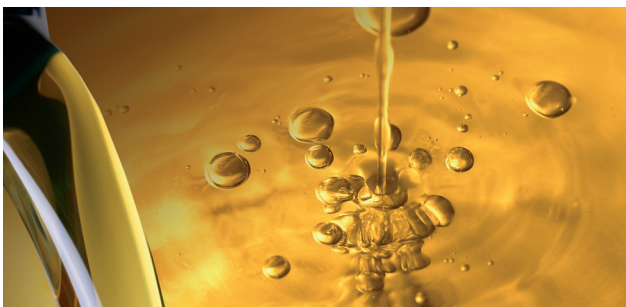
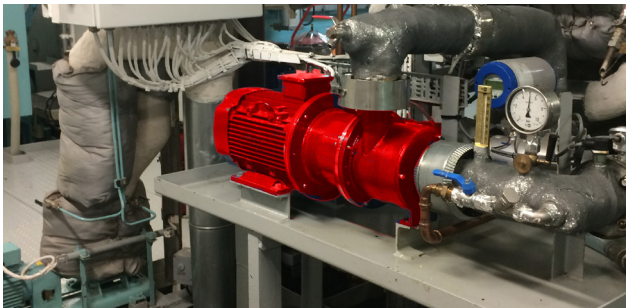


## Homogenizer

Sludge reduction

Fuel quality improvement

Combustion perfection



The Homogenizer is a dynamic milling machine which can be used in the fuel system on board ships. It is designed to improve your fuel quality which will lead to a better combustion and less maintenance. Furthermore it can reduce sludge in case of fuel incompatibility. Increase the amount of burnable fuel in case of bad fuel quality. The Homogenizer has a high saving potential.

### Features

- Continuous homogenizing by shearing of asphaltene clusters
- Pure mechanical & no chemical treatment
- Continuous generation of water in fuel emulsion
- Sludge treatment on board
- Fuel treatment in fuel circulating system reduce sludge of fuel incompatibility

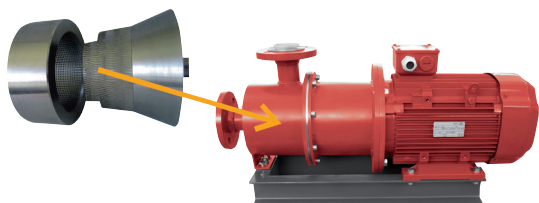
### Benefits

- Reduction of sludge
- Increases amount of burnable fuel
- Less wear and tear on engine components
- Ind. optimization of combustion process
- Prevent sludge in case of fuel incompatibility
- Fuel treatment / conditioning
- Better fuel quality for combustion
- Less clogged filters

## System description

The homogenizer is a dynamic milling machine and it mainly consists of a specially constructed stator / rotor-milling gear to improve the fuel quality as well as to allow sludge treatment on board of sea-going vessels.

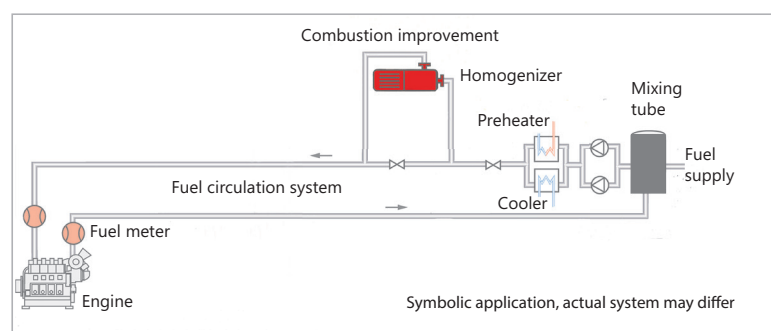
- Pure mechanical homogenizing
- Free adjustable clearance between rotor and stator
- Creates long term stable fuel-water emulsion
- Low maintenance



## Principle

The Homogenizer operates on the principles of mechanical shearing and ultrasonic forces. It utilizes a special conical shaped milling gear, to generate high hydrodynamic power consisting of shearing, friction and acceleration forces with pressure waves of high frequency. The high molecular asphaltenes are reduced in their size to below 5  $\mu\text{m}$  and homogenized into the heavy fuel oil.

## Application Combustion Improvement



## Specification and ordering information

- Power supply: 400/440 V; 50/60 Hz
- Working pressure: max. 15 bar
- Working temperature: max. 150 °C

Size / Type	Capacity IFO380 at 130 °C (~13 cSt) [m³/h]	Flange (in-/outlet) DIN/ISO 2633 [mm; bar]	Art No.
Homogenizer HG100	3.0	DN 32; PN 16	94709
Homogenizer HG130	8.0	DN 50; PN 16	94710
Homogenizer HG150	12.0	DN 65; PN 16	94711
Homogenizer HG220	25.0	DN 80; PN 16	94735

Optional control panel / Type	Art No.
Control panel CP100	95191
Control panel CP130	94725
Control panel CP150	94726
Control panel CP230	94734