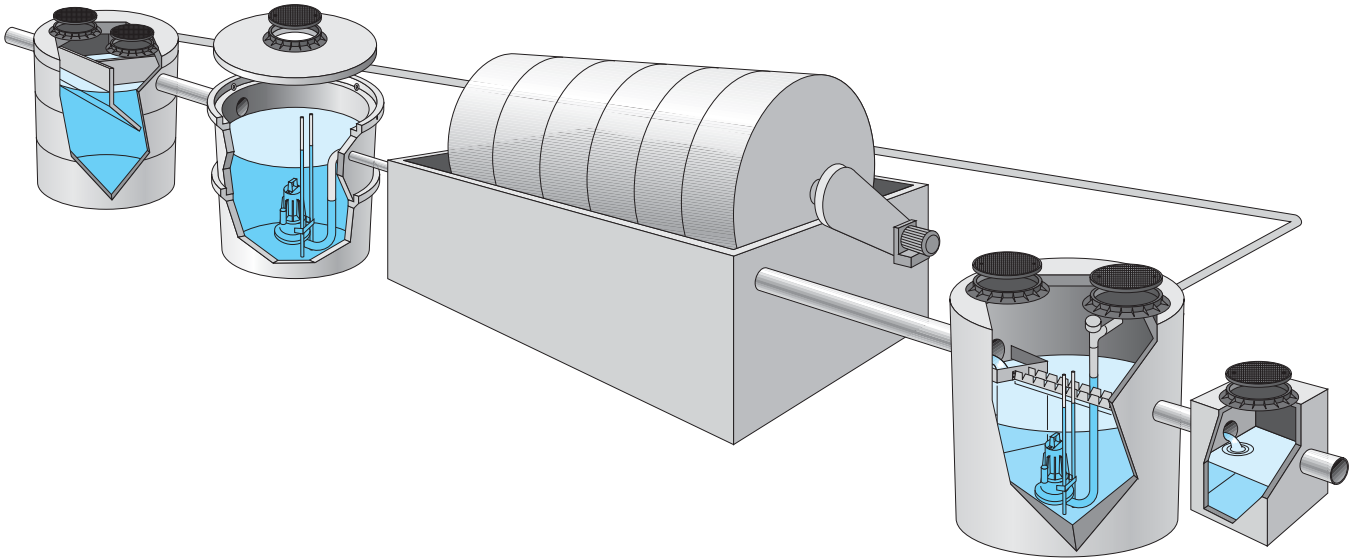


## BIODISCS MODULAR RING BIOLOGICAL PLANTS FROM 50 TO 500 EQUIVALENT POPULATION

OXI/B series



### WHAT ARE BIODISCS BIOLOGICAL PLANTS OXI/B SERIES

Modular ring prefabricated plants type EURO MEC OXI/B series for residential areas from 50 to 500 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, principally composed of a "biodisks" biological oxidation including a roll composed of propylene discs assembled on a rotating shaft by means of a low energetic consumption gear box and a final sedimentation with continuous sludge recycling by means of a submersible pump.

Besides the supply includes the general command and protection electric panel.

By request the modular ring prefabricated plants type EURO MEC OXI/B series can be executed with pre-treatment realised in a suitably dimensioned gross screening tank type Imhoff (OXI/BS series).

### HOW BIODISCS BIOLOGICAL PLANTS OXI/B SERIES WORK

Modular ring prefabricated plants type EURO MEC OXI/B series are composed of a primary sedimentation section, a biological oxidation section and a secondary sedimentation section.

Water first flows to the primary sedimentation tank, that accomplishes at the same time the physical separation of the most gross sedimentable solid bodies, the digestion and stabilization of primary sludge and of sludge produced by the process recycled from the final sedimentation tank.

In the biological section happens the absorption of decomposable organic substances coming from the flora grown on low speed rotating disks.

The bacterial flora is alternately brought into contact with organic material contained in sewage to clarify and with atmospheric oxygen, directly absorbing most of the organic material in phase of immersion in sewage and the oxygen proportionally necessary during the emersion phase.

The layer of bacterial flora which adheres to the discs when it reaches the thickness of 4/5 mm, comes off in easily sedimentable flakes, that are collected and concentrated in the following phase of final sedimentation and then recycled in continuous to the primary digestion phase.

### USED MATERIALS

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

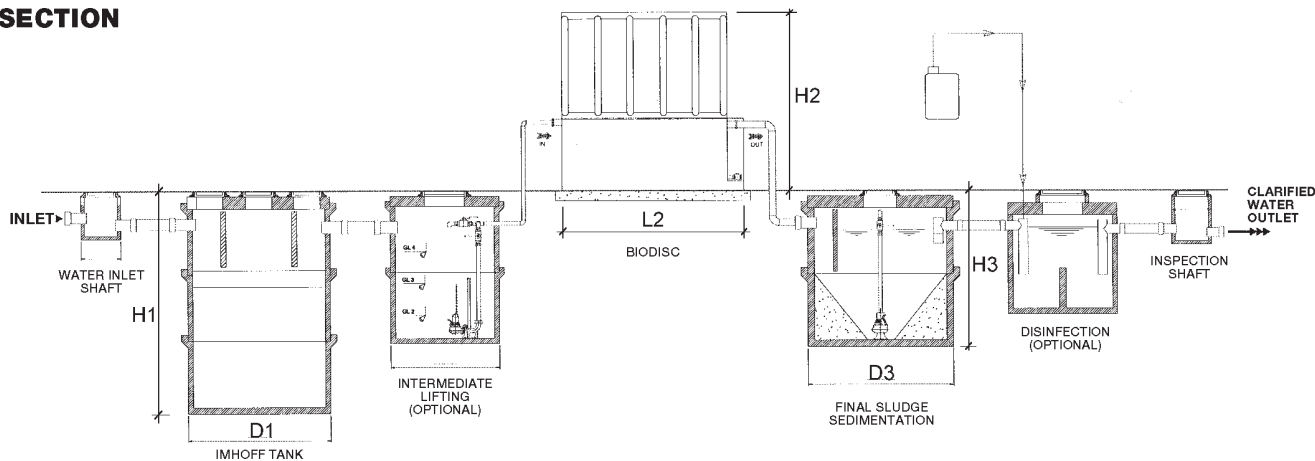
### SPECIFICATION

"Supply of prefabricated total oxidation biological depuration plant made of reinforced concrete type EURO MEC OXI/B series composed of a primary sedimentation tank made of modular rings in highly resistant reinforced concrete to seal on site, a monobloc tank made of concrete to contain biodisks with gear box and fiberglass cover. The supply also includes the final sedimentation tank made of modular rings made of highly resistant concrete to seal on site with water recycle system in front of the plant, the command and protection electric panel of all devices."

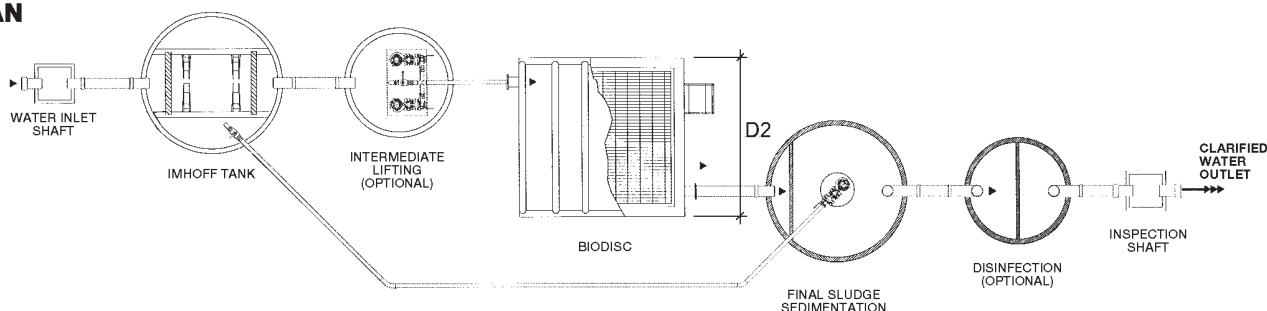


**STANDARD PRODUCTION**

**SECTION**



**PLAN**



DESCRIPTION	MEASURE UNIT	MODEL										
		OXI/B 50	OXI/B 100	OXI/B 150	OXI/B 200	OXI/B 250	OXI/B 300	OXI/B 350	OXI/B 400	OXI/B 450	OXI/B 500	
Equivalent population	n.	50	100	150	200	250	300	350	400	450	500	
Daily flow rate	mc/g	10	20	30	40	50	60	70	80	90	100	
BOD5	kgBOD/g	3	6	9	12	15	18	21	24	27	30	
Biodisc surface	m <sup>2</sup>	220	370	600	800	1000	1200	1400	1600	1750	2000	
Biodisc diameter	cm	115	115	200	200	200	200	200	200	200	200	
Installed power	kW	0,37	0,37	0,55	0,55	0,55	0,55	0,55	0,75	0,75	0,75	
Imhoff tank, type IMO/A		25	30	55	85	100	100	100	115	115	145	
	D1	cm	125	150	200	200	200	200	200	200	300	
	H1	cm	230	210	210	310	360	360	360	410	410	225
Biodisc												
	Width B2	cm	135	135	240	240	240	240	240	240	240	
	Length L2	cm	305	415	310	310	310	358	406	455	455	503
	Height H2	cm	130	130	230	230	230	230	230	230	230	
Final sedimentation												
	D3	cm	100	150	200	200	200	250	250	250	300	300
	H3	cm	258	208	228	278	328	235	285	285	320	395
Weight	q. ls	80	104	172	196	208	219	230	254	260	311	

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 200 l/inhab. g. and of 60 g BOD5/inhab. g.