

# FBBR-Container

## 20ft & 40ft

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

### The advantages of the ClearFox® fixed bed container

- Plug & Play
- Fast commissioning
- Small space requirement
- Modular system, adaptable to any application
- Chemically stable materials
- Low maintenance
- Municipal and industrial waste water
- Rotating tanks without weld seam



The ClearFox® fixed-bed modules are fully equipped bioreactors in a high-quality PE tank. All equipment parts, such as aerator plates, distribution systems and the fixed-bed material in a cubic tank are part of the pre-installed standard equipment of the high-performance bioreactors.

The typical application is the reduction of carbon and/or nitrogen concentrations from any type of pre-treated (solids removed) wastewater from industrial or municipal sources.

The specific surface area of the fixed bed material depends on the concentration of the influent. Degradation is calculated for municipal/domestic concentrations; higher concentrations, as in industrial applications, result in higher performance rates. Plants in series operate

at a higher treatment efficiency, resulting in a higher degradation rate per day.



## 20ft.

Dimensions lwxh	6058x2438x2896mm
Weight	Empty: 7.5 t Operating: 38 t
Electrical power	3 kW
COD reduction (according to basic values)	100kg/d
Nitrification	10 kg/d
Hydraulic load for carbon degradation	5 m3/h
Hydraulic load during nitrification	5 m3/h
Inlet	DN 100, > 2.45m
Outlet	DN 100, 2.4m

## 40ft.

Dimensions lwxh	12116x2438x2896mm
Weight	Empty: 12 tons Operating: 60 tons
Electrical power	5.5 kW
COD reduction (according to basic values)	180kg/d
Nitrification	20 kg/d
Hydraulic load for carbon degradation	10 m3/h
Hydraulic load during nitrification	10 m3/h

## Basic values: (optimal degradation is possible under these parameters)

- Temperature: max 35°C
- Conductivity: < 10mS/cm
- pH value: 6.5-8
- C:N:P ratio: 100:5:1
- COD / BOD ratio: 2:1
- Solids content: < 0.2 g/l
- Toxic substances (biocides): Must not be contained





Prüfinstitut für Abwassertechnik GmbH

*Prüfeinrichtung des Prüf- und Entwicklungsinstituts  
für Abwassertechnik an der RWTH Aachen*



Prüfinstitut für  
Abwassertechnik  
GmbH

# Prüfbericht über die Reinigungsleistung der modularen Container-Kläranlage

**Clearfox-Festbett-Container**

PPU Umwelttechnik GmbH

**Prüfbericht-Nr. PIA2017-1510-1056**

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