

TECHNICAL CHARACTERISTICS

FLUIDIFIX® MODEL FL 1/6 FL 6/12 FL 12/18 FL 18/24 FL 24/36 FL 36/48

Treatment capacity	1 to 6	6 to 12	12 to 18	18 to 24	24 to 36	36 to 48	PE
Nominal hydraulic load	900	1800	2700	3600	5400	7200	l/d
Nominal pollution load (COD)	0.36	0.72	1.08	1.44	2.16	2.88	kg COD/d
Nominal pollution load (BOD ₅)	0.72	1.44	2.16	2.88	4.32	5.76	kg BOD ₅ /d
Nominal TSS load	0.54	1.08	1.62	2.16	3.24	4.32	kg TSS/d
1 PE (person equivalent) : 150 l/d of wastewater - 120 g COD/d - 60 g BOD ₅ /d - 90 g TSS/d - 12 g N-NH ₄ /d - 4 g Pt/d							

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Primary settling volume	2 x 1.05	2 x 1.80	2 x 2.5	2 x 3.2	2 x 4.2	2 x 5.2	m³
Biological volume	1.05	1.8	2.5	3.2	4.2	5.2	m³
Secondary settling volume	1.05	1.8	2.5	3.2	4.2	5.2	m³
Total package plant volume	4.2	7.2	10.0	12.8	16.8	20.8	m³
Tanks, extension sets & covers	4	4	4	4	4	4	Units
Tanks Length (nbre tanks x L)	4 x 0.75	4 x 1.35	4 x 1.85	4 x 2.13	4 x 2.38	4 x 2.38	m
Tanks width	1.19	1.15	1.15	1.38	1.60	1.60	m
Tanks height	1.70	2.05	2.05	2.02	2.02	2.29	m
Manhole access covers	Ø 400	Ø 600	Ø 600	Ø 600	Ø 600	Ø 600	mm
Piping (inlet / outlet / vent.)	Ø 100	Ø 110	Ø 110	Ø 110	Ø 110	Ø 110	mm
Air diffusers	1	2	3	4	5	6	Units
Air compressor	60	80	120	160	200	400	l/min
Sludge extraction pump	JUNG OXYLIFT						

FLUIDIFIX® INSTALLATION VERSIONS

BURIED Installation - DRY SOIL conditions						
FLUIDIFIX DS (STANDARD)	FL 1/6 DS	FL 6/12 DS	FL 12/18 DS	FL 18/24 DS	FL 24/36 DS	FL 36 /48 DS
Backfill depth / inlet pipe (max.)	0.50 m	0.61 m	0.61 m	0.63 m	0.63 m	0.63 m
BURIED installation - WET SOIL conditions						
FLUIDIFIX WS (REINFORCED)	FL 6/12 WS	FL 12/18 WS	FL 18/24 WS	FL 24/36 WS	FL 36/48 WS	
Backfill depth / inlet pipe (max.)	0.61 m	0.61 m	0.63 m	0.63 m	0.63 m	
Aquifer level / bottom of the tank (max.)	1.52 m	1.52 m	1.64 m	1.64 m	1.64 m	
ABOVE GROUND Installation						
FLUIDIFIX AG	FL 1/6 AG	FL 6/12 AG	FL 12/18 AG			

FLUIDIFIX® SUPPORT SERVICES

- L'Assainissement Autonome provides :
 - A standard design & engineering package
 - An Operation and Maintenance manual
- L'Assainissement Autonome may provide optional services :
 - Custom-project design & engineering
 - Detailed process design and engineering
 - Retrofit design and engineering package
 - Installation assistance and/or supervision
 - Commissioning services
 - Operation and maintenance training
 - Operation and maintenance services
 - Troubleshooting assistance



Fluidifix FL 1-6



Fluidifix FL 1-6

Fluidifix®
A brand from



L'Assainissement
autonome



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Fluidifix®

CE
12566-3



The Advanced Compact Wastewater Package Plant

A Modular Fluidized Bed Technology (Capacity of 1 - 48 PE)



L'Assainissement
autonome

FLUIDIFIX® is the Advanced Wastewater Treatment Package Plant.
For Residential, Commercial and Municipal buildings or facilities.

MORE

- **CE Certification EN 12566-3** : Tested by PIA (notified body N° 1739) in Aachen (Germany)
- **Designed** and built according to the **highest European and German Standards**
- **Secured High Performance** (under low, nominal and variable pollution loadings)
- **Designed and tested for permanent or intermittent occupations**
 - Single and multi-family houses, weekend and holidays dwellings,
 - Hotels, lodges, condominiums, Public buildings and facilities
 - Existing wastewater plants upgrade
 - Temporary camps and emergency settlements
- **Plug & Play package plant**
- **"All road" for Challenging Site Conditions** : Restricted areas, slopes & rocky areas, beneath roads & slabs, under shelters, aquifer presence, etc.
- **Designed for small properties, landless buildings**
Fluidifix FL 1/6 even transportable through small stairs, small doors to install in cellars, barns, garages
- **Optimized footprint and light-weight** for properties with no or restricted accessibility, air transportable
- **Buried plant** (all models)
- **Above ground plant** (only for FL 1/6 AG, FL 6/12 AG and FL 12/18 AG models)
- **Optimized civil engineering & earthworks costs and land savings**
- **Modular multi-tanks layout**
- **Manhole extension sets** rotomolded with the tanks, watertight and adjustable
- **25-year life tank** - Premium design and reinforced HDPE structure
- **Durable plant** - Recyclable 100 %
- **Green Plant** with solar or wind Energy Sourcing
- **Easy, Reliable and Economical** :
 - To install, to operate, to control and maintain
 - To disinstall, move and reuse for best investment return



FLUIDIFIX® package plant includes a primary settling dual-tank, a fluidized bed reactor and a final settling tank

Domestic raw influents are **pretreated** in the **primary settling tanks**. The tanks design and reinforced structure give the plant a **greater resistance** (than conventional tanks) even in the presence of an aquifer.

The **tanks and extensions are roto-molded together and watertight**. Inlet access traps and outlet access manholes ease the maintenance of the plant. The primary settling tanks outlet is equipped with a **pre-filter brush, easy to remove and clean**.

The **biological reactor is gravity fed by the pretreated influents**. The FLUIDIFIX® process and performances rely on the **fluidized bed media and tank design**. It allow **best performances** in terms of COD, BOD, TSS and ammonia removal **even in low loading and variable loading conditions**, with the Fluidifix Fluidized Bed technology. The biological reactor is equipped with EDPM air membrane diffusers and air piston compressor(s).

FLUIDIFIX® package plant has been designed to treat domestic wastewaters prior to discharge in natural outfalls, to infiltrate in natural soils or to feed a water reuse post treatment.



• PRETREATMENT

- Enhanced solids and grease retention
- Higher sludge digestion and flow equalization
- Inlet / outlet access traps & manholes on every tank
- Removable and washable prefilter

• FLUIDIZED BED REACTOR

- An advanced **fluidized bed biological reactor** design
- A **fluidized media** with a **higher active surface** for best performances
- An **efficient and low maintenance air diffusion** technology
- A **reliable air compressor**
- An **optimized energy** consumption

• FINAL SETTLING TANK

- A conservative settling velocity
- A multi-point sludge extraction
- A **reliable excess sludge pump**
- An optional **floating scum removal**

Process Diagram

CROSS SECTION

