

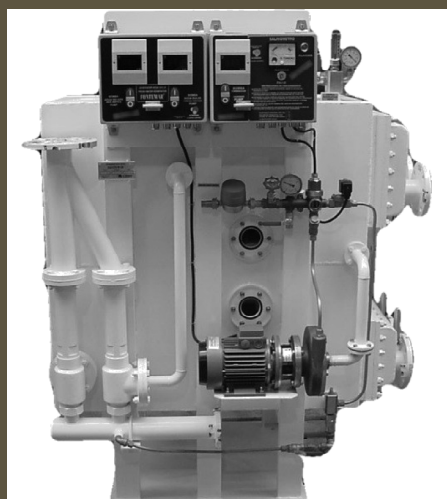
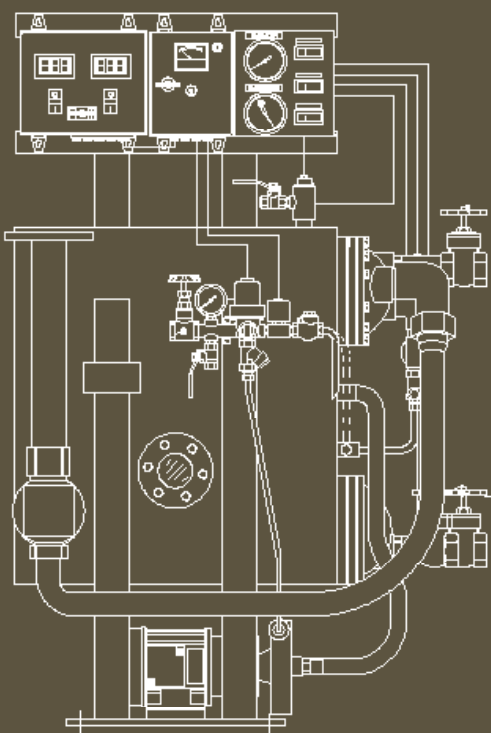
## FONTEMAR<sup>®</sup> FRESH WATER BY SEAWATER DISTILLATION

FONTEMAR<sup>®</sup> generators produce fresh water by seawater distillation. It is the most economical system because it takes advantage of the residual heat from the motor cooling system, which heats the water to be distilled from 65°C and which evaporates in a vacuum chamber. They provide fresh water productions from 1,500 litres per day to 30,000 litres per day. (Please consult us for higher volumes).

### THE GENERATORS FONTEMAR<sup>®</sup>

- Are the only ones on the market in which the structural elements and boiler are manufactured entirely from AISI 316-L stainless steel, using a minimum of 3 mm thickness. which increases their useful lifetime by more than 40% and also allows rapid repairs on board the ship.
- The compact design adapts to the space requirements of the engine room.
- The most economic system: Any source of waste heat between 60° and 90° can be used as supply for the generator. Vapour at low pressure can also be used as source of energy.

FONTEMAR<sup>®</sup> fresh water generator is designed to transform sea water into fresh water, suitable to human and industrial use. This equipment can be installed on board vessels and in land-based facilities.





Fontemar®

## How does it work

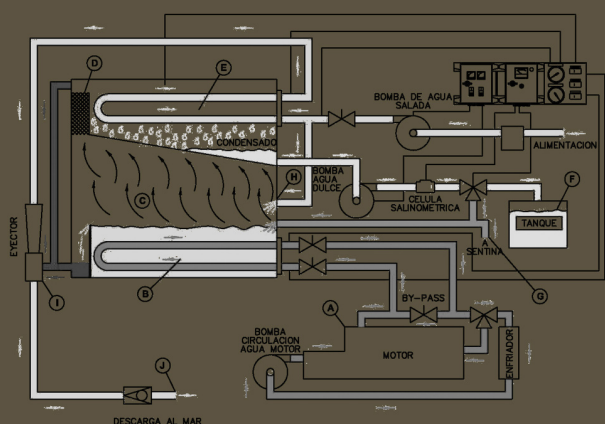
The generators Fontemar® are using the waste heat of the motor cooling system, and do circulate that heat through the interior of the heat exchanger. At this point the engine cooling sea water loses about 7°, enough heat to produce fresh water suitably. The cooling sea water, sent by the pump, goes through the condenser tubes.

The heat exchanger rises the water temperature surrounding the tubes, at this point, due to the vacuum effect, the water begins boiling. The vapour produced rises to the upper part of the casing going through the monel screen separator (demister).

Water drops are collected in the lower part while pure vapour goes through the demister. Vapour gets condensed when getting in contact with the cool condenser tubes.

A tray placed under the condenser collects the distilled water drops produced by the generator constantly. The extracting pump sends the water produced from the generator to the storage.

The salinometer analyses the water produced and checks that only pure water is kept in the tank, in case that water exceeds 4 p.p.m., the two-way solenoid valve will be electrically opened, sending the impure water to the bilge.



MODEL	PRODUCCIÓN 24 HOURS	HEIGHT	LENGTH	WIDTH	CONSUMPTION KW / H	NET WEIGHT
60-80	1.500 L	700	505	340	1.85	145 Kgs
TCS 1	2.000 L	1.240	815	345	1.85	170 Kgs
TCS 1,5	3.000 L	1.345	830	380	2.25	223 Kgs
TCS 2	4.000 L	1.320	1.170	490	2.25	260 Kgs
120-160	4.000 L	700	1.185	370	1.85	170 Kgs
TCS 2,5	5.000 L	1.320	1.370	490	3.75	338 Kgs
TCS 3	6.000 L	1.410	1.230	660	6.25	390 Kgs
TCS 4	8.000 L	1.610	1.320	775	6.25	560 Kgs
TCS 5	10.000 L	1.580	1.515	810	6.60	750 Kgs
TCS 6	12.000 L	1.605	1.680	800	8.60	850 Kgs
TCS 8	16.000 L	1.930	1.570	910	10.00	1.110 Kgs
TCS 10	20.000 L	2.060	1.565	910	10.00	1.375 Kgs
TCS 12	24.000 L	1.800	1.790	910	12.00	1.685 Kgs
TCS 15	30.000 L	1.800	2.070	910	19.00	1.800 Kgs

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