

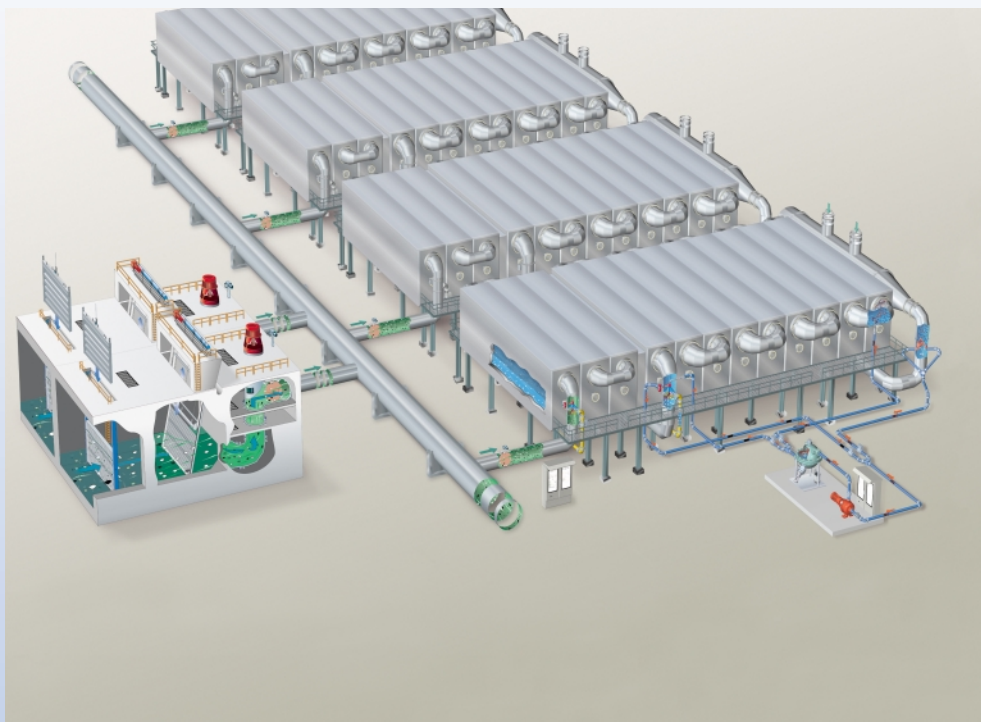
# IN-TA-CT<sup>®</sup>

Seawater Desalination (MSF)



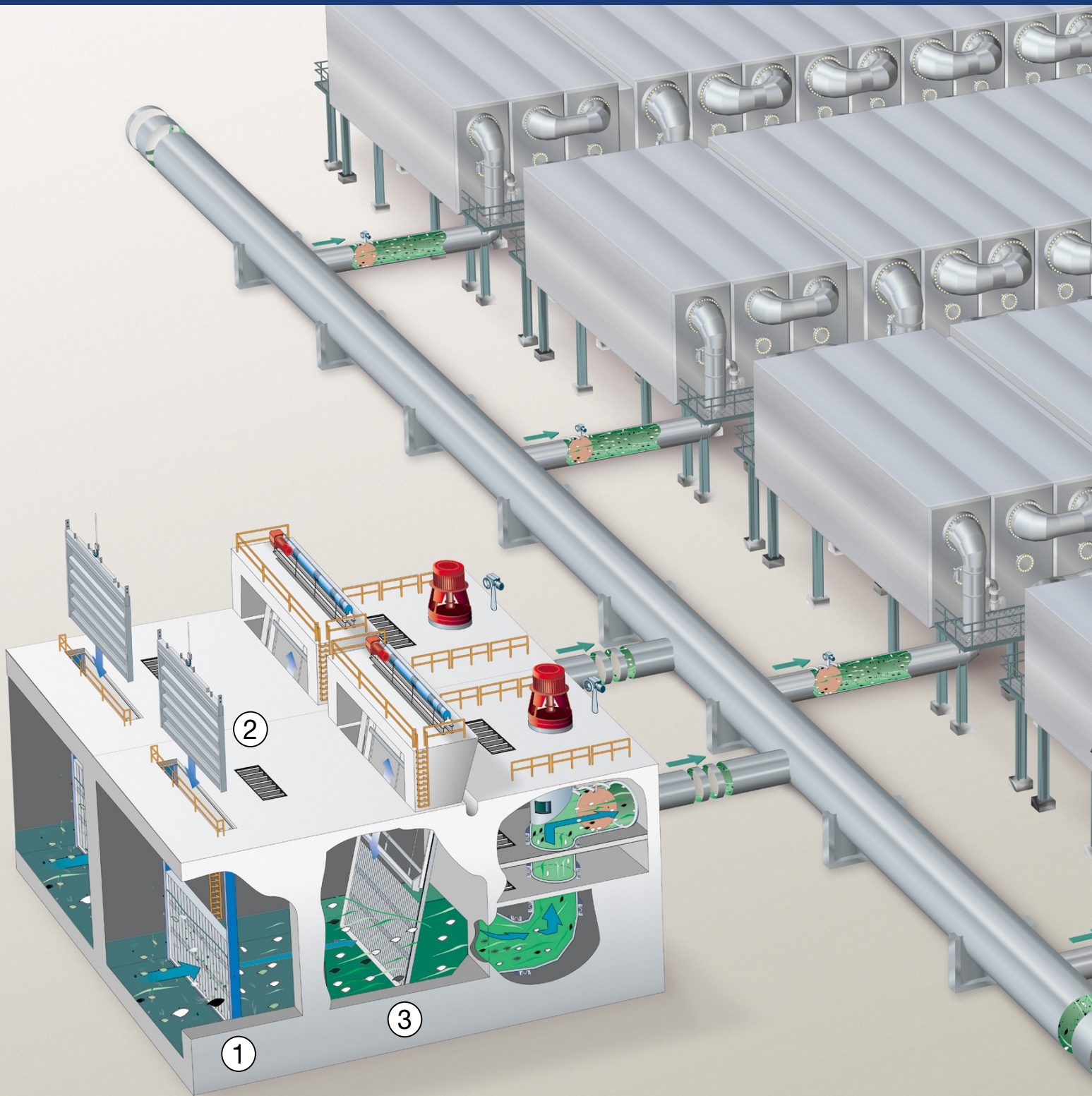
Fields of Application

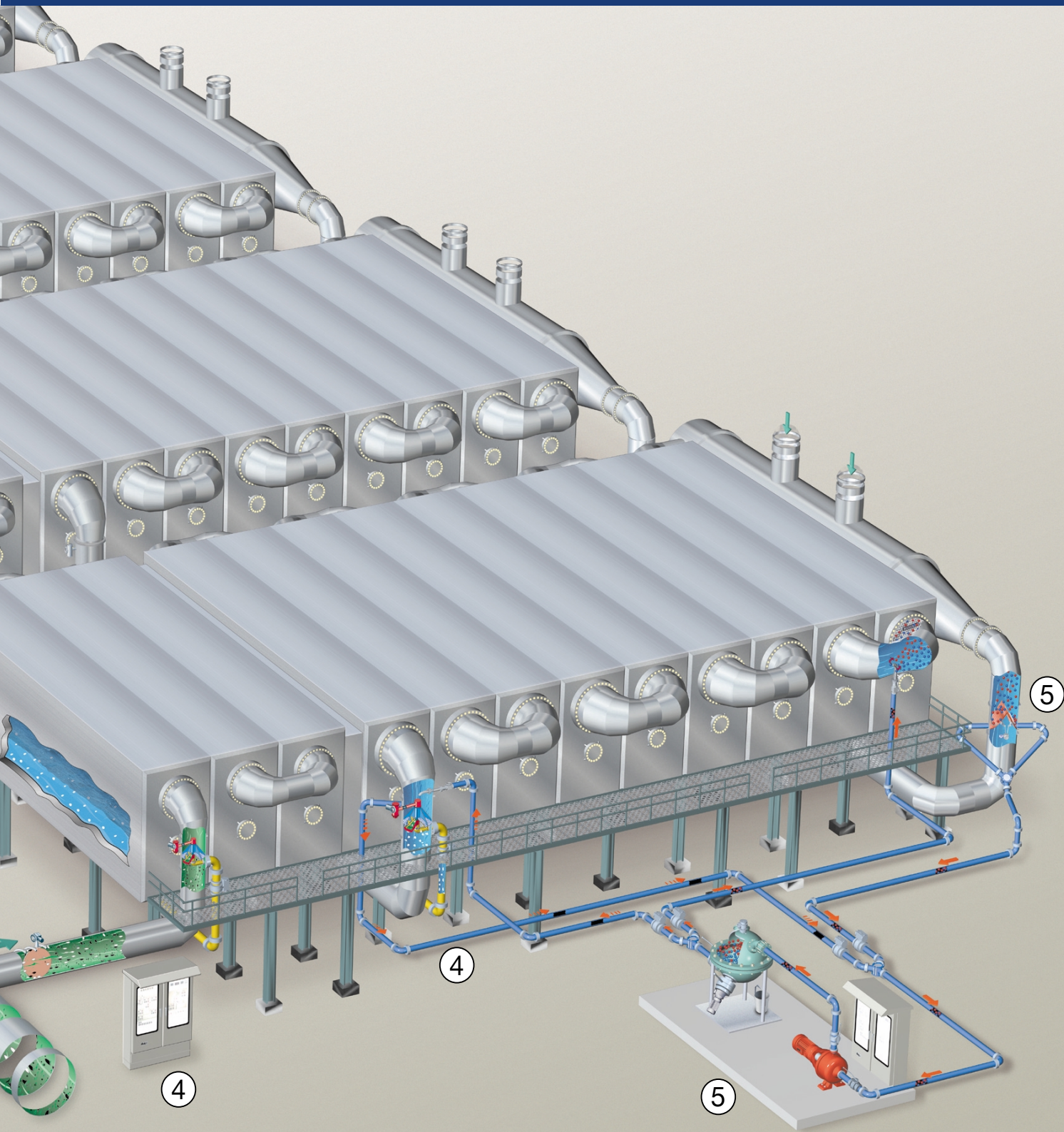
1



## **IN-TA-CT® in Seawater Desalination according to the MSF Principle**

- ① Coarse Bar Screens
- ② Stop Logs
- ③ Skip-raked Fine Bar Screens
- ④ High Performance Debris Filter, Type PR-BW 800
- ⑤ TAPROGGE System







## **IN-TA-CT® in Seawater Desalination according to the MSF Principle**

The major part of the drinking water of the world produced from seawater is generated according to the MSF principle (Multi-Stage-Flash Evaporation). Salt water is taken from the sea and, in evaporator stages connected one after the other, is separated into distilled water and highly concentrated brine.

In addition to the requirement to protect the water pumps from coarse debris and the evaporator tubes from impairment due to macro fouling, the solution to micro fouling problems, particularly the precipitation of hardness-causing salts (scaling), resulting from the high temperatures in the evaporators, constitutes a major problem. Solving this technical problem will ensure optimum efficiency of the process of drinking water production. The modular components of IN-TA-CT® offer a comprehensive solution - effectively and at highest availability:

- Lean systems for water extraction which may be executed as single-stage or multi-stage systems (the latter is represented here), are the first step according to IN-TA-CT®. They serve as pump protection. In contrast to earlier solutions, IN-TA-CT® does not require travelling band or drum screens in the pre-screening stage because this task is accomplished much more effectively and better by high-performance filters installed downstream. The result is that both the cost of the civil construction and the cost of mechanical components is greatly reduced. Additionally, the footprint of the entire pre-screening is much smaller with IN-TA-CT®.
- TAPROGGE high-performance filters are of double importance - firstly as a protection for the evaporators of the heat rejection section from obstructions by fouling carried in by the seawater, and secondly in the make-up water circuit for filtering scaling films chipped off. This concept enables maximum availability to be achieved.
- TAPROGGE Systems for continuous cleaning of evaporator tubes serve primarily for the prevention of scaling films which impair the heat transfer. That is why they are applied - independently - in the heat rejection section as well as in the heat recovery section where they increase the efficiency and reduce the cost in terms of water chemistry.

IN-TA-CT® is ideally complemented by IN-TA-S®, TAPROGGE's integrated service system.



Postal address:

**TAPROGGE Gesellschaft mbH**  
58292 Wetter  
Germany

Company address:

**TAPROGGE Gesellschaft mbH**  
Schliemannstraße 2-14  
58300 Wetter  
Germany

Tel.: +49 (0)2335 / 762-0  
Fax: +49 (0)2335 / 762-245

E-Mail: [info@taprogge.de](mailto:info@taprogge.de)  
Homepage: <http://www.taprogge.de>

© TAPROGGE Gesellschaft mbH. All rights reserved.  
TAPROGGE®, IN-TA-CT®, IN-TA-S® and TAPIS® are  
registered trademarks of TAPROGGE Gesellschaft mbH.