

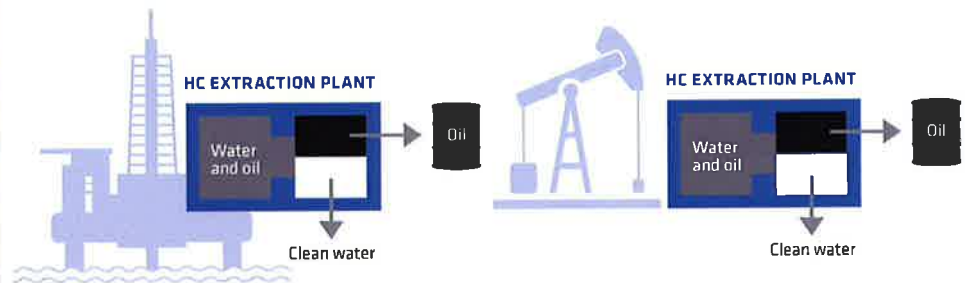


PureteQ



WDS - Water Detoxification System

Best Available Technique to prevent the release of oil, toxic- and bio accumulative substances to the environment.



ABOUT PURETEQ

PureteQ is an engineering company. The business is development of patented high-tech process plants to include construction and commissioning. Our goal is to solve environmental issues for our customers in the on- and offshore industry including the maritime sector. Focus is applied to recognized problems i.e. utilization of industrial byproducts, liquid hazardous waste and combustion/incineration issues including treatment and heat recovery of flue gasses. This to include treatment of flue gas emissions from the maritime industry as well as land based industry. PureteQ is a subsidiary of the Dansk Synergi A/S conglomerate. Head Quarter, Production Facilities and Test Center are situated in the city of Svendborg.

PureteQ has developed a Water Purification System designed for treatment of heavy-duty process water from the Oil- and Gas Industry. The PureteQ Water Detoxification System is a combination of well-known and proven process techniques and patented high-tech equipment. The technologies are based on decades of practical experience in Hazardous Waste Management. WPS systems are in general designed to customers' needs and specifications.

PureteQ offers;

Hydrocarbon Extraction Plant (HCE)

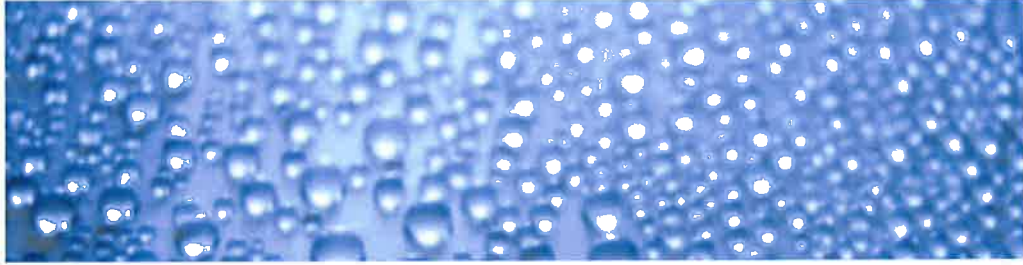
The HCE water purification process is based on solvent extraction of bio accumulative substances to prevent accumulation of hazardous substances in living organisms.

Produced Water Plant (PWP)

The PWP water purification process is based on micro particle adsorption of toxic substances. The PWP's main purpose is to boost the nitrification process in biological ecosystems, thus to allow downstream inexpensive conventional biological waste water treatment.

PureteQ units can operate as stand-alone plants combined or included in existing installations. Also a unique SCADA system is delivered and connected to customers Central SRO/SCADA/HMI system.

PureteQ - transform old issues into sustainable solutions



PureteQ HCE Hydrocarbon Extraction - Capacity per Unit 4 m³/h

Energy consumption: Electric power 10 kW + Steam supply 1,5 t/h at 4 bar. Additives to the process: Lost of extraction solvent < 100 g/m³ water treated. By-product out: Oil (slop). Possible reutilization in i.e. power plant.

Stena Åmål Sweden Waste water	Toxic Substances Act (TSCA) 15 U.S.C. 2601	TOC Total organic carbon	BNI Biological nitrification inhibition
Before treatment:	6 Peaks Pow = 1,4 - 2,3	620 mg/l	71 %
After treatment:	< Detection limit	82 mg/l	< 20 %
M-I SWACO Norway Heavy duty Rig waste water	Oil benzene C10-35	TOC Total organic carbon	Biological treatment
Before treatment:	580 mg/l	7.100 mg/l	Not possible
After treatment:	0.53 mg/l	3.500 mg/l	Excellent final level 380 mg/l
ST1 Refinery Sweden Oil distilling process water	Oil Benzene C10-35	BNI Biological nitrification inhibition	Biological treatment
Before treatment:	4,9 mg/l	98 %	Not possible
After treatment:	< 0,1 mg/l	24 %	Excellent

PureteQ Produced Water - Capacity per Unit 8 m³/h

Energy consumption: Electric power 40 kW. Additives to the process: Lime ~ 3 kg /m³ water treated. By-product out: Oily lime stone Oil. Reutilization is possible in cement plant.

ST1 Refinery Sweden Oil distilling process water	Oil Benzene C10-35	BNI Biological nitrification inhibition	Biological treatment			
Before treatment:	4,9 mg/l	98 %	Not possible			
After treatment:	0,6 mg/l	44 %	Good			
Maersk Oil & Gas	Oil Benzene C10-35	Pb	Cd	Cr	Cu	Hg
Before treatment:	140 mg/l	0,6 µg/l	2,2 µg/l	3,6 µg/l	2,1 µg/l	0,42 µg/l
After treatment:	< 1.0 mg/l	< 0,5 µg/l	0,1 µg/l	0,7 µg/l	< 1,0 µg/l	< 0,050 µg/l