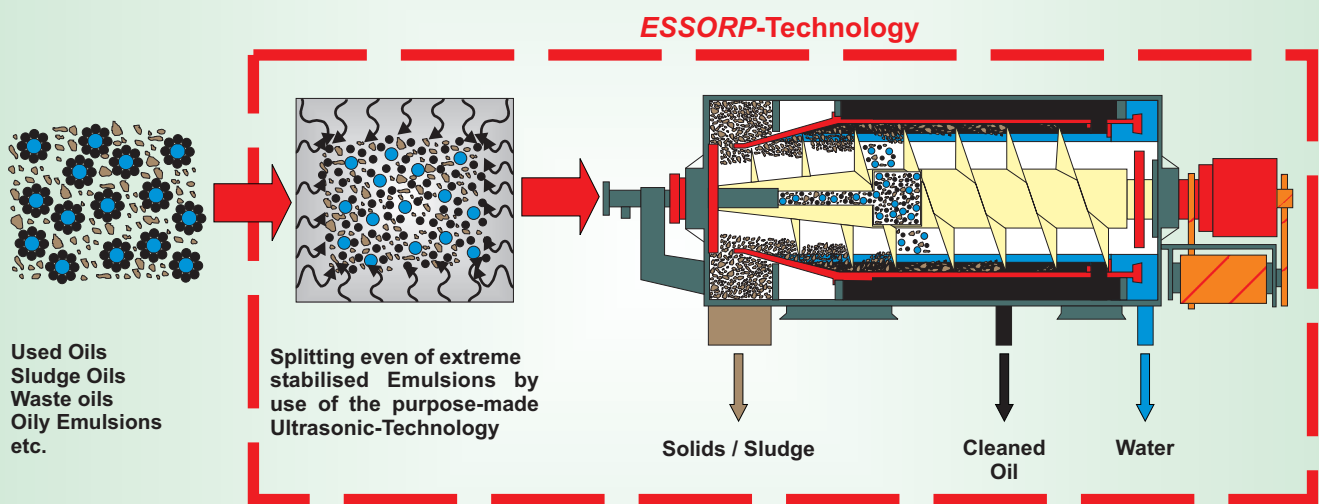


## ***ESSORP-LB-System***



**Treatment of  
Sludge Oils, Used Oils & Emulsions  
from Ships & Industry  
by means of**

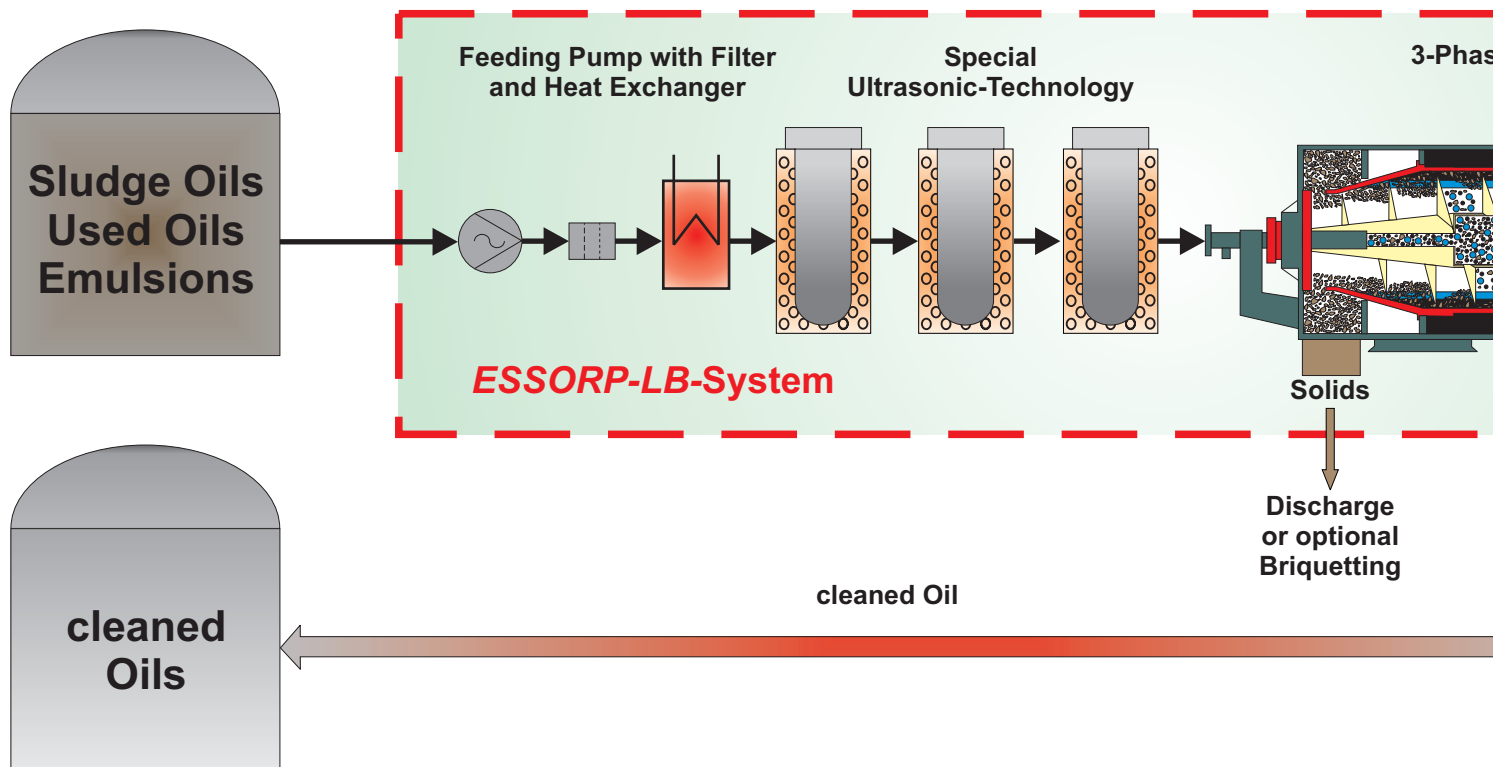
**Recovery of the Oil  
Separation of the Water  
Separation of the Solids**

**Ultrasonic-Technology**

+

**Separation-Technology**

=



## Benefits of the *ESSORP-LB-System*

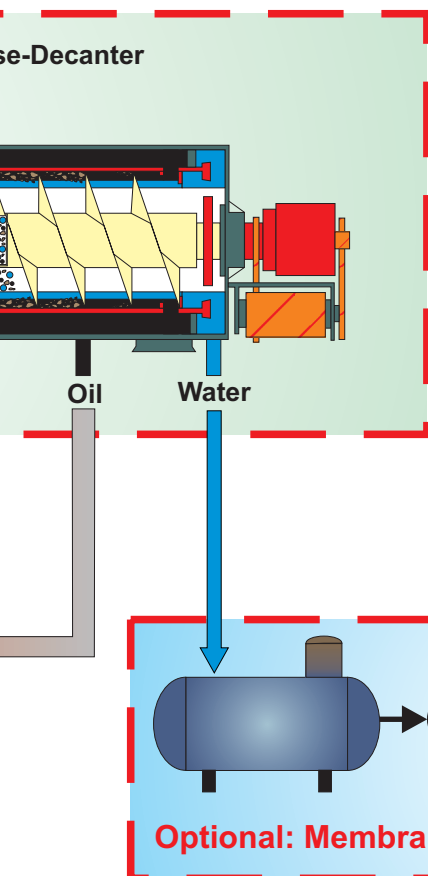
- Proofed separation of the free and emulsified water from the oil
- System purifies also Used Oils with an extreme high content of solids & water
- Trouble-free treatment also of high viscous Used Oils
- Continuously treatment of the Used Oils during operation in customers process
- No use of chemicals
- Treated Oils can be used for further applications
- Treated Oils fulfill without any problems the customer's acceptance of Oils as derived fuels for the cementary-& steel-industry
- Less energy costs in case of further post-thermal treatment, because the already removed water has not to be evaporated
- By use of different separation-technologies the oil-quality can be optimal adapted to the varying and special demands of the market
- System modular upgradeable
- System-configuration according application, specification & installation
- System-sizes from 0,5 up to 50 m<sup>3</sup>/day
- Ready to install -units, internally cabled and piped
- Installation in Container on request

1 F  
(M  
2 C  
3 H  
4 S  
5 3  
6 C  
7 W  
8 E  
9 P  
10 F

optimal  
Oil-Treatment

=

**ESSORP-  
Technology**



## Brief description of the **ESSORP-LB-System**

By means of the **ESSORP-LB-System** especially high viscous Sludge Oils, Used Oils and Oily Emulsions with a high content of solids & water will be treated in a way that the treated oil can be returned back into the cycle of matter. The “heart” of this system is the combination of a special Ultrasonic -Technology with an integrated downstream 3-Phase-Decanter for the separation of the single phases. Optional the separated water from the oil can be internally processed in a way that the water can be discharged to the local sewage network after treatment. Only the separated solids have to be disposed.

Feeding Pump

(Not illustrated, because of separate installation / location)

Change-Over Filter

Heat Exchanger

Special Ultrasonic-System

3-Phase-Decanter

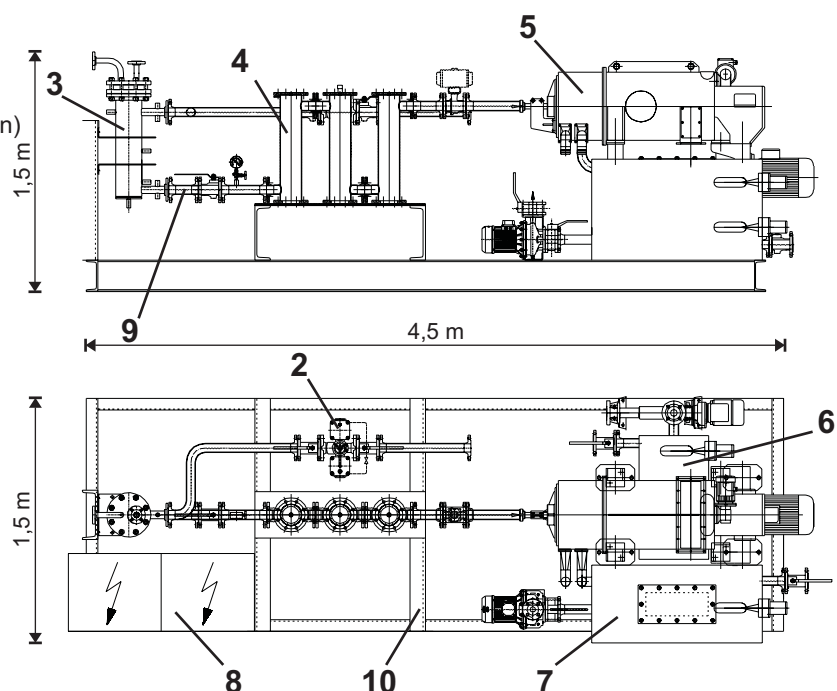
Oil tank-Unit

Watertank-Unit

Electric Control Cabinet with SPS

Pipings & Armatures

Frame



# Environmental **ES** Systems

## Reference: Power Plant for electric power generation in Honduras



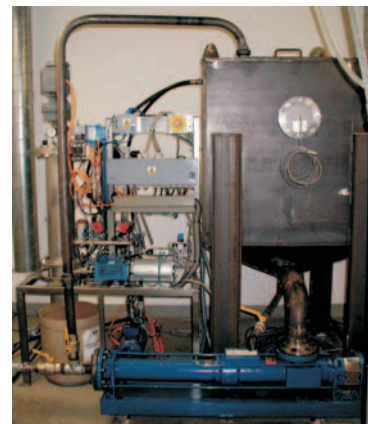
- 13 Diesel-Engines
- 240 MW power
- Operation of the engines with HFO-380
- 10 m<sup>3</sup> Sludge Oil per day
- Application of the special Ultrasonic-Technology for Sludge Oil Treatment
- Continuous treatment of daily 10 m<sup>3</sup> Sludge Oil from the operation of:  
8 HFO-Separators & 13 Lube Oil-Separators
- Separation of the Sludge Oil into: Oil / Water / Solids
- Separation of the Water from the stabile Water/Oil-Emulsion without any chemicals
- Easy operation of the **ESSORP-Systems**



Special **ESSORP**-Ultrasonic-Technology for cracking the Emulsions



**ESSORP**-3-Phasen-Decanter, for separation of oil, water & solids



**ESSORP**-Tank-Unit for Sludge Oil pre-treatment

If you have additional questions about our **ESSORP-System**, we are pleased to consult you detailed & individually.



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