

WASTEWATER REUSE - CONTAINERISED MBR UNITS

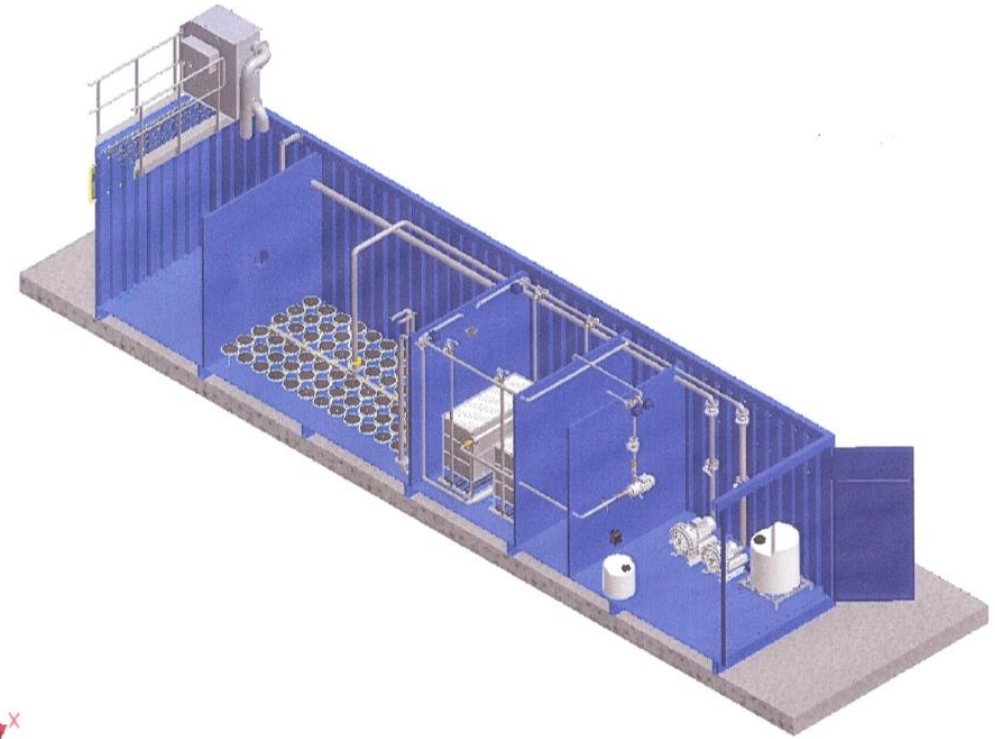
A NEW CONCEPT TO TREAT CIVIL WASTEWATERS

B&P Water Technologies manufactures a comprehensive range of "containerised" of biological wastewater treatment plants based on MBR technology.

When used with domestic wastewater, MBR processes produce effluent of high quality enough to be discharged to coastal, surface or brackish waterways or to be reclaimed for urban irrigation.

It is possible to operate MBR process at higher mixed liquor suspended solids (MLSS) concentrations compared to conventional settlement separation systems, thus reducing the reactor volume to achieve the same loading rate, and the physical barrier imposed by the membrane system provides complete disinfection of the treated effluent.

Our containerised MBR systems are built inside of metal shipping containers and are assembled and fully tested at our facility before being delivered with no need for on-site system assembly, pipe work, electrical wiring or mounting of components. The container also serves as the shipping container so there is no need for wood crating or rental of sea containers in which to transport the system to its destination.



- DESIGN DATA

Feed water specifications

COD: 600 ppm

BOD₅: 270 ppm

P_{tot}: 17 ppm

TSS: 450 ppm

TKN-N: 65 ppm

F.O.G.: 50 ppm

Effluent water specifications

COD: <100 ppm

BOD₅: < 20 ppm

P_{tot}: < 2 ppm

TSS: < 5ppm

N_{tot}: < 15 ppm

E. Choli: < 100 UFC

- STANDARD FEATURES

Feed water pre-treatment with rotary strainer

Denitrification section

Nitrification/oxidation section

Phosphorus removal agent injection

High efficiency flat sheet membranes

Permeate and sludge recirculation pumps

Local control panel with PLC

CONTAINERISED MBR -STANDARD SIZES

MODEL	CTN-70	CTN-100	CTN-150	CTN-250	CTN-500
EQ. INHAB.	70	100	150	250	500
CAPACITY M ³ /DAY	12	20	30	50	100
MEMBRANE AREA M ²	22,5	45	90	180	360
MEMBRANES	1	1	1	2	4
CONTAINERS	1	1	1	1	2
ISO CONTAINER SIZE	20 FT	20 FT	40 FT	HC 40 FT	HC 40 FT