

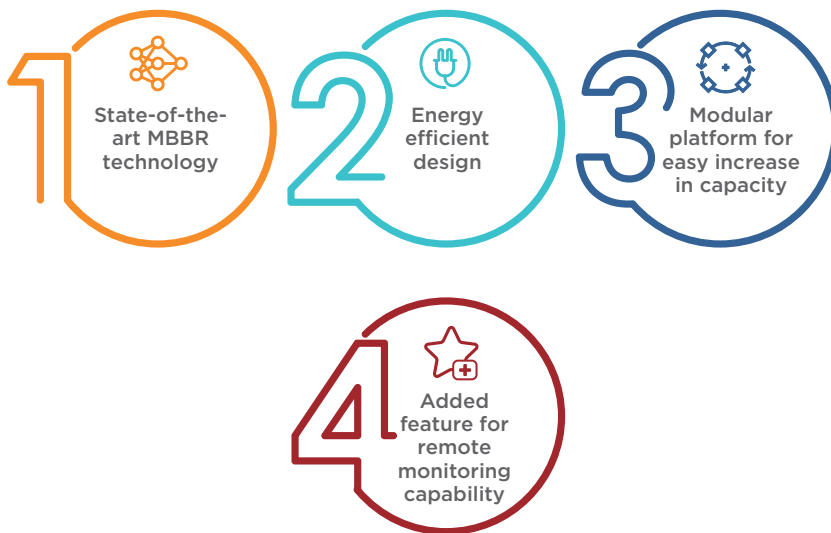
# SaniPaq

MBBR

Wastewater  
treatment

Sanipaqa treats wastewater from a variety of different sources using state-of-the-art MBBR technology.

The system is simple: It is well-suited to decentralised applications and only needs minimal infrastructure. It also delivers robust reliability in a compact configuration making it easy to implement, operate and maintain.

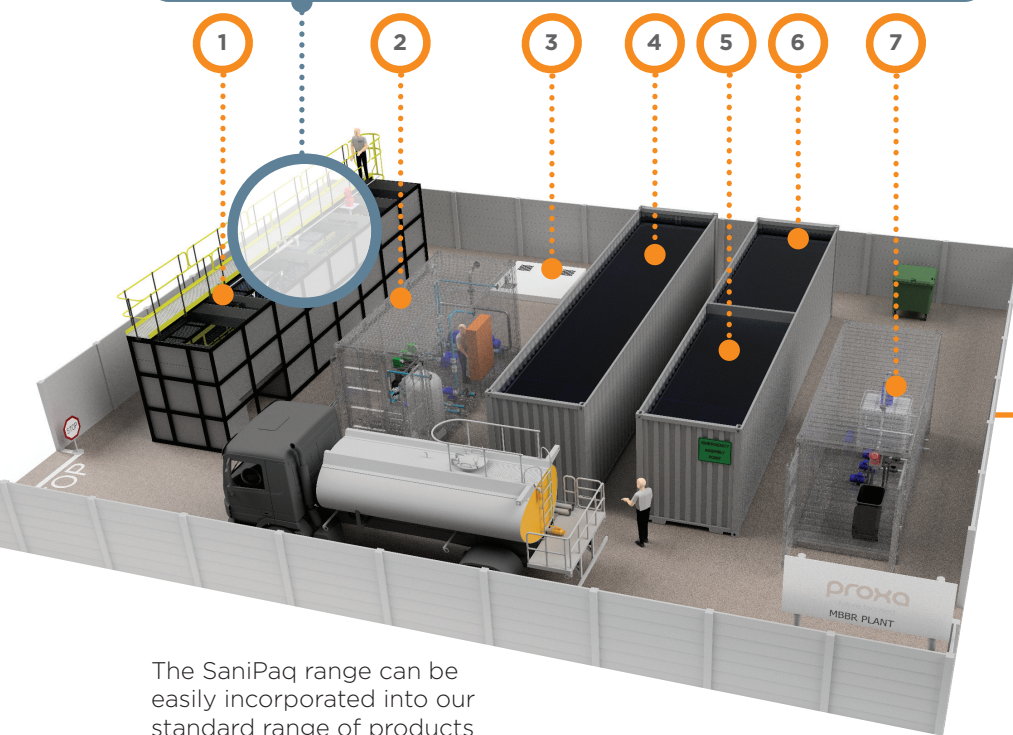
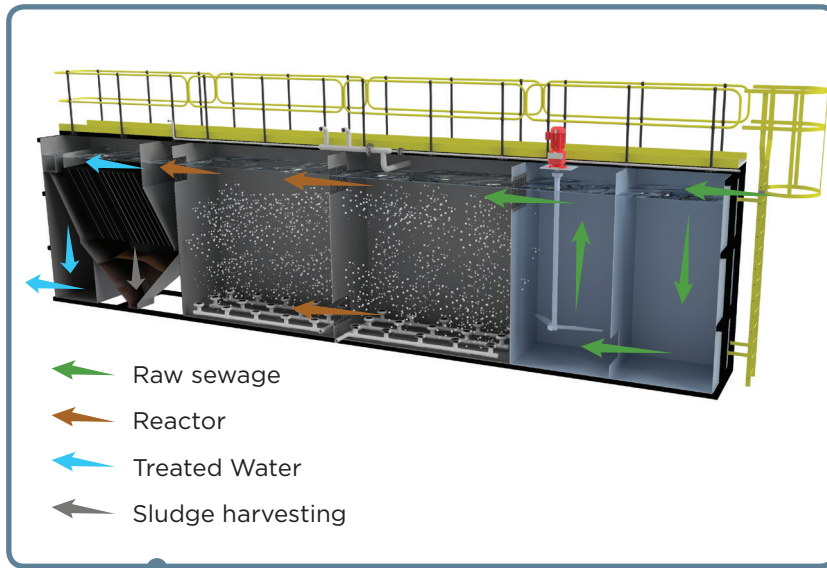


SaniPaq MBBR combines high performance bio-carrier material with compact reactor design. This prevents wash-out of bio-matter during turbulent/irregular/unusual conditions and ensures consistent performance.

## BENEFITS

- 1 Non-clogging micro aeration discs
- 2 Fine bubble aeration for energy efficiency
- 3 Minimal maintenance
- 4 Easy maintenance in small footprint
- 5 Modular and simple to install
- 6 Can handle shock loads
- 7 Minimal process complexity and operator attention
- 8 100% packaged design in a plug-and-play configuration

## PROCESS FLOW DIAGRAM



## APPLICATIONS

- Areas with congested or overloaded infrastructure
- Small communities, property developments
- Remote locations with limited access
- Campuses for schools, universities, office parks
- Shopping malls, hospitals, clinics
- Hotels, resorts, golf courses, lodges
- Industrial plants, dairies, food factories
- Mining, or oil/gas camps
- Construction sites
- Refugee camps

1. MBBR Unit
2. Plant Room
3. Plant Sump
4. Equalisation Tank
5. Sludge Holding Tank
6. Treated Water Tank
7. Dewatering Unit

The SaniPaq range can be easily incorporated into our standard range of products to allow re-use of treated water of high quality industrial applications, process water.

## CONTACT US

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 future focused

# SaniPaq

MBBR

## Spec sheet

### MODEL SELECTION

Characteristics	Standard	Premium
Balance & chlorine contact tank float level switches	✓	-
Chemical dosing & sludge tank float level switches	✓	✓
Pressure switches	✓	✓
Pressure gauges	✓	✓
Glass media filter pressure transmitter	✓	✓
Treated effluent chlorine & pH analyser	✓	✓
Treated effluent turbidity analyser	✓	✓
Variable speed drives	✓	✓
Influent feed pump	✓	✓
MLR pump	✓	✓
Aeration blower	-	✓
Balance & chlorine contact tank level transmitters	-	✓
Magnetic flow transmitters (influent feed pump & MLR pump)	-	✓
Aerobic tank dissolved oxygen analyser	-	✓
Aerobic tank pH analyser	-	✓
Remote monitoring & control capabilities	-	✓

### STANDARD SPECIFICATIONS

Characteristics	Units	Influent	Effluent
Temperature	°C	15-45	15-45
pH	pH units	6.0-9.0	6.0-9.0
Biological oxygen demand (BOD)	mg/L	<300	10
Chemical oxygen demand (COD)	mg/L	<500	100
Suspended solids (TSS)	mg/L	<300	10
Oil & grease	mg/L	NIL	NIL
TKN	mg/L	<30	<15
Free chlorine	mg/L	-	0.2-0.5

## STANDARD SPECIFICATIONS Continued

Parameter		Units	MBBR-50	MBBR-100	MBBR-150	MBBR-200	MBBR-250	MBBR-300
Treatment capacity (min/max)		m <sup>3</sup> /day	50	100	150	200	250	300
*Equalisation tank volume (recommended)		m <sup>3</sup>	20	35	50	70	85	100
*Treated effluent tank volume (recommended)		m <sup>3</sup>	50	100	150	200	250	300
Sludge tank volume		m <sup>3</sup>	10	20	30	45	55	65
**Irrigation pump duty		m <sup>3</sup> /hr @ 500 kPa	6,3	12,5	18,8	25,0	31,3	37,5
Ambient temperature (min/max)		°C	1/43					
Power supply		-	AC 380-450 V, 3 Phase, 50/60 Hz					
Power consumption		kW	5,9	12	18,5	26,5	35,7	44,1
Footprint	Reactor tank	m (LxWxH)	5.0 x 2.4 x 3.0	6.0 x 2.4 x 3.0	8.0 x 2.4 x 3.0	10.0 x 2.4 x 3.0	12.0 x 3.0 x 3.0	12.0 x 3.0 x 3.0
	Containerised plant room	m (LxWxH)	6 x 2.4 x 2.5					

\* Sold separately, \*\* Optional equipment

## STANDARD INCLUSIONS + OPTIONS

Equipment	SB-50	SB-100	SB-150	SB-200	SB-250	SB-300
Automatic inlet screen (2 mm)	o	o	o	o	o	o
Influent mixing pump	✓	✓	✓	✓	✓	✓
Influent feed pump	✓	✓	✓	✓	✓	✓
Reactor tank with safe access and working area						
Aerobic zone with floating media, blower & MLR pump	✓	✓	✓	✓	✓	✓
Lamella clarifier with tube settler & float removal system	✓	✓	✓	✓	✓	✓
Chlorine contact tank and chlorinator	✓	✓	✓	✓	✓	✓
Premium plant room with cooling and lighting						
Chemical dosing - coagulant	✓	✓	✓	✓	✓	✓
RAS/WAS pump	✓	✓	✓	✓	✓	✓
Effluent transfer/filter feed (& backwash) pump	✓	✓	✓	✓	✓	✓
Bag filter (100 µm)	✓	✓	✓	✓	✓	✓
Auto-backwashing aseptic glass media filter (5 µm)	o	o	o	o	o	o
Treated effluent tank recirculation pump	o	o	o	o	o	o
Residual chlorine dosing	o	o	o	o	o	o
PLC control system with HMI	✓	✓	✓	✓	✓	✓
Sludge tank with sampling points & discharge valves	o	o	o	o	o	o
Treated water tank	o	o	o	o	o	o
Discharge pump with level control & flow totaliser	o	o	o	o	o	o
Remote monitoring capability	o	o	o	o	o	o

✓= Standard Supply, o = Optional Supply

Disclaimer: This specification sheet is for reference purposes only and does not constitute any guarantee. PROXA is continuously updating and improving its products and services. Please contact us for updated information on our latest specifications and designs.