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BIO-SAMM

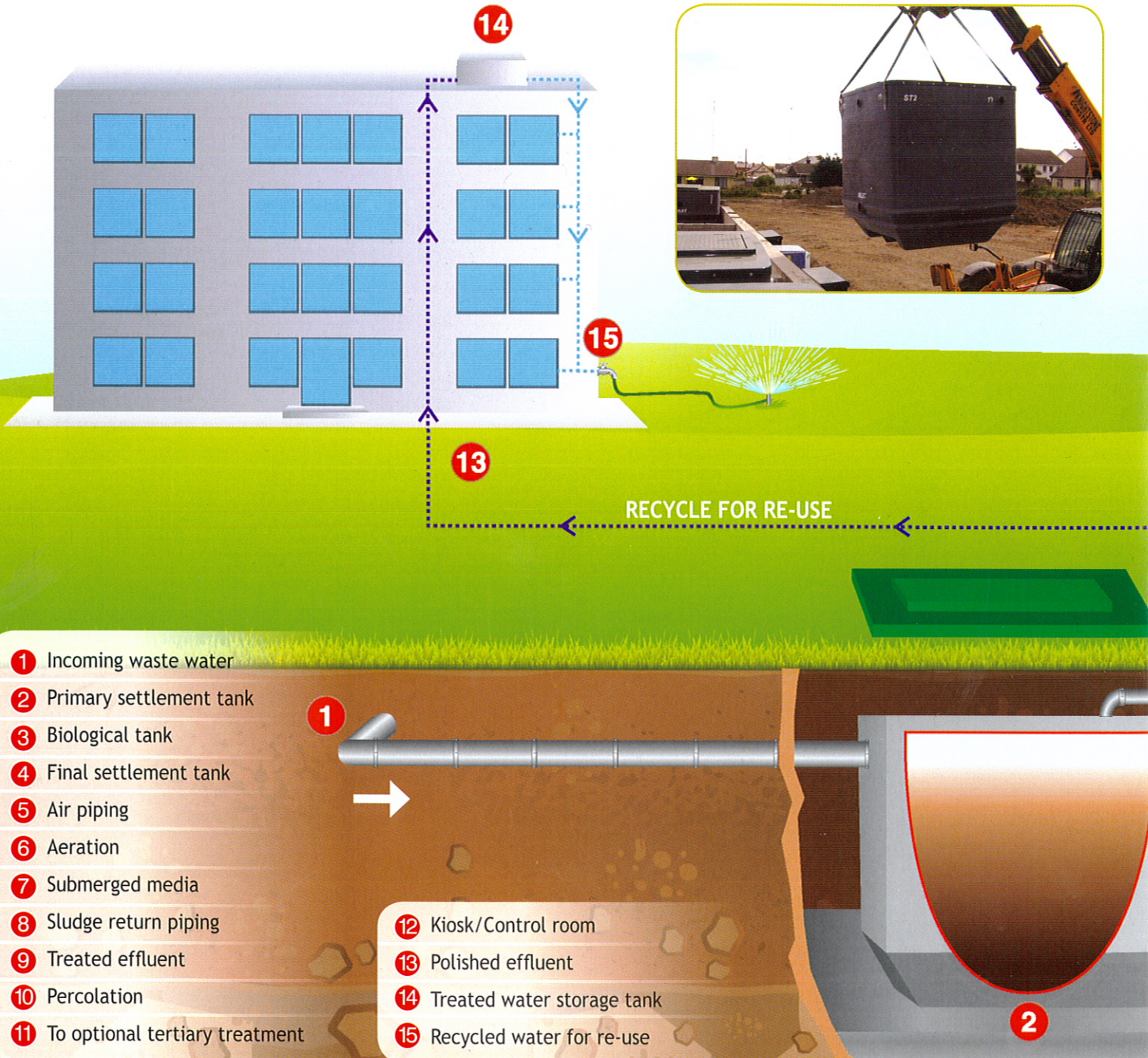
BIOLOGICAL SUBMERGED AERATED FILTER SEWAGE TREATMENT PLANTS

Onsite treatment
and recycling of wastewater



The Biosam modular wastewater treatment plant, provides a multi stage biological purification process. With very low maintenance requirements and power consumption, the Biosam provides a cost effective answer to environmental pollution problems, and wastewater recycling.

The Biosam consists of a number of modular tanks (GRP/Concrete or HDPE tanks) providing primary settlement, biological treatment and final settlement. The plants are suitably designed to promote good flow balancing, settlement of solids and sludge holding. The Biosam system can be designed to conduct tertiary treatment, de-nitrification and/or phosphate reduction to the levels expected by local authorities.





IDEAL FOR

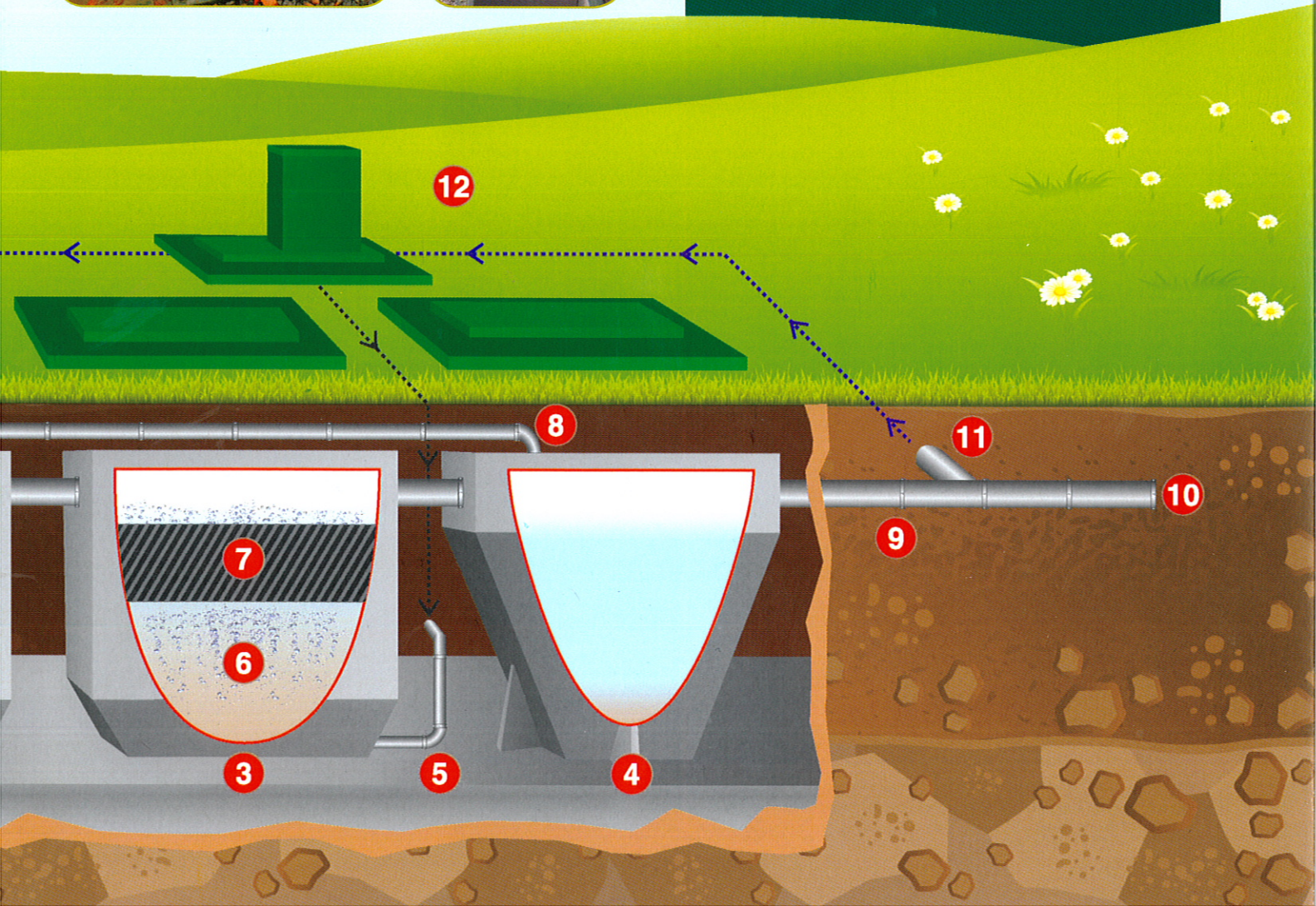
- Population 30 - 3000
- Housing communities
- Commercial buildings
- Hotels & resorts
- Amenity sites

SPECIFICATIONS

- Standard models effluent BOD:SS 20:30mg/l
- Modular and easy to install
- Minimal civil works
- Low running costs
- Copes with variable and peak flows
- Minimal visual impact
- MT tanks 1.6m x 1.6m x 2.4m (H)
- ST tanks 2.2m x 2.2m x 2.4m (H)

OPTIONAL ADD-ONS

- Tertiary filtration: BOD:SS 10:10 mg/l
- Disinfection
- Nitrification / phosphate reduction
- Kiosk
- Packaged skid mounted control room





IDEAL FOR

- Population 250 - 3000
- Housing communities
- Commercial buildings
- Hotels & resorts
- Working camps

SPECIFICATIONS

- Standard models effluent BOD:SS 20:30mg/l
- Modular and easy to install
- No excavation required
- Low running costs
- Copes with variable and peak flows
- UT tanks 3m diameter x 3m high

OPTIONAL ADD-ONS

- Tertiary filtration: BOD:SS 10:10 mg/l
- Disinfection
- Nitrification / phosphate reduction
- Containerised / Skid mounted control room



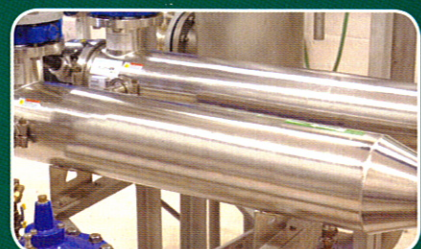
Tertiary Treatment: Various technologies for tertiary treatment can be incorporated with Biosam, to polish the treated water further . The effluent water achieved can be re-used in various applications such as surface irrigation, toilet flushing and others as per international standards.



FILTRATION



MICROSCREEN



UV DISINFECTION

MOBILE WASTEWATER TREATMENT PLANTS

The Mobile Biosam is specifically designed for temporary sites which would require frequent mobilization from one site to another. The plant works on the well-proven submerged aerated filter process, and is readily packaged for quick installation, ease of mobility and minimal operator intervention.



Applications:

- Fixed and temporary camps
- Remote locations
- Construction, drilling and exploration camps
- Army camps

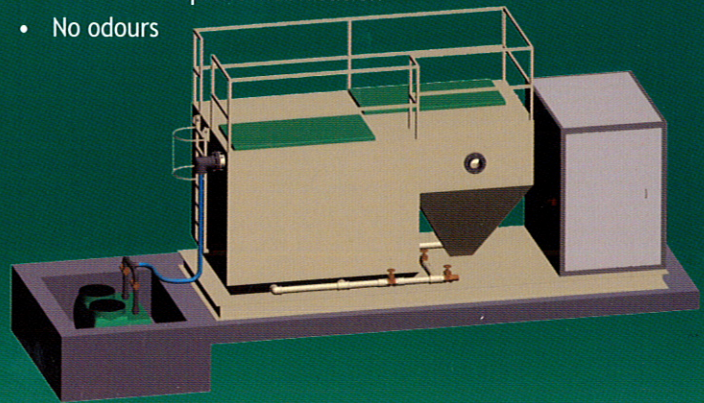
Optional Add-ons

- Inlet pumping station
- Tertiary filtration
- Disinfection
- Duty/Standby air blowers operation

All plants are inclusive of a duty air blower, ladders, handrailing, insulated lockable control room, lightweight GRP manholes, special epoxy coating, & control panel

Specifications:

- Manufactured in high grade steel, specially coated to withstand specific applications.
- Skid mounted packaged solution, easy to install and operate
- No civil works required
- Complete with control room
- Ideal for frequent mobilisation
- No odours



Model	MB-30	MB-50	MB-75	MB-100	MB-125	MB-150	MB-200	MB-250
Daily Flow m ³ /day	5.50	9.00	13.50	18.00	22.50	27.00	36.00	45.00
Daily BOD kg/day	1.80	3.00	4.50	6.00	7.50	9.00	12.00	15.00
Peak flow m ³ /h	1.80	2.25	2.25	2.25	2.81	3.38	4.50	5.63
Length (m)	3.60	4.20	5.10	5.90	6.80	7.80	9.70	11.90
Width (m)	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Height (m)	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26

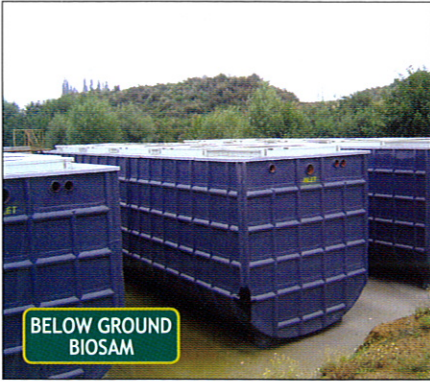
- Larger models are available and custom designed to specifications required
- Skids are equipped with ISO certified lifting lugs and fork lifter pockets for ease of mobilisation
- All models are designed to fit in ISO containers for shipping purposes

Standard effluent quality BOD:SS 20:30mg/l or better

Tertiary filtration - available upon request BOD:SS 10:10mg/l or better

Dimensions may vary according to manufacturing requirements

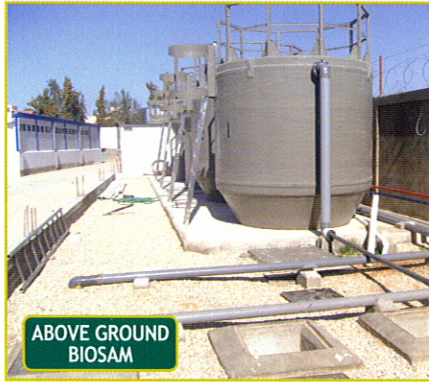
CASE STUDIES



BELOW GROUND BIOSAM

**CHARLEROI AIRPORT
BRUSSELS, BELGIUM**

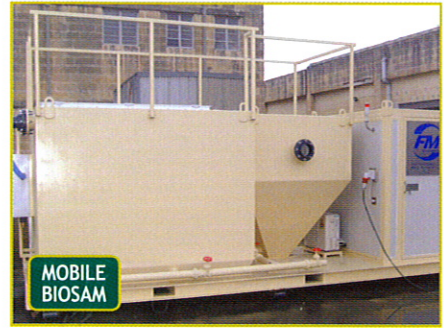
Effluent production: 450m³/day
Effluent quality: BOD <20mg/l SS <30mg/l



ABOVE GROUND BIOSAM

**ARCHIRODON CONSTRUCTION
OVERSEAS LTD, LIBYA**

Effluent production: 100m³/day
Effluent quality: BOD <10mg/l SS <10mg/l

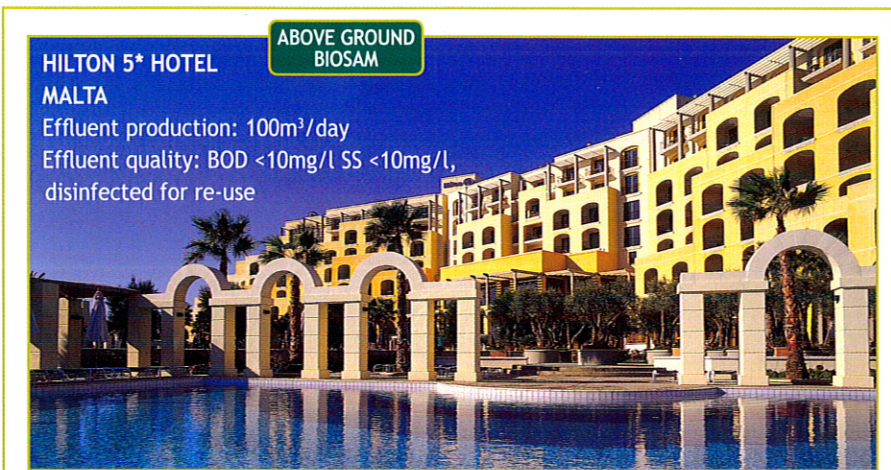


MOBILE BIOSAM

**BP EXPLORATION (LIBYA) LTD
LIBYA**



Effluent production: 10m³/day
Effluent quality: BOD <20mg/l SS <30mg/l



ABOVE GROUND BIOSAM

**HILTON 5* HOTEL
MALTA**

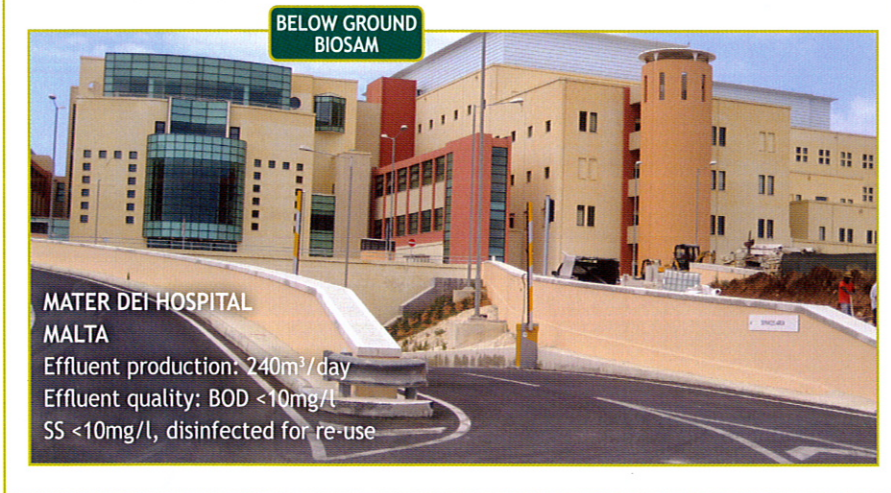
Effluent production: 100m³/day
Effluent quality: BOD <10mg/l SS <10mg/l,
disinfected for re-use



BELOW GROUND BIOSAM

**GOLDEN RIDGE HOUSING DEVELOPMENT
IRELAND**

Effluent production: 300m³/day
Effluent quality: BOD <20mg/l SS <30mg/l



BELOW GROUND BIOSAM

**MATER DEI HOSPITAL
MALTA**

Effluent production: 240m³/day
Effluent quality: BOD <10mg/l
SS <10mg/l, disinfected for re-use



BELOW GROUND BIOSAM

**BORRIS IN OSSORY VILLAGE HOUSING
DEVELOPMENT, IRELAND**

Effluent production: 200m³/day
Effluent quality: BOD <10mg/l SS <10mg/l,
Amm-N <5mg/l, discharge into river



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