

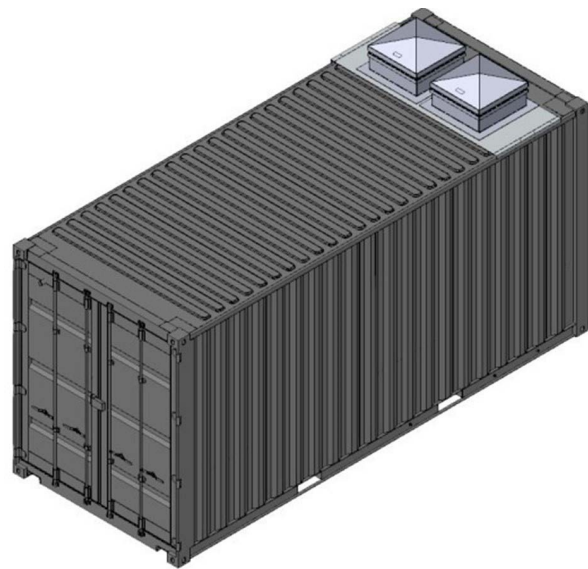
Compact module

CF-C-50

clearfox.com

Benefits for Clearfox® WWTP compact modules

- Fast startup, cost saving in installation, small footprint
- Modular system, adaptable at every application
- High performance with high quality, Made in Germany
- Flexible against underload and overload
- Industrial as well as municipal wastewater
- Stable and very robust process technology



Description:

ClearFox WWT modules are fully equipped biological treatment plants. Pretreatment such as settling tank, storage tank and buffer are not scope of delivery. They can be ordered optionally. All compounds are preinstalled in a 20ft high-cube container such as fixed bed biological treatment section and lamella separator. The system runs fully automatically operated by a control unit.

The wastewater inflow needs to be pretreated and equalized to Q20. The pretreated wastewater is pumped into the fixed bed reactor. It is equipped with aeration membranes, distributor system, blank holders and all support for positioning grid tube blocks in order to get a high-performance bioreactor for wastewater treatment. Included in the scope is a blower and airsplitters (pro rata). In order to reduce TSS a clarifying unit is connected

after the modules. Secondary sludge from the clarifier is pumped back to the client's sludge storage.

The typical application is reducing carbon and nitrogen concentration from domestically or municipally nature. The design is according to DWA guidelines, the cleaning efficiency is approved in field tests, made by external wastewater institutes (notified bodies). Test reports and certificates for static, performance, origin, DWA guidelines are available on request. Additional pretreatment needs a volume of 10 m³ (settling) plus 5 m³ (sludge storage 30 d) plus buffer volume to reduce Q10 to Q20.

Technical Specifications:

Module type	CF-C-50
Flow rate	50 m ³ /d
Flow rate Q10	5,00 m ³ /h
Flow rate Q20 into fixed bed tank	2,50 m ³ /h
Load BOD ₅	20 kg/d
Load COD	40 kg/d
Measures (l/w/h) in m	6,1/2,5/2,8
Machine house (l/w/h) in m	inside container
Weight (transport/operation)	7,0/23,0 to
Power connected	1,75 kW
Power consumption	28 kW/d (1,75 kW x 16 h/d)
Buffer	not included
Sludge storage	not included

Application:

All kinds of domestic and municipal wastewater. Influent: domestic/municipal wastewater. It also can be applied to industrial purposes. In that case the design has to be individually adjusted.

Cleaning Performance:

The wastewater is purified according to German standards for wastewater treatment. The German wastewater management regulation sets limits (up to BOD load of 60 kg/d) for
 COD 90 mg/l
 BOD5 20 mg/l
 Nitrification depending on load

Options:

There are several options applicable. Please have a look at the appropriate data sheets. Pretreatment: settling tank, sludge storage and buffer tank.

UV treatment => DO_DB_20181204_UV_treatment.pdf
 Chloride dosing => DO_DB_20181204_Chlorine Dosing Unit.pdf

See also data sheets:

DO_DB_20181204_CF-FBR inlet module+container.pdf
 DO_DB_20181204_CF-lamella-AP-tank.pdf
 on website.

Clients' Service:

According to our checklist after ordering.

Before delivery:

- Prepare a concrete foundation for positioning the container (stripes or similar; drawings available from PPU)

After positioning:

- Read owner's manual
- Connect inlet/outlet pipe
- Connect power supply
- Fill with water
- Start up by push the button on controller

