

Bulgaria Akulite Wastewater Treatment Plant



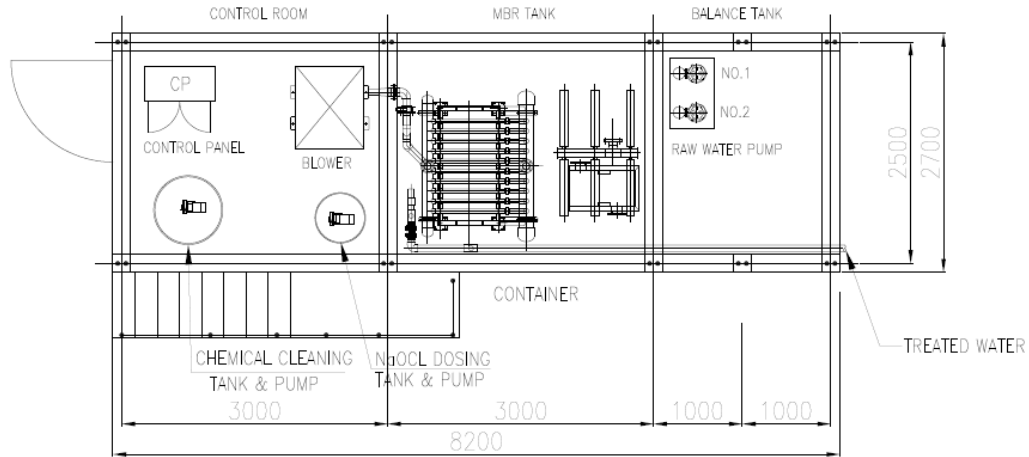
Plant Description:

- Bulgaria Akulite Sports and Training Center wastewater treatment and re-use plant.
- Plant is completely covered and sensitive to the environment and landscape.
- Effluent quality achieved meets the most stringent reuse requirements.
- The MBR contract agreement provided for the process design, specification and supply of flat sheet membrane units
- Additional services provided were M&E design assistance, inspections during installation, assistance to start-up, commissioning and membrane maintenance advice plus operator and management training

Status:	Sports Complex is expected soon to start operation.
Client:	Akulite Sports and Training Center
Commissioning:	Not yet commissioned.
Req. discharge quality:	BOD < 5 mg/l, N total <10 mg/l, zero parasites
Performance:	NA.
Brief description:	Completely covered re-use prestige plant.

MBR Atıksu Arıtma Sistemleri Ltd.
 Bağdat Cad. No: 7, Kat: 4 Kızıltoprak – İstanbul
 Tel: +(90)216 4141034- 4146035 Fax: 0216 4141344
 e-mail: asistan@tr-mbr.com
 web: www.mbraritma.com.tr

Bulgaria Akulte Wastewater Treatment Plant



Process Description:

Plant is completely covered in a steel tank.

Balance tank feeds process via fine 1mm bi-directional screen.

Single stream treatment process, has one aeration and two membrane tanks.

Treated effluent flows by gravity to the Clean Water Tank for re-use.

Odour control, at screen and inlet sections.

Plant designed to operate automatically with minimal supervision

Design Requirements

Influent average loading:

BOD	330 mg/l
COD	850 mg/l
TKN	22 mg/l
NH ₃ – N	30 mg/l
SS	300 mg/l
TDS	5,000 mg/l

Effluent standards

BOD	5 mg/l
Total N	10 mg/l
Total P	1 mg/l
NH ₃ – N	2 mg/l
SS	5 mg/l

Plant data

Maximum daily flow	100 m ³ /d
Average daily flow	50 m ³ /d
Peak flow	1.74 l/sec
MLSS membrane tank	12,500 mg/l
Membrane area	100 m ²
Sludge age	25 days
Sludge volume	6 kg/g

Current performance

BOD	<5 mg/l
COD	<50 mg/l
Ammonia	<5 mg/l
SS	<4 mg/l

MBR Atıksu Arıtma Sistemleri Ltd.

Bağdat Cad. No: 7, Kat: 4 Kızıltoprak – İstanbul

Tel: +(90)216 4141034- 4146035 Fax: 0216 4141344

e-mail: asistan@tr-mbr.com

web: www.mbraritma.com.tr