

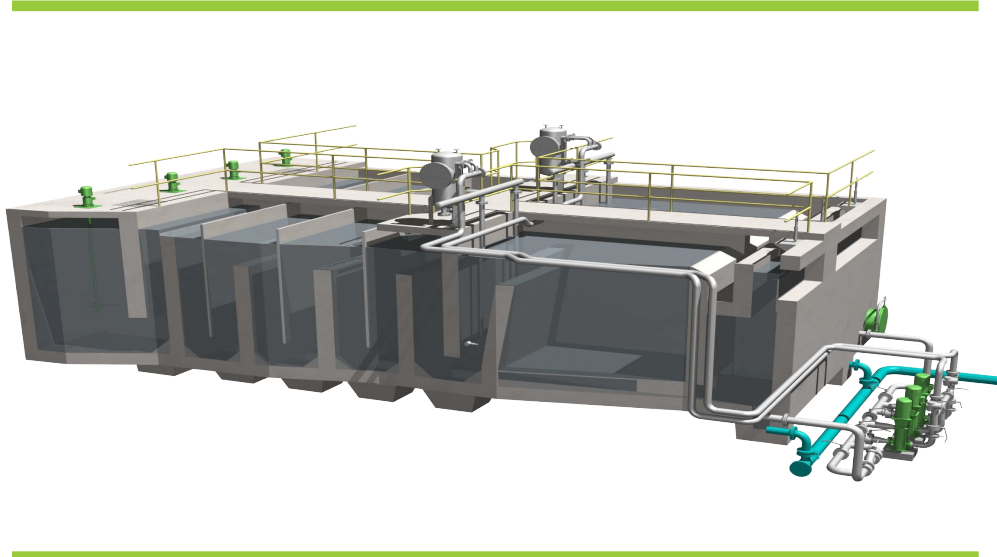


Seadaf™

(RICTOR process)

seawater clarification through rapid flotation

o **desalination**



performance

increase quality of pretreatment to optimize the global productivity of the installation

economy

less frequent need for washing lowers water consumption

potential flow rate up to

4 times superior compared to filters

▶ **optimize pretreatment productivity before desalination**

▶ **a compact clarification solution that allows higher flotation speeds and reduced flocculation time that replaces the first stage of filtration**

o Seadaf™ is an air flotation system for clarifying seawater.

o Its unique design allows the treatment of very large volumes of water.

Seadaf™ technology

Seadaf™ is adapted to the clarification of seawater presenting occasional peaks in suspended solids and algal bloom.

a patented perforated floor system:

The coagulant and raw water to be treated are piped into the coagulation zone to neutralize the colloidal loads present in the water. Once their loads are neutralized, the colloids agglomerate to form floc particles in the hydraulic flocculation zone.

These solid particles agglomerated within the water are then sent to the flotation zone where micro bubbles are diffused. The flocs attach to the air bubbles and float to the surface forming a thick bed of sludge that is removed using overflow troughs. A patented, perforated floor system promotes formation of a bubble blanket, which supports operation at high velocities.

| | Seadaf™ | |
|----------------------------------|-------------|-------------|
| maximum speed of circulation (*) | 30m/h | 40m/h |
| flowrate in m ³ /h | 200 - 2 700 | 270 - 3 500 |
| time required for flocculation | 5 - 10 min | |

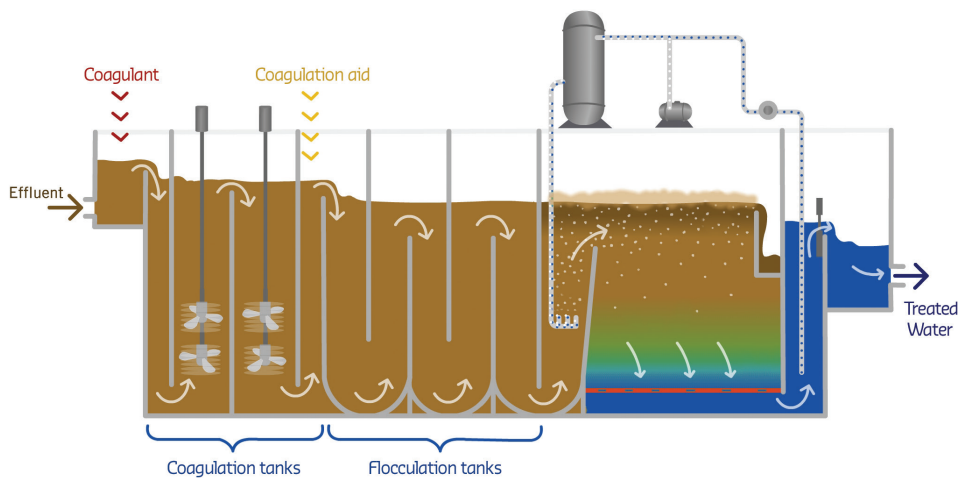
(*) depending on water quality

what it can do for you

- **flexibility of installation:** a compact product that requires less floor space.
- **performance:**
 - able to support greater circulation speeds and treat large volumes of water for the feed of reverse osmosis;
 - a flexible product that supports turbidity (algae peaks or suspended solids);
 - no need for a wash cycle means water loss is reduced to 1%.
- **simplicity of operation and maintenance:**
 - instant start-up and shutdown without special precautions;
 - very little electro-mechanical equipment in contact with seawater due to hydraulic reactor flocculation.

among our references

- Barcelona, SPAIN (200 000 m³/d capacity)
- Al Dur, BARHAIN (218 000 m³/d capacity)
- Minera Escondida, CHILE (45 000 m³/d capacity)



contact

SUEZ
Treatment Solutions
innovation.mailin@degremont.com
www.degremont.com