

# Aquadaf TM (RICTOR process)

surface water clarification through rapid flotation with hydraulic flocculator

odrinking water



## savings

reduced consumption of reagents

#### environment

greater water savings ans resource preservation

70% space gain compared to a conventional installation using flotation

- clarify surface water with a simplified engineered integration
- a compact clarification solution, allowing higher flotation rates and reduced flocculation time
- Aquadaf™ is a high-speed dissolved air flotation system particularly suited to the clarification of surface water generally of low-turbidity and subject to seasonal variations.
- Dissolved air flotation is a particularly efficient treatment system for eliminating low-density particles pollutants.



### **Aquadaf** <sup>™</sup> technology

Aquadaf<sup>™</sup> is ideal for clarification of low-load water experiencing occasional peaks of turbidity.

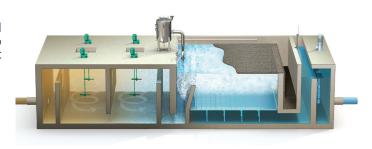
Retention time is reduced to 5 minutes: the coagulant and the raw water are introduced into the coagulation zone to neutralize the colloidal particles present in the water. Once their loads are neutralized, the colloidal particles agglomerate by a system of mechanical (MF models) or hydraulic (HF models) agitation to form floc particles in the flocculation zone.

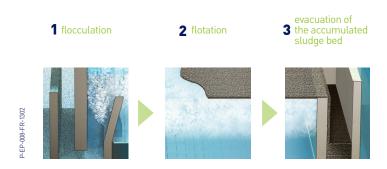
These solid particles, agglomerated within the water, are then sent into the flotation zone where micro bubbles are dispersed. The flocs attach to the air bubbles and float to the surface forming a thick bed of sludge that is then removed using overflow troughs. The patented, perforated collection floor then creates a bubble blanket, which allows the system to function at higher flotation velocities.

	Aqua <b>daf</b> ™	
	MF models	HF models
flotation velocity	30m/h	40m/h
flow in m <sup>3</sup> /h	200 - 2 700	270 - 3 500
minimum coagulation/ flocculation time	12 -15 min	8 - 10 min

#### what it can do for you

- saves space and limits nuisance: Aquadaf™ is a compact product with a reduced footprint and limited height (2.5m to 4 m).
- versatility, economy and respect for the environment: Aquadaf™ is a flexible product for the treatment of cold water and/or surface water with turbidity levels up to 200 NTU. Most of the time, the use of polymers is not necessary.
- simplicity of operation and of maintenance:
  - instant start-up and shutdown without special precautions;
  - visibility of treatment steps;
  - few mechanical components.





#### among our references

- Haworth, NJ, USA (590,000 m³/d capacity)
- Gatineau, CANADA (45,000 m<sup>3</sup>/d capacity)
- La Segarra, SPAIN (24,000 m<sup>3</sup>/d capacity)

#### contact

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