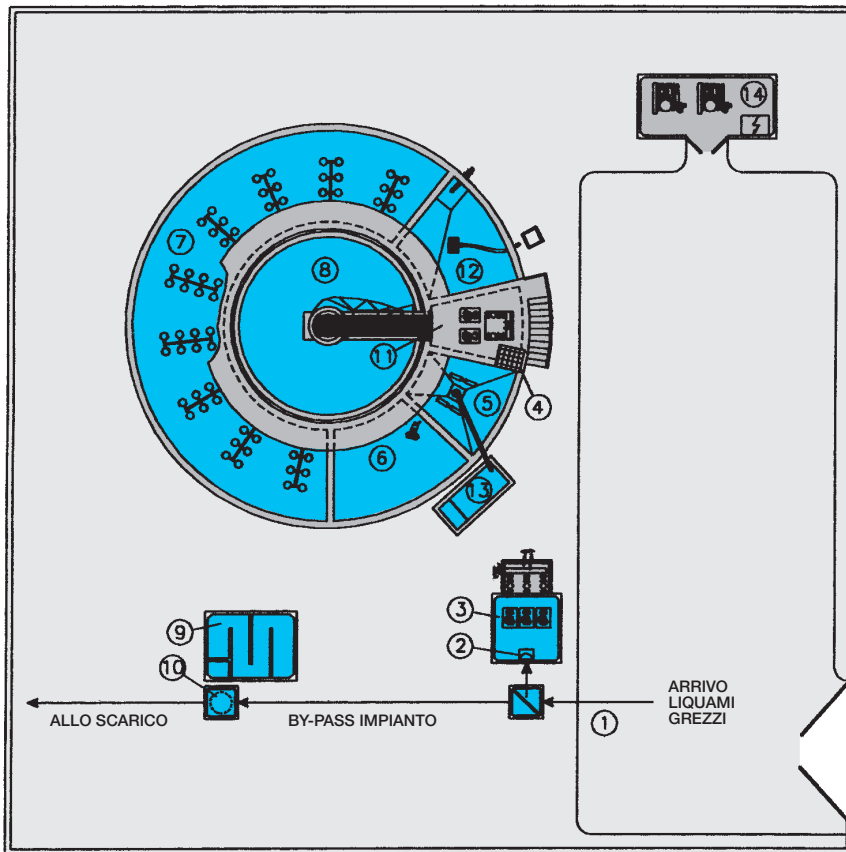


MODULAR CIRCULAR TANKS TOTAL OXIDATION PLANTS FROM 700 TO 3000 EQUIVALENT POPULATION

OXI/M series



PLANT PLAN

- 1 SEWAGE INLET
- 2 MANUAL BASKET SCREEN
- 3 LIFTING
- 4 FINE SCREENING
- 5 SAND SEPARATOR
- 6 PRE-DENITRIFICATION
- 7 OXIDATION
- 8 SEDIMENTATION
- 9 FINAL CHLORINATION
- 10 INSPECTION SHAFT
- 11 SLUDGE RECYCLING
- 12 THICKENER
- 13 SAND INSPECTION SHAFT
- 14 COMMAND CAB

WHAT ARE TOTAL OXIDATION PLANTS OXI/M SERIES

Prefabricated circular tanks plants type EURO MEC OXI/M series for residential areas from 700 to 3000 people equivalent are used for the sewage water depuration.

They are composed of two circular concentric tanks, that constitute the biological oxidation section, equipped with aeration system with self-polishing membrane air diffusers of a suitable power and a final sedimentation section.

The tanks are made of modular panels in reinforced concrete sealed between them and positioned on reinforced foundations. In the external circular sector can be located the following sections: pre-treatment, pre-denitrification and sludge thickening.

HOW TOTAL OXIDATION PLANTS OXI/M SERIES WORK

In the standard model *prefabricated circular tanks plants type EURO MEC OXI/M series* are expected to be with a pre-treatment section with manual screening (in option even mechanical), that, if necessary, is followed by a sewage lifting plant.

After the pre-treatment section, the sewage is sent to the external tank of the depuration plant in which it happens: sand and oil separation, pre-denitrification and biological oxidation by means of aeration through air insufflation highly efficient; the system is fed

After that treatment, sewage is sent to the final sedimentation section, where sludge separation is obtained, which settle on the bottom, and skimming clarified water is sent to the discharge.

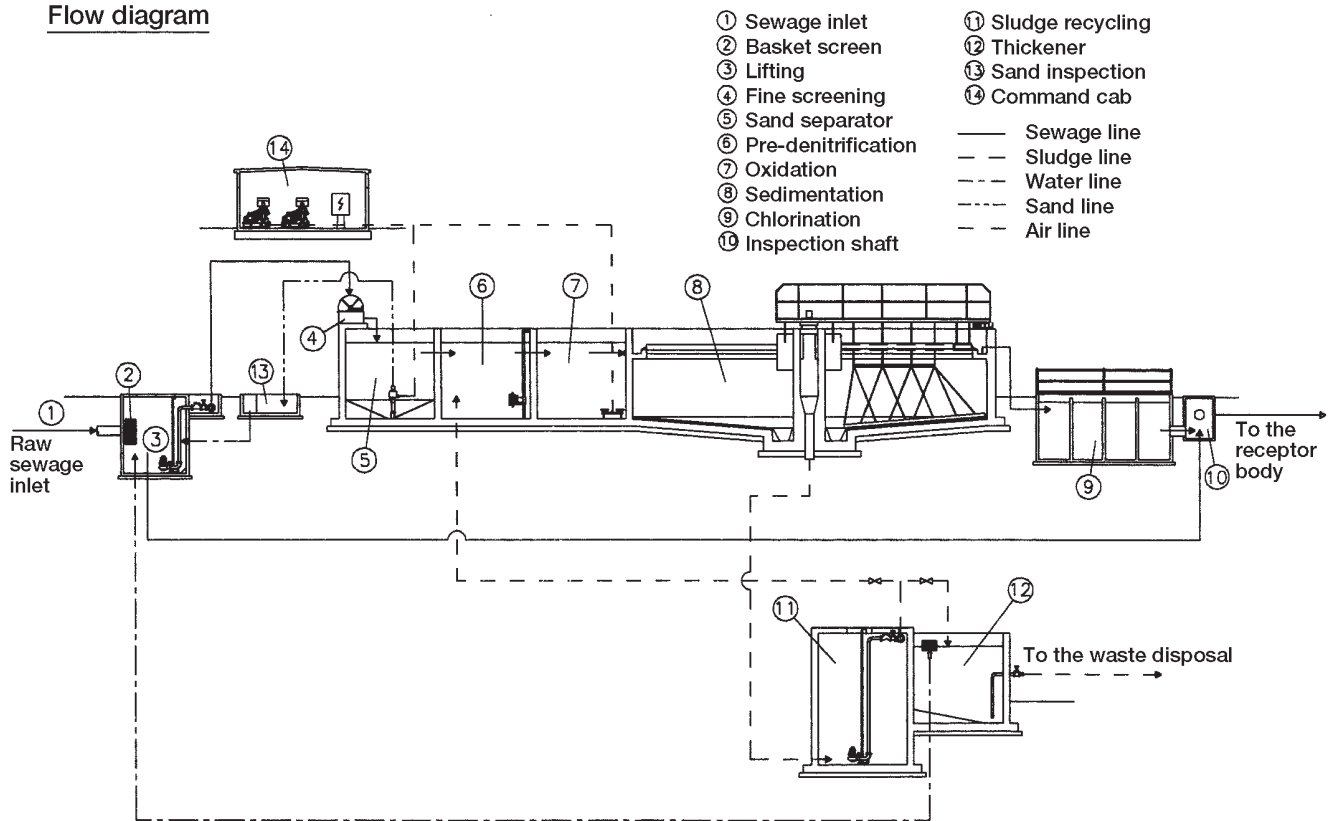
Active sludge, collected from the bottom of the sedimentation section, is recycled in continuous by means of a submersible electropump to the oxidation, respect to overflow sludge, coming from biological increase, which under static thickening, is periodically extracted.

The static sedimentation is produced till model OXI/M 1500, for superior models the final sedimentation section is accomplished with a peripheral traction scraper bridge, in order to automatically permit the sludge collection and the floating substances collection.

The prefabricated circular tanks plants type EURO MEC OXI/M series are supplied with all devices, which guarantee the automatic functioning without supervision and, by request, can be integrated with measuring, recording and alarm instruments.

STANDARD PRODUCTION

Flow diagram



Modular circular tanks, total oxidation OXI/M series
For discharge in superficial water – Directive 91/271/CEE

DESCRIPTION	MEASURE UNIT	MODEL								
		OXI/M 700	OXI/M 800	OXI/M 900	OXI/M 1000	OXI/M 1250	OXI/M 1500	OXI/M 2000	OXI/M 2500	OXI/M 3000
Daily flow rate	mc/d	140	160	180	200	250	300	400	500	600
Organic load (BOD5)	Kg/d	42	48	54	60	75	90	120	150	180
Air request	Nmc/h	250	280	300	350	450	540	700	900	1100
Lift	mm	3500	3500	3500	3500	3500	3500	3500	3500	3500
Installed power	kW	3,00	5,50	5,50	5,50	7,50	7,50	10,00	12,50	15,00
Membrane blowers	n	36	42	48	54	60	72	96	124	144
Oxidation diameter	m	9,50	10,00	10,50	11,00	12,50	13,50	15,50	17,50	19,00
Sedimentation diameter	m	5,00	5,50	5,50	6,00	6,50	7,00	8,00	9,00	10,00
Oxidation water level	m	3,00	3,00	3,00	3,00	3,00	3,00	3,00	3,00	3,00
Engaged surface	m ²	500	500	600	600	700	700	900	950	950

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.