一、制淡装置 / 造水机 Fresh Water Generator, FWG-10

1. GENERAL 总则

Based on the general design scheme, the Fresh Water Generator which mainly consists of evaporating and condensing chambers, ejector equipped for vacuum, as well as relevant accessories for the system. The sea water pump is to be in loose supply.
按照常规的设计方案，造水机主要包括以下部分：蒸发腔、冷凝腔、喷射泵和相关的附件。海水泵为散供。

Furthermore the whole control system is to be designed as maker standard in according to our design purpose. Subject Salinometer is exclusively composed by maker, the design scheme concludes with temperature compensation.
此外，整个控制系统由厂家标准设计。标题项目包含的盐度计也为厂家自行设计，设计方案包括温度补偿。

The system designed with roughly crude sea condition. That is for 32 ^{0}C sea water and 75 ^{0}C cooling water temperature. Under such circumstance, the unit can reach distillate production capacity of 10 t/d with a sea temperature of 32 ^{0}C. Each unit consists of a condenser and a heater installed in a same chamber.
系统按照设备处于恶劣的海水环境状态下设计。32 ^{0}C 的海水作为冷却源，75 ^{0}C 缸套水作为热源。在此情况下，制淡装置用 32 ^{0}C 的海水作为制水源，可达到制得 10t/d 的蒸馏水量。装置的蒸发器和冷凝器被设计布置在同一腔体内。

2. TECHNICAL SPECIFICATION 技术说明

Theory description: 原理
The sea water enters the plant at the condenser, flows through the condenser. Then a little quantity is fed into the evaporating chamber. The remainder quantity of sea water fed the brine/air ejector, where brine and air is take off, and was discharge overboard.
海水流经单元的冷凝器，其中较少数量的海水进入蒸发器，其中一部分蒸发，其余大部分的海水被喷射泵排出舷外，同时带走盐雾。

The pressure inside the chamber is less than atmosphere (vacuum), in this way the boiling temperature is lower than 45 ^{0}C. The vapor arise from the brine level in the plate heat exchanger, flows through the demister where atomized brine in the vapor is separated and pure steam condensers to distillate in the condenser.
由于喷射泵的作用，腔室内的压力远低于大气压（真空），这样水的沸腾温度低于（45 ^{0}C）。在板式热交换器上，海水蒸发后蒸汽流经去雾器，蒸汽中的盐雾被