

# ClearFox<sup>®</sup> Clarifier

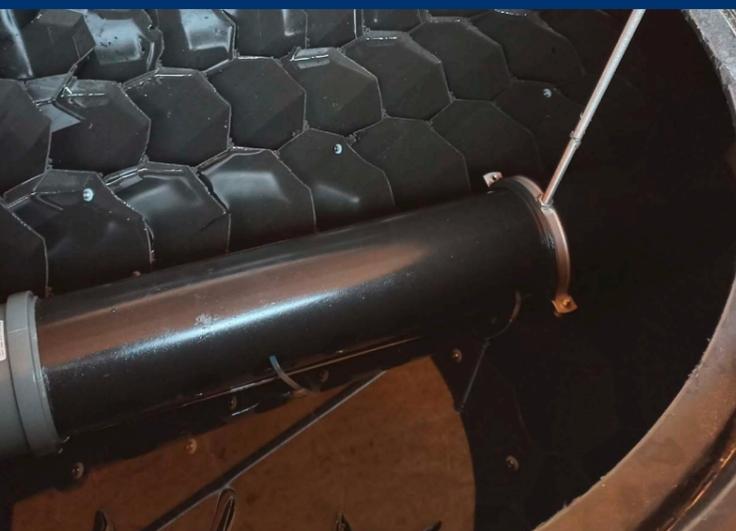
Advanced physical separation of  
sludge and solids

[clearfox.com](http://clearfox.com)



ClearFox® Clarifier is a separation process for removing particles from liquids. A clarifier is mainly used after biological treatment to clarify final effluent.

ClearFox® modular clarifier is a compact solution for efficient solid-liquid separation.



# 80%

smaller footprint than traditional settling tanks.

## ClearFox® Clarifier

### The ideal solution for industrial and municipal wastewater treatment.

#### The applications

Clarifiers handle flow rates of up to 120 m<sup>3</sup>/h in a single 40-foot container module. They ensure compliance with turbidity and TSS values in the wastewater to be discharged.

#### Industrial wastewater treatment

- Permanent or temporary solution
- Simple expansion of existing wastewater treatment plants
- Removal of solids from raw wastewater
- Improved clarification of final effluent
- Phosphorous removal from final effluent
- Temporary solutions during system maintenance

#### Municipal wastewater treatment

- Permanent or temporary solution
- Simple expansion of existing wastewater treatment plants
- Removal of TSS in untreated wastewater
- Improved clarification of final effluent
- Phosphorous removal from final effluent
- Temporary solutions during system maintenance

#### The advantages

##### Modular

Easily **expandable**

Short term or long term **leasing**

Available to **buy** or **lease-to-buy**

##### Simple maintenance

**Scalable** thanks to systems connected in parallel

**Fast installation** and **commissioning**

**Compact design**

**Corrosion-resistant materials**

**High efficiency** in pollutant removal

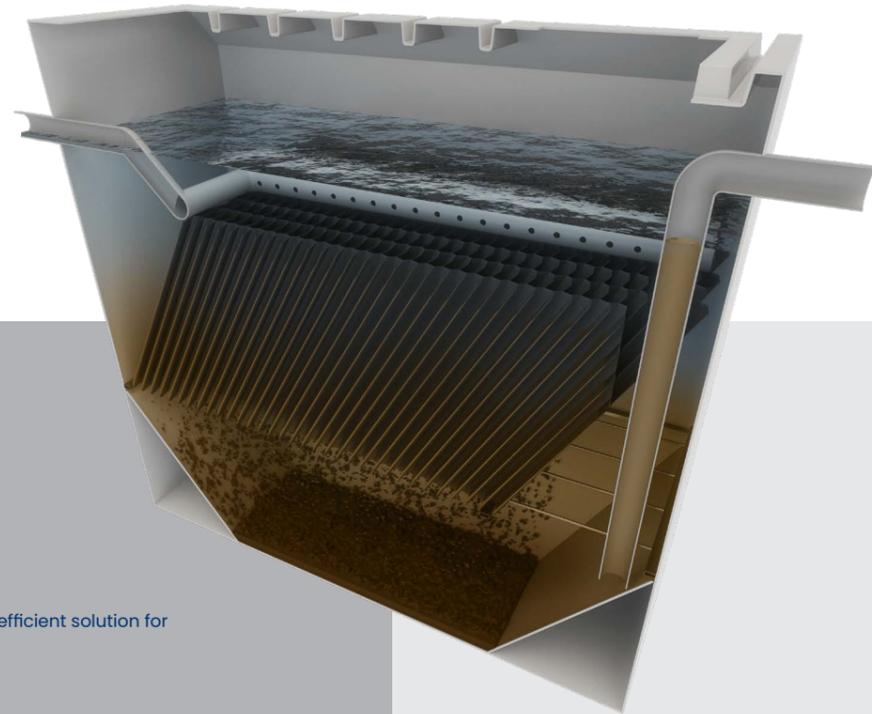
Efficient **phosphorus removal**

**Above and below ground installation**

Can be easily **combined** with other treatment modules

# ClearFox® Clarifier

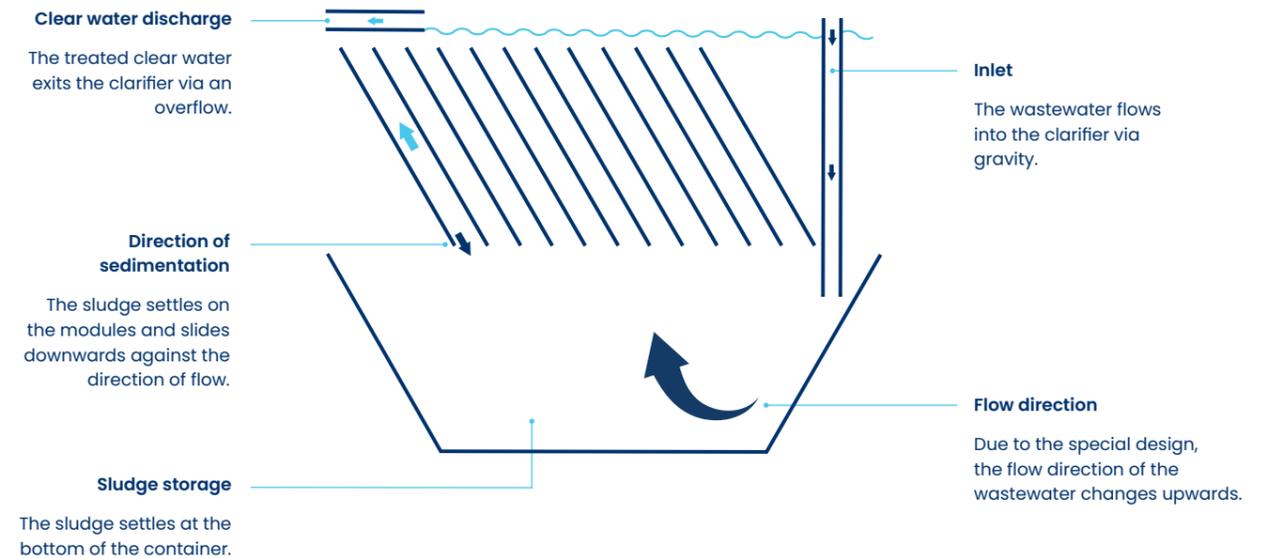
## Versatile and efficient. Just clever.



**Clarifier**  
The compact and efficient solution for solids separation

# ClearFox® Clarifier

## The customised and reliable separation process



### Containerized

#### The mobile solution for all applications

Plug & play solutions in containerized modules for above-ground installation.

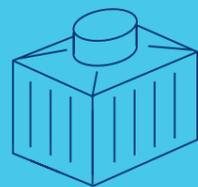
ClearFox® containerized clarifiers are available in 20' or 40' versions.

Depending on the requirements, they can be placed in a row, parallel or on top of each other.



### In plastic tanks

#### The small solution



2

### In concrete tanks

#### The underground solution



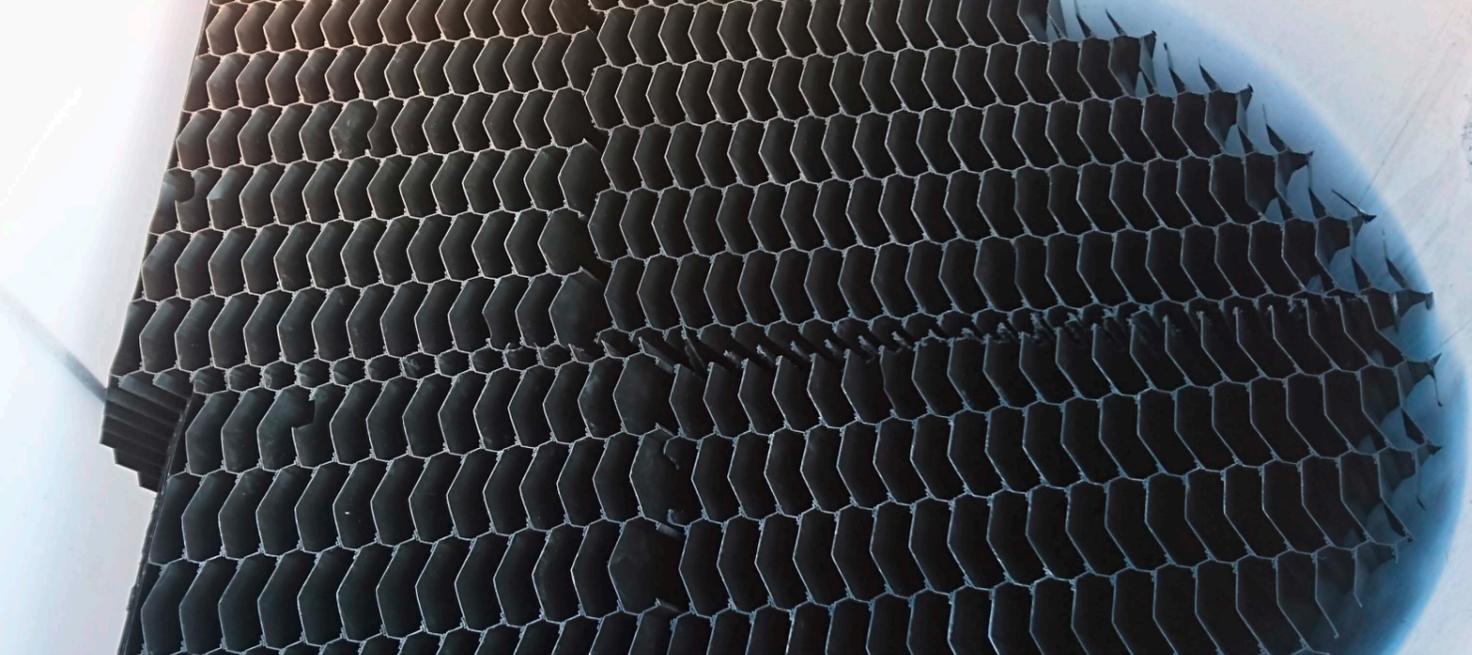
3

ClearFox® Clarifier works with a **physical process** to efficiently separate sludge or suspended solids from the clear water. By efficiently using space and accelerating the sedimentation processes, clarifiers enable **high treatment capacity in a small area**.

The lamella clarifier consists of a container into which the wastewater-sludge mixture flows and the separated sludge can collect. Above this are the inclined plates or tube settlers. The clear water outlet is located at the top.

The wastewater-sludge mixture flows into the lower container using gravity. Due to the special shape of the container, the flow direction reverses upwards. The wastewater flows upwards into the clarifier modules. Since the mud particles are heavier than water, gravity and the direction of flow work against each other. Therefore, the mud particles settle on the edge of the slats. There they slide down and collect at the bottom of the container.

A **clear water zone** forms in the upper part of the clarifier modules. The clear water flows further up and over a special overflow weir to the outlet.



**Flowrates and capacity of ClearFox® containerised clarifiers – with customisable inlets/outlets and accessories:**

	CI in a 20' Sea container		CI in a 40' Sea container
	CI 1250	CI 2250	CI 3500
Max. Flowrate	60 m³/hr		120 m³/hr
Measurements (L/W/H) in cm	90/122/171	154/122/171	243/122/171
Footprint	1,25 m²	2,25 m²	3,5 m²
Transport weight	150 kg	190 kg	250 kg
Max. operating weight	1300 kg	2300 kg	3550 kg
Feeding via gravity or pressure pipe	DN 100	DN 100	DN 100
Possible outlet connection	DN 100	DN 100	DN 100



## Leasing? Of course!

All containerised clarifiers are available to lease or lease-to-buy. The leasing period can be customised between a few months and several years.

For municipal wastewater treatment plant upgrades, temporary wastewater treatment during maintenance operations, short term solutions for worker camps and construction sites – the applications are endless!

A purchase option is available at the end of the leasing period.

**We are happy to advise you!**

## Purchase? No Problem!

When you purchase a ClearFox® Clarifier, you get guaranteed process reliability for the treatment of your wastewater.

PPU Umwelttechnik GmbH tests all systems extensively before they leave the production facility.

The purchase includes comprehensive customer service, which supports the continual operation of the wastewater treatment system throughout its use.

**We are happy to advise you!**



**Do you have any questions?  
We are happy to advise you!**  
**+49 (0) 921 1511 020-0**  
**info@clearfox.com**



Further information about  
our ClearFox<sup>®</sup> Clarifier  
can be found here



#### **Innovation made in Germany**

PPU Umwelttechnik GmbH provides wastewater treatment to the private, municipal, industrial and decentralised sectors. Under the brand name ClearFox<sup>®</sup>, the company sells wastewater treatment plants produced in Bayreuth all over the world. The focus is on biological, chemical-physical and oxidising processes for wastewater treatment. PPU Umwelttechnik GmbH offers selected processes in ISO sea containers. This makes them compact, mobile, modular and available anywhere in the world within a very short time. Each containerised wastewater treatment plant is tailored to individual requirements, making each project unique.

As a general contractor, PPU takes on the planning, production and commissioning of each individual wastewater treatment plant. Every customer can count on reliable co-operation with PPU Umwelttechnik GmbH.

#### **PPU Umwelttechnik GmbH**

Carl-Kolb-Str. 6  
D-95448 Bayreuth

T +49 (0) 921 1511 020-0  
info@ppu-umwelttechnik.de  
ppu-umwelttechnik.de  
[clearfox.com](http://clearfox.com)