

Water Treatment

...in the Marine Industry



TEMAK[®]

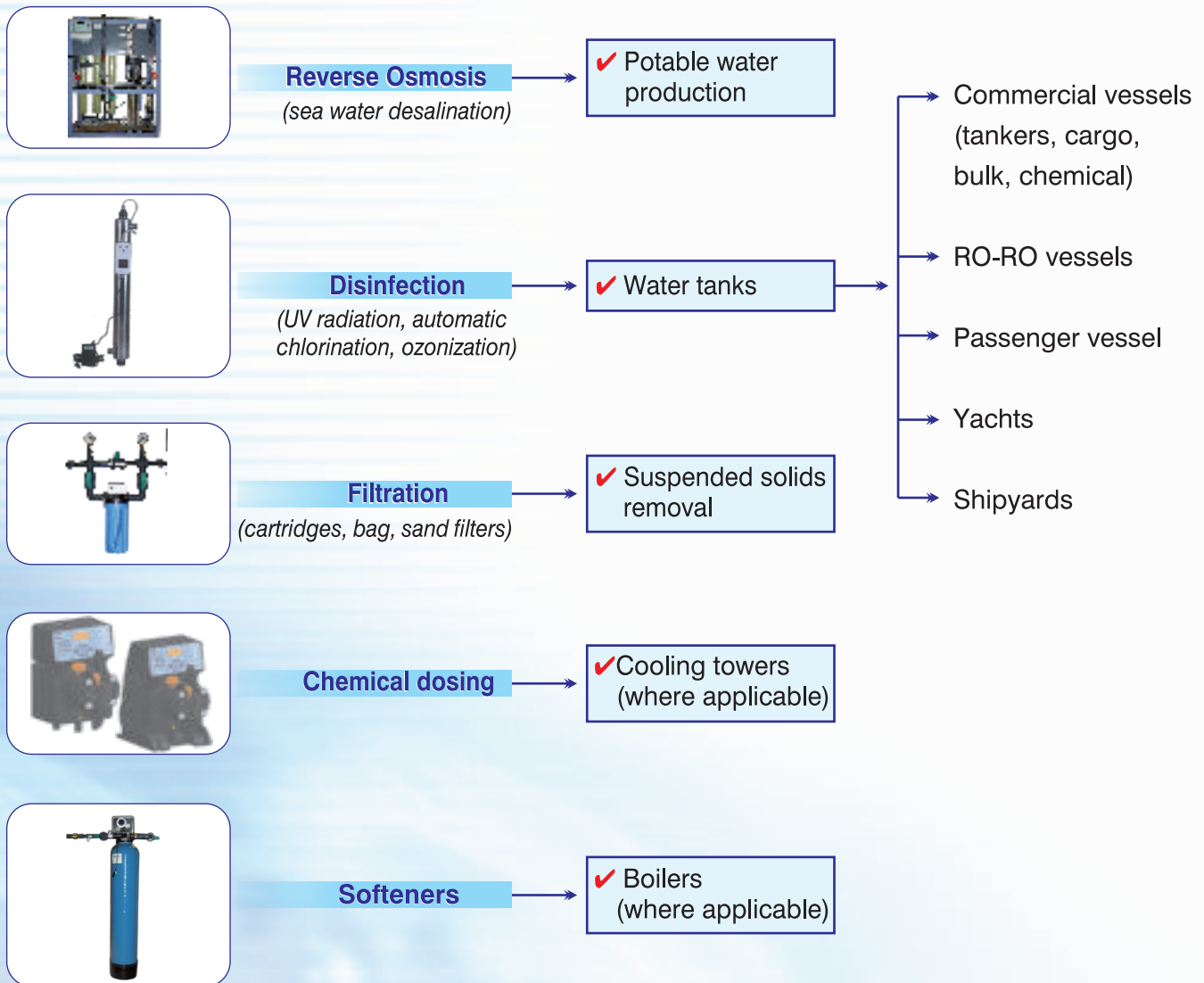
MARINE INDUSTRY

In marine industry the demand for water is exponentially increasing and considering that in the majority of cases the only available water source is the sea, water treatment (sea water desalination) becomes a must.

There is always the option for the ships to be supplied with water at the ports. Buying the water from water carts, the water quality varies according to the supplier and the cost can be very high at times. But even in that case, it is still necessary to remove the suspended solids and sterilize it before consumption.

HOW CAN **TEMAK** BE YOUR IDEAL PARTNER ?

OFFERING TOTAL WATER SOLUTIONS!



MARINE REVERSE OSMOSIS UNITS

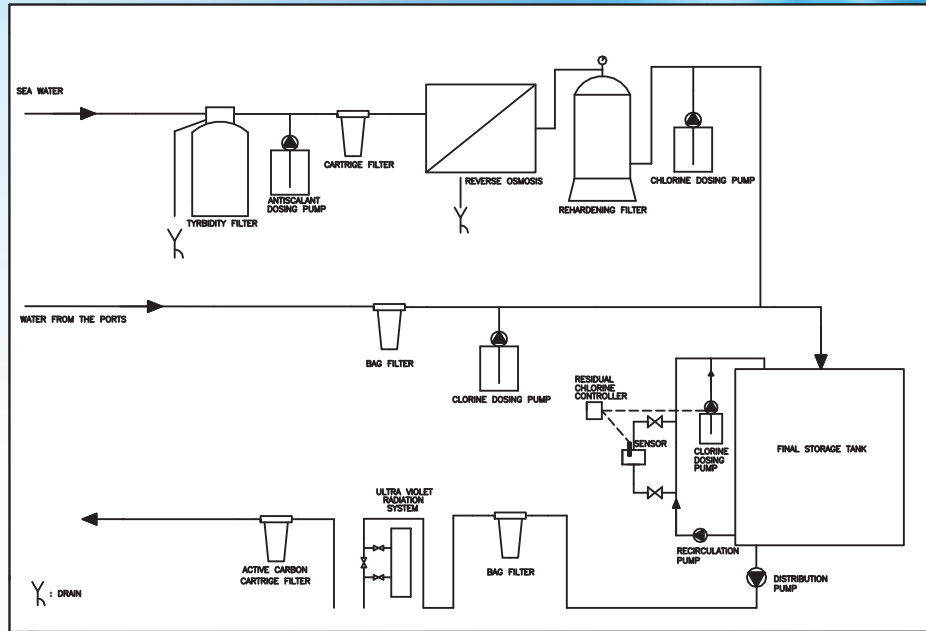
MODEL	MAX PRODUCTION (m ³ /24hrs)	NOMINAL POWER (kw)	RECOVERY %
TSW 11	2.1	2.2	9
TSW 12	4.1	2.2	17
TSW 13	5.7	2.2	24
TSW 14	6.9	2.2	29
TSW 22	10.5	5.5	20
TSW 23	14.4	5.5	27
TSW 24	17.7	5.5	34
TSW 26	22.8	5.5	42
TSW 32	38.4	18.5	20
TSW 34	64.8	18.5	34
TSW 36	79.2	18.5	41
TSW 38	120.0	18.5	43
TSW 312	158.4	37.0	41
TSW 318	240.0	55.5	43

- ✓ The actual absorbed power varies with the feed water quality (ppm TDS) and the temperature and is calculated separately each time.
- ✓ The productions are calculated for operation at 50Hz. If 60Hz frequency is available the respective productions could be higher depending on each case individually.

The production of the models above has been calculated for the typical Aegean Sea water of TDS=42.500ppm and temperature 18°C. For other seas and oceans the productivity and recoveries will be different. Please refer to your nearest **TEMAK** dealer.



TYPICAL FLOW CHART OF THE WATER TREATMENT IN SHIPS



FURTHERMORE...

- ✓ The core of water treatment in the marine industry is the reverse osmosis unit. It is the part of the treatment where the desalination of the sea water takes place.
- ✓ In all of our designed marine R/O units, we have considered the required space for installation so that the installed system can fit in the available space of your boat.

ON REQUEST

- ✓ Full automation of the systems.
- ✓ Appropriate pretreatment for highly contaminated sea water (ports).
- ✓ Instrumentation's output signal transmission to a control room for supervision from a distance.
- ✓ Custom made desalination plants, designed for the customer's special needs concerning the quantity and quality of the product water, as well as the infrastructure available.

TEMAK'S ADVANTAGES

- ✓ Customized solutions to fit in the space available
- ✓ After sales support-excellent cooperation with the client.
- ✓ Many years of experience / know-how on the application /experienced and trained personnel.
- ✓ Undertaking of rebuildings and of existing systems' upgradings.
- ✓ Highest quality materials, specially selected for sea water applications.
- ✓ Certified equipment, constructed under ISO 9001:2000 standards.



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