

Seadaf™

(RICTOR process)

SEAWATER CLARIFICATION THROUGH
RAPID FLOTATION



DESALINATION

OPTIMIZE PRETREATMENT PRODUCTIVITY BEFORE DESALINATION

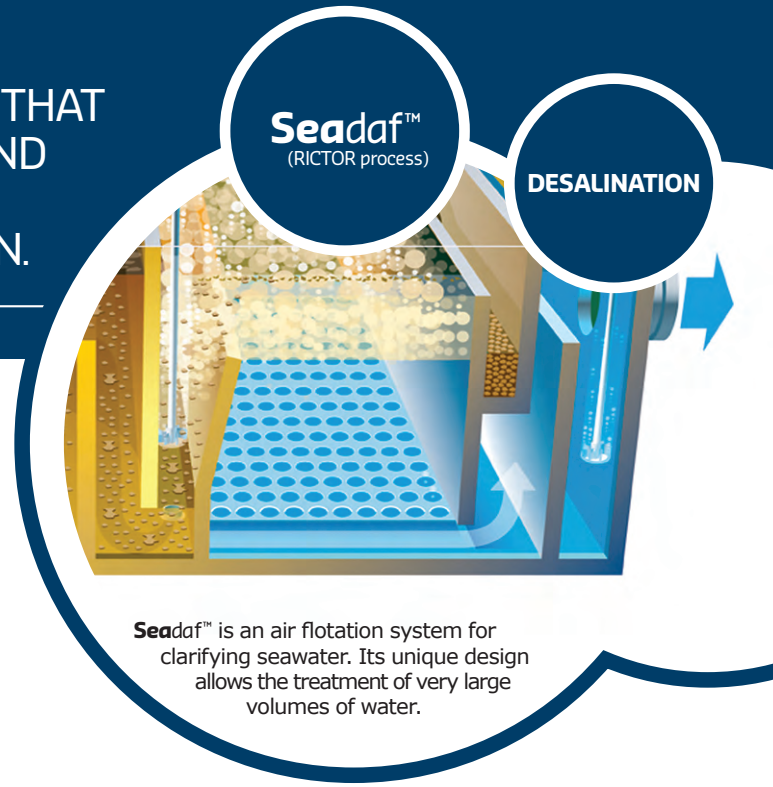
+ **PERFORMANCE**
Increase quality of pretreatment
to optimize the global productivity
of the installation

+ **ECONOMY**
Less frequent need for washing
lowers water consumption



INNOVATION

A COMPACT CLARIFICATION SOLUTION THAT ALLOWS HIGHER FLOTATION SPEEDS AND REDUCED FLOCCULATION TIME THAT REPLACES THE FIRST STAGE OF FILTRATION.



Seadaf™ is an air flotation system for clarifying seawater. Its unique design allows the treatment of very large volumes of water.

KEY FIGURE:

Potential flow rate up to 4 times superior compared to filters.

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Seadaf™ TECHNOLOGY...

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

	Seadaf™	
Maximum speed of circulation (*)	30 m/h	40 m/h
Flowrate in m ³ /h	200 - 2,700	270 - 3,500
Time required for flocculation	5 - 10 min	

(*) following water quality

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.

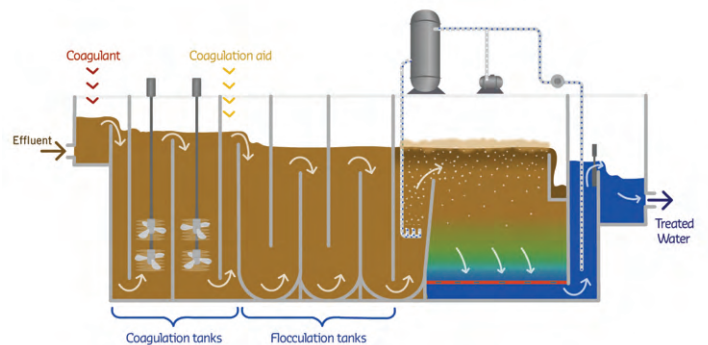
A patented, perforated floor system promotes formation of a bubble blanket, which supports operation at high velocities.

AMONG OUR REFERENCES:

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

...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



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