



Global water treatment solutions

FLOTOFILTER® DAFF* solution for large drinking water & tertiary treatment

KWI Group is one of the pioneers of Dissolved Air Flotation (DAF) technology. **Our DAF range includes standard models as well as custom designs to meet all customer requirements.**

KWI is not only an equipment manufacturer, but provides also **complete solutions for water treatment.** Today, it is a member of an international companies Group.

FLOTOFILTER was developed based on the KWI experiences collected with the Sandfloat BP and the Klaricell installations. The new FLOTOFILTER implements the same **combined clarification/filtration technology** as the previous circular units, but the design is **adapted to rectangular concrete tanks and large flowrates.**

AN INNOVATIVE CONCEPT

FLOTOFILTER performs a **two-stage clarification process in one single tank:**

DAF CLARIFICATION (ideal to remove SS)



Single or double granular media filtration
(achieves excellent filtered water quality)



A combination of 2 complementary water purification technologies!

Continuity of Service

1. The FLOTOFILTER technology is used in **multiple cells** in order to provide **continuous operation of the plant.**
2. **Specific diffusers**
The pressurisation is made with clarified water. The pressure relief is made through special pressure relief diffusers generating very fine bubbles. Each one of these diffusers can be disassembled and removed individually. **This concept allows inspection and cleaning without interrupting the UNC BF clarifier operation!**

MAIN APPLICATIONS

Drinking or industrial water production

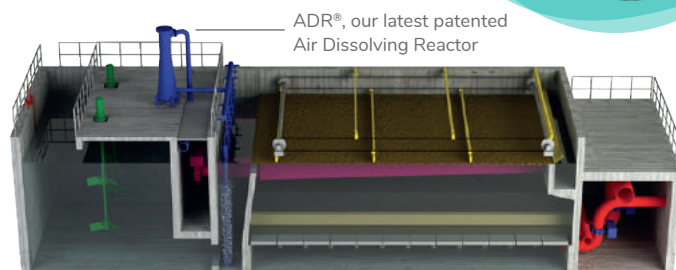
First step of clarification of large fresh or sea water flows, including coagulation and flocculation processes.

Tertiary treatment

For hard COD and phosphorus removal.

KEY FEATURES AND BENEFITS

- Turbidity less than 0.5 NTU
- High hydraulic load: 10 m³/(m².h) (filtration)
- Algae removal efficiency: up to 98%
- High sludge concentration: max. 3% of solid content, with low chemical consumption
- **Smaller footprint and less piping & instrumentation than conventional DAF + media filter**
- Suitable for revamping existing WWTPs



ADR®, our latest patented Air Dissolving Reactor

FLOTOFILTER®

*DAFF: Dissolved Air Flotation unit + Filter

■ Customised design

- Flocculation:** 1 or 2 compartments with 1 or 2 mixers/compartment.
- Pressurisation:** 2 types of dissolving devices can be used:
- **ADV: Air Dissolving Vessel**
Suitable for very large flow (over 500 m³/h per unit).
Very competitive for seawater desalination (ebonised mild steel construction).
 - **ADR: Air Dissolving Reactor**
The largest unit can pressurise up to 200 m³/h flow in only 16 s retention time.
The saturation efficiency can be as high as 80% if required.
- Filtration:** 1 or 2 media filters: sand only or anthracite/sand.
- Floated sludge removal:** 2 possible ways:
- **Hydraulic desludging**
Automatic outlet weirs.
 - **Surface scraper desludging**
Fully non-metallic components to be seawater resistant.
Highly mechanical and UV resistant synthetic materials.

Construction
Multiple concrete tank



■ Flotofilter® range

TYPE	MAXIMUM INLET FLOW* (m ³ /hour)	SCRAPER POWER (kW)	FILTRATION AREA SIZE LxW (m)
FLF 70	730	0.25	11 x 6
FLF 80	860	0.25	12 x 6.5
FLF 90	1030	0.25	12 x 7.8
FLF 100	1080	0.25	12 x 8.2
FLF 110	1190	0.25	12 x 9

*The maximum flow includes recycle flow and depends on SS loading and on the application.

KWI specialists have vast expertise and experience ranging from engineering to building and commissioning, and from investment to operation.

Let's work together to make your project a success!



Global water treatment solutions

www.kwi-france.com
contact-fr@kwi-intl.com

Member of the **SafBon** Group

KWI France
Savoie Technolac
Bâtiment Modul A
27, allée du lac d'Aiguebelette - BP 353
73372 Le Bourget-du-Lac cedex
Tel: +33 (0)4 79 60 80 24 - Fax: +33 (0)4 79 60 85 67

