

NEWS

Sea Water Desalination

Cogeneration, also combined heat and power (CHP), is the process of using thermal power stations to simultaneously generate both electricity and heat. As our energy carrier of the future, electricity is needed everywhere. Heat is only needed in the colder regions of our planet.

The demand for electricity is on the increase globally, while heat consumption levels remain relatively stable. Population growth is on the rise but our drinking water resources are declining. Especially the warmer regions of the world face acute shortages of drinking water. There is, however, sufficient sea water.

The de-centralised electricity production coupled with the abstraction of drinking water is one potential solution: Sea Water Desalination.



How does this work ?

The de-centralised production of electricity generates exhaust heat. This heat is used to vaporise sea water under vacuum. The sterile water is then condensed in the condensing unit and turned into drinkable and usable water. Fuels such as heating oil, diesel, natural gas, bio and sewage gas, as well as liquid gas, are used as energy carriers and combined with sea water to generate electricity and produce drinking water. Sea Water Desalination for the de-centralised production of electricity and drink water in a container, e.g. with heating oil fule (optionally: natural gas, bio or sewage gas, liquid gas):

- › **40' special purpose container** in RAL 6002 lined with a sound insulation behind a galvanised perforated plate, incl. a fire-retardant door, 230V lighting, inside partition wall, swithgear room
- › Liebherr or MAN 6 cylinder four stroke in-line engine, water-cooled
- › Splitter silencer (air inlet and outlet) incl. fan for permanent operation in the cont.
- › Sea water / fresh water - generator 450 - DN 65 incl. hardness filter.
- › Output of 100-200 kW generated electricity (variable output regulator
- › Drinking water abstraction up to 450 l/h
- › Heating oil consumption of up to 53l/h.



List price for this Sea Water Desalination in container type BHKW 200 - HL/ MSG 450,
net: 380.000,- € plus VAT, delivery time approx. 6 months, collection in Hamburg Hamburg · Germany.

The scope encompasses the interfaces for electrical work, the load, control and data lines connecting the switch cabinet to the local electricity grid, fuel pipes on the container, fresh water pipes on the container, a sea water connection on the container as well as a sea water submersible pressure pump.

This Sea Water Desalination system can be controlled according to demand for **electricity or drinking water**. If so desired, the exhaust heat can also be used for other purposes.

Other sizes available on request.

Subject to change without notice; Version 08/2011