Care for Ocean, Care for People

Water Resource Solution | Marine Conservation | Ship Safety & Automation
HANSUN (listed company, NEEQ:831791) is one of the world’s leading suppliers of marine & offshore equipment with expertise and experience in merchant ships, offshore exploration platforms as well as naval warships.

HANSUN focuses on three main categories of products: Water Resources, Marine Conservation, and Ship Safety & Automation. Certified by major classification societies such as ABS, BV, CCS, DNV-GL, LR, RINA, N K and RS, etc. Hunsun products have been sold to many world-renowned ship owners, ship builders and ocean engineering projects, etc.

With a talented engineering team and through collaborations with prestigious institutions, HANSUN has established strong R&D capabilities and is capable of developing and applying state-of-the-art technologies to the marine industry.

HANSUN has five main divisions, respectively in Hunsun Shanghai (Headquarter), Hunsun Jiangsu (R&D, Production), Hunsun Hong Kong (Sales), Hunsun Singapore (Service) and Hunsun Environmental Protection.

Over 9000 Hunsun products have been installed in over 3500 vessels and platforms.

Our mission is to make ship operations Greener, Safer and More Economical.

*Data source before 2017*
# Water Resource Solution

## Plate Type Fresh Water Generator
Plate Type Fresh Water Generator mainly consists of evaporating, condensing chamber, ejector equipped to achieve vacuum, fresh water pump for delivering distilled water to storage tank. Heat exchanger is made of titanium. It's an energy-saving device because of using jacket water heat and lower boiling point of water in vacuum.

**Features:**
- High quality titan plate for evaporator and condenser
- Highly compatible to variety heating sources as jacket water, steam and thermal oil
- Control cabinet with specialized salinity meter
- No moving part, less maintenance

## Reverse Osmosis Fresh Water Generator
Reverse Osmosis Fresh Water Generator desalinates the seawater by making seawater pass the osmotic membrane at high pressure. The design makes fully as per requirement of marine and offshore applications. The units are widely equipped on platforms, working barges, support vessels of offshore industry. It's a reliable and economical way of potable water production for offshore staffs.

**Features:**
- Key components from well known brands
- Adapt to harsh working conditions
- Auto chemical washing device and fresh water replacement
- HMI with PLC controller for automatic control process

## Fresh Water Unit
Fresh Water Unit is applicable for the water supply system of the fresh water pipe system and the sanitary water pipe system on the ship and the platform. It is characterized by the modular design, compact structure, convenient and operable arrangement. A comprehensively designed system module shall include a set of features, such as heating, pressurizing, transmitting, sterilizing and filtering.

**Features:**
- High quality of pressure vessels combined as hydrophores and calorifiers
- Pressure and circle pumps skid installed and automatic controlled
- Patented self-priming device option
- Package solution for water treatment
- Customized dimension and interface

## UV Sterilizer
UV Sterilizer intends for potable water instant treatment on marine and offshore industry. The sterilizing device adopts the dedicated ultraviolet light tube to sterilizer drinking water. The ultraviolet strength is used for the online monitoring to ensure that the fresh water meets the standard of qualified sterilization.

## Silver Ion Sterilizer
Silver Ion Sterilizer is a kind of drinking water sterilizer that kills and inhibits the growth of bacteria with silver ion concentration through electrolysis. The significant advantage of a silver sterilizer is that sterilized fresh water can be maintained over a long period without being contaminated. It's for instant treatment and storage of drinking water.

## Rehardening Water Filter
Rehardening Water Filter is used to mineralize and filter fresh water. The solid impurities, algae and other foreign substances in fresh water will be removed after it flows through the mineralization filter. Also, the PH value of the water can be adjusted to neutral or low alkali to meet the safety and sanitation requirements on human's drinking water.
Marine Conservation

**Incinerator**

Incinerator may incinerate sump oil, sewage, sludge and plastic, paperboard and food wastes. It is an important device for the pollution prevention in various ships and offshore platforms. The reliable system consists of high quality sludge tank and fan. Wastes compactor and spark arrestor are option. The Incinerator meets the latest IMO Resolution MEPC.244(66).

Features:  
-- Touch screen HMI, a key operating automatically  
-- Three heating resource available, steam, electric and thermal oil  
-- Optimized incinerating process, lower fuel consumption  
-- Modbus protocol for communication  
-- USCG approval

**Oily Water Separator**

Oily Water Separator mainly comprises of gravity separating tank and absorbing filter, and treated water secured no more than 15ppm. The separator meets the latest IMO MEPC.107(49) code. It is widely used for ships’ bilge water and rigs’ oily water.

Features:  
-- Compact design, easy maintenance and high efficiency process  
-- Special organic clay for emulsion absorbing  
-- High quality 15ppm bilge alarm unit secured reliable and accuracy discharge monitor  
-- Middle positioned processing pump to avoid emulsification  
-- USCG approval

**Sewage Treatment Plant**

Sewage Treatment Plant is designed, tested and manufactured according to IMO Resolution MEPC.227(64). Its biological treatment can meet both ship and offshore platform requirements. The aerating fans are used provide sufficient oxygen for the growth of biological and chemical bacteria and the disintegration of organisms. Nano filtration and ultraviolet sterilizer are combined to remove suspended solids and kill coli, virus and other harmful bacteria.

Features:  
-- HMI with PLC controller for automatic control process  
-- Compact design, less installation area  
-- Program control with macerating device, secures no clogging under fully sewage macerating  
-- Vacuum collection device option

**Oil Discharge Monitoring and Control System (ODME)**

Cleartack 1000B oil discharge monitoring and control system is used to monitor, record and control the discharge of sump oil and ballast water, which is accordance with IMO Resolution MEPC.108(49) as well as the latest MEPC.1/Circ.761 & MEPC240.65. It is applicable for the monitoring and discharge control of the carriage of blends of petroleum and BIO-FUELS. Optional components included in the ODME are flow meter, sample probes, valves and pneumatic control box.

Features:  
-- Compact console mounted and wall mounted available  
-- No bulkhead penetration sampling pump required, easy for on-site installation  
-- Patented unique design of measuring cell  
-- Big storage capacity for 18 months, USB/WLAN connection available  
-- Compatible to upgrade of Bio-fuel for all ODME system in the market

**15ppm Bilge Alarm**

BilgMon488 bilge alarm is specifically designed for 15ppm oil water separator and complies with IMO Resolution MEPC.107(49). It is provided as supplementary accessory to major oily water separator manufacturers worldwide and is extensively chosen by different vessel owners in updating 15ppm bilge alarm. The unit is modularization and easy to replace and calibration.

Features:  
-- Optical communication, no cable between control unit and measuring cell  
-- Calibration onboard  
-- Big storage capacity for 18 months, USB connection available  
-- High compatibility to all concerned oily water separators on the market
Seascape™ Ballast Water Treatment System

Seascape™ Ballast Water Treatment System is a combined treatment system which takes advantage of filter and ultraviolet light. It is environmentally friendly and optimally designed for every type of vessel. Adopting a pure physical treatment technology, it effectively disinfects harmful aquatic organisms and pathogens in water without generating any toxic substance during ballasting and ballasting and de-ballasting processes. Features: - No secondary pollution, no pipeline corrosion, instant treatment - Patented automatic self-cleaning filter for high TSS water - Flexible installation, onboard survey for old vessels reforming - Obtained approval by main classification societies

GLD™ Ballast Water Treatment System

Coldharbour GLD™ (Gas Lift Diffusion) Ballast Water Treatment System is a unique in-tank system which uses the gas output from Sea Guardian™ Inert Gas Generator linked to specially designed gas lift diffusion (GLD) pipe assemblies inside the ship’s ballast tanks. It is optimized for large tankers, LNG/LPG carriers and large bulker/ore carriers, total ballast capacities from 20,000m³ up to 345,600m³. It is available for both new build and retrofit installations. Features: - No upgrades to ballast pumps and piping and No disruption to ship operations - No upgrades to power generation capacity - No filters so no risk of blockages

Ship Safety & Automation

Sea Guardian™ Inert Gas Generator

Inert gas generator is used to generate the inert gas with oxygen content (by volume) no more than 5%, which is fed into the upper space of oil tanker, reducing the oxygen content in atmosphere, preventing fire hazard and explosion and improving the safety of oil tanker and offshore platform. The innovative design of the Sea Guardian™ IGG incorporates patented elements which achieve a cleaner more stable operation, resulting in reduced downtime and lower maintenance costs. Features: - Innovations of No burner cone, No vertical scrubbing section, No demister pads - Stable operation at 0.2% residual oxygen - Zero spot