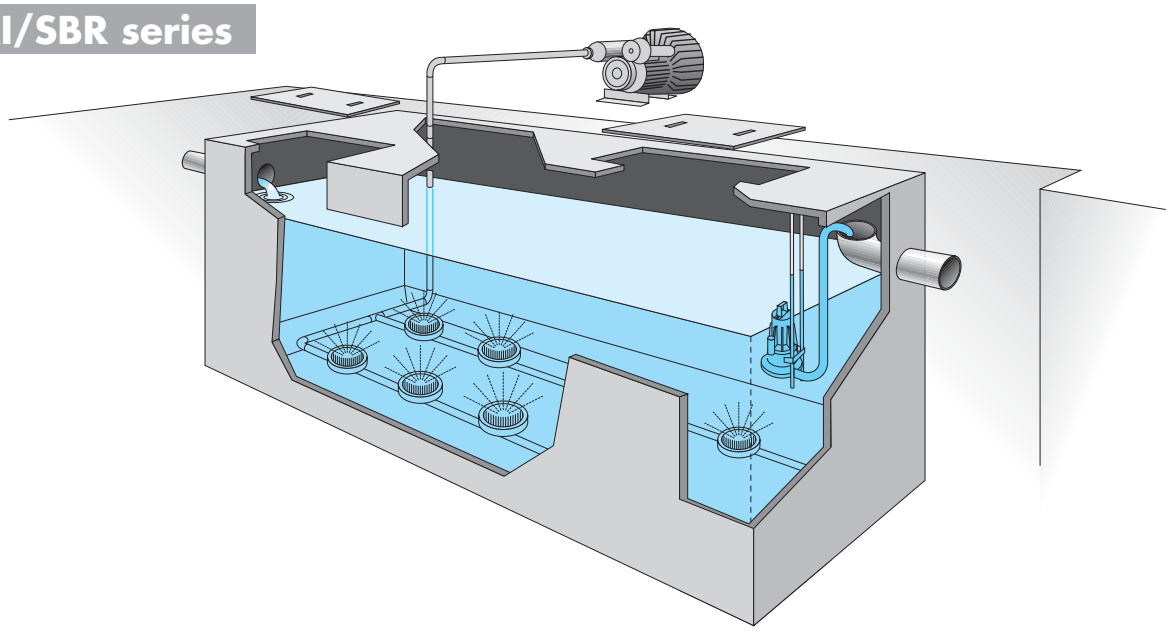
MONOBLOC PARALLELEPIPED TOTAL OXIDATION PLANTS FROM 30 TO 200 EQUIVALENT POPULATION WITH SBR REACTOR

OXI/SBR series



WHAT ARE TOTAL OXIDATION PLANTS OXI/SBR SERIES

Monobloc parallelepiped prefabricated plants type EURO MEC OXI/SBR series for residential areas from 30 till 200 equivalent population are dimensioned in order to guarantee the acceptance limits to the discharge foreseen by the Directive 91/271/CEE for discharge in superficial water and foresee the functioning of the active sludge biological reactor "S.B.R." (Sequencing Batch Reactor).
This technics fully tested is suitable to solve treatment problems when local requirements prevent from the application of traditional systems, particularly when hydraulic flow rates and organic loads are extremely discontinuous, like for example those of tourist resorts, restaurants, hotels, kitchens and canteens, dairies, food industries, wine cellars, dye-works and laundries.
Monobloc parallelepiped prefabricated plants type EURO MEC OXI/SBR series of simple construction and functionality, permit a notable working flexibility, high clarifying efficiency, extremely reduced maintenance, odour and noise absence.
Monobloc parallelepiped prefabricated plants type EURO MEC OXI/SBR series are principally composed of a parallelepiped tank horizontal axe, equipped with self-polishing membrane air diffusers and clarified water discharge pump submersible type.
Besides the supply includes the blower type side channels for the production of compressed air and the general command and protection electric panel with relative working logic.
The basins of the *prefabricated monobloc tanks* type EURO MEC OXI/SBR series are composed of monolithic basins made of reinforced concrete to guarantee any leak absence and any absence of ground infiltrations and can be installed even in presence of ground water.

HOW TOTAL OXIDATION PLANTS OXI/SBR SERIES WORK

Monobloc parallelepiped prefabricated plants type EURO MEC OXI/SBR series foresee the functioning according to the "S.B.R." technology (Sequencing Batch Reactor), that combines to the process quality the discontinuous flow reactor flexibility obtaining guarantees and efficiencies hardly comparable to traditional plants.
Plants structured with this particular technology are suitable for the industrial discharges treatment as they are insensible to the changes either of the hydraulic or of the organic load typical of the effluents

The S.B.R. reactor differs from continuous traditional plants as the two principal functions of the active sludge process, biological oxidation and final clarification, happen in the same tank.
The sedimentation phase is obtained by stopping the sewage aeration system so as to determine a situation of calm inside the oxidation tank and the consequent active sludge decantation on the bottom of the tank, leaving so on the surface a clarified water layer, that is conveyed to the discharge by means of a particular submersible pump.
The functioning of the blower providing the air necessary to the biological process is commanded by electronic programmers, that consent to arrange working cycles changeable according to the requested operational requirements.

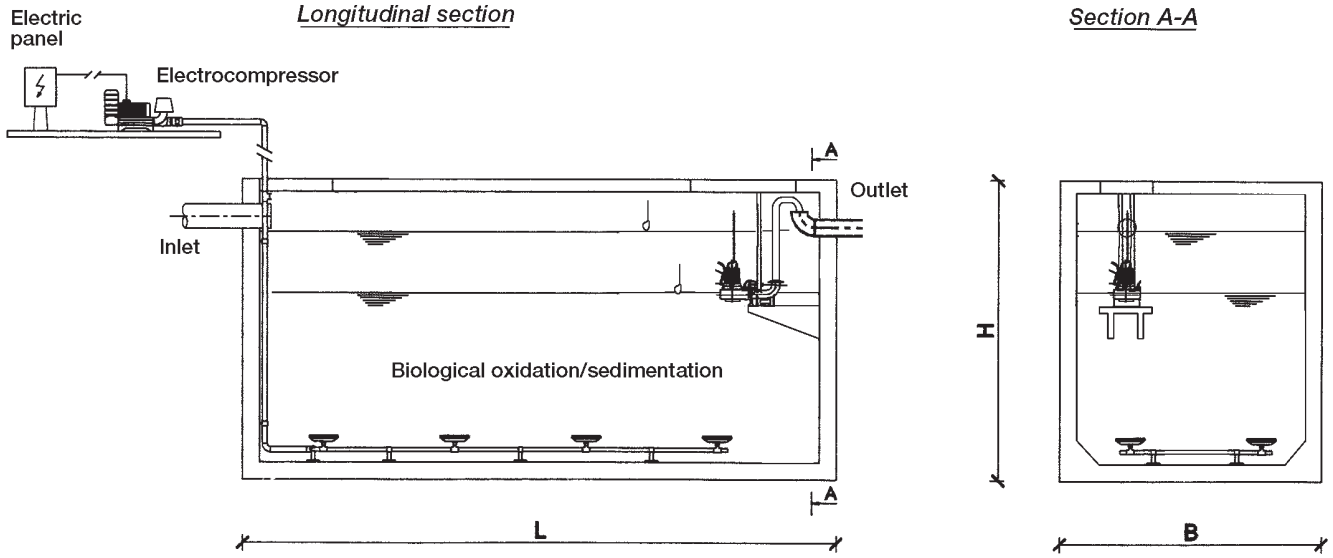
USED MATERIALS

Tanks	:	highly resistant reinforced vibrated concrete
By request	:	painted steel fiberglass
Shafts	:	concrete (if requested class D 400 cast iron)
Piping	:	galvanised steel and polyethylene
By request	:	stainless steel AISI 304

SPECIFICATION

"Supply of total oxidation prefabricated depuration plant made of reinforced concrete type EURO MEC OXI/SBR series composed of a parallelepiped monolothic tank made of reinforced concrete horizontal axe with functioning according to "S.B.R." technology, complete with sewage inlet and outlet connection pipes, inspection shafts made of concrete, electroblowers type side channels, self-polishing membrane air diffusers, submersible electropump for clarified discharge water, level regulators, command and protection electric panel with timer and all other electromechanical parts for the correct functioning."

STANDARD PRODUCTION



Monobloc parallelepiped total oxidation OXI/P series.
For discharge in superficial water – Legislative Decree n. 152 dated 03.04.06

DESCRIPTION	MEASURE UNIT	MODEL									
		OXI/SBR 30	OXI/SBR 40	OXI/SBR 50	OXI/SBR 60	OXI/SBR 80	OXI/SBR 100	OXI/SBR 125	OXI/SBR 150	OXI/SBR 175	OXI/SBR 200
Equivalent population	n.	30	40	50	60	80	100	125	150	175	200
Daily flow rate	mc/g	4,50	6	7,50	9	12	15	18,75	22,50	26,25	30
Daily organic load (BOD5)	Kg/g	1,80	2,40	3	3,60	4,80	6	7,50	9	10,50	12
Oxidation/sedimentation volume	mc	5,65	7,75	9,50	11,20	16,20	19,60	24,40	28,60	33,90	36,25
Air request	mc/h	24	24	40	40	40	70	70	70	115	115
Lift	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Installed power	kW	0,55	0,55	1,10	1,10	1,10	1,50	1,50	1,50	2,20	2,20
Blowers	n.	4	4	8	8	8	12	12	12	16	16
Length L	cm	230	300	360	420	500	500	600	700	750	800
Width B	cm	200	200	200	200	220	250	250	250	250	250
Height H	cm	220	220	220	220	220	250	250	250	250	250
Total weight	q.ls	60	110	130	150	170	180	230	260	280	300

The above written data are given as information. The Society EURO MEC S.r.l. reserves the right to change them in every moment.

The plants can be supplied with hydraulic flow rates and organic loads even different from the ones in the schedule, which are of 150 l/inhab. g. and of 60 g BOD5/inhab. g.