

GENERAL CATALOGUE



EURO MEC

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"WATER CARE FOR LIFE"



EXPERIENCE AND QUALITY FOR THE ENVIRONMENT

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EURO MEC s.r.l. operates on a national and an international scale designing, producing and managing water treatment plants.

EURO MEC's technical staff, the heart of the company, boast years of experience in environmental engineering, specializing in the design and management of water treatment systems including their technology, machinery and associated equipment and tools. These systems are employed for the treatment of industrial waste water, rain water, sewage and the production of drinking water.

The services offered are:

- Feasibility studies and planning for purification plants, wastewater treatment plants, rainwater plants and drinking water plants
- Detailed engineering
- Contract development
- Technical sales advice regarding plants, equipment and service
- Construction and maintenance of the plants proposed

The plants and equipment supplied by EURO MEC come selected or proposed according to the very highest standards of quality and safety.

EURO MEC's staff cooperate with the most important partners in Europe and the world in order to develop and realize the most advanced technologies in the environmental field.





OFFICES AND MANUFACTURING PLANTS

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www.euromec.net



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Italy



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EURO MEC d.o.o. Commercial Office, Slovenia

Celje
Slovenia

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LARGE WASTEWATER PURIFICATION PLANTS

Page 6



PREFABRICATED WASTEWATER PURIFICATION PLANTS

Page 10



RAIN WATER TREATMENT PLANTS AND EQUIPMENT

Page 64



PRIMARY WATER TREATMENT PLANTS, DRINKING WATER AND DESALINATION PLANTS

Page 100



MOBILE DRINKING WATER UNITS

Page 128



INDUSTRIAL PLANTS AND SPECIAL WORKS

Page 146



VACUUM SEWAGE SYSTEM

Page 152



PLANT MANAGEMENT

Page 158



BROCHURES

COMPANY PROFILE

REVERSE OSMOSIS DRINKING WATER INSTALLATIONS

GENERAL BROCHURE

MOBILE PRIMARY WATER TREATMENT UNITS

PREFABRICATED WASTE WATER DEPURATION PLANTS

VACUUM SEWAGE SYSTEM



Design and construction of civil and industrial wastewater treatment plants of medium to large dimensions with innovative processes and technology developed according to environmental and normative standards. Activated sludge and fixed biomass process technologies with oxidization, BioDisc and membrane plants.



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LARGE WASTEWATER PURIFICATION PLANTS

LARGE WASTEWATER PURIFICATION PLANTS





Screw filter



BioDisc plant



Civil works plant



Plant servicing a textile manufacturer



Standardisation of wastewater treatment plants, prefabricated, preassembled in cement, steel and Fibreglass.

IMHOFF TANKS

Monobloc Imhoff tanks	Series IMO	Page 18
Imhoff tanks made with modular interconnecting rings	Series IMO/A	Page 20

BIOLOGICAL PLANTS

Monobloc total oxidation plants from 5 to 30 p.e.	Series OXI/AM	Page 22
Parallelepiped monobloc total oxidation plants from 30 to 200 p.e.	Series OXI/P	Page 24
Parallelepiped monobloc total oxidation plants from 250 to 800 p.e.	Series OXI/P	Page 26
Modular circular tank total oxidation plants from 700 to 3000 p.e.	Series OXI/M	Page 28
Total oxidation plants from 15 to 250 p.e made with interconnecting rings	Series OXI/A	Page 30
Total oxidation plants from 300 to 800 p.e. made with interconnecting rings	Series OXI/A	Page 32
BioDisc biological plants from 50 to 500 p.e. made with interconnecting rings	Series OXI/B	Page 34
Parallelepiped monobloc total oxidation plants from 30 to 200 p.e. with reactor (SBR)	Series OXI/SBR	Page 36
Parallelepiped monobloc total oxidation plants from 250 to 800 p.e. with reactor (SBR)	Series OXI/SBR	Page 38

LIFTING STATIONS

Cylindrical monobloc lifting station	Series SSL/C	Page 40
Parallelepiped monobloc lifting station	Series SSL/P	Page 42
Lifting station in polyethylene	Series SSL/PI	Page 43

MECHANICAL SCREEN CHANNELS

Monobloc mechanical screen channels	Series CGR	Page 44
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DISINFECTION PLANTS

Liquid dosage unit	Series CDL	Page 45
Monobloc chlorination tank	Series VCL	Page 46
Disinfection tanks made with interconnecting rings	Series VCL/A	Page 48

RAINWATER COLLECTION PLANTS

Monobloc rain water collection tanks	Series VRM	Page 50
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OIL & FAT SEPERATORS FOR KITCHENS

Monobloc oil and fat separators for kitchens	Series SCU	Page 52
Oil and fat separators for kitchens made with interconnecting rings	Series SCU/A	Page 54

PURIFICATION PLANTS FOR CARWASHES

Chemical-physical plants	Series ICF	Page 56
Purification plants for carwashes with bio-oxidation process	Series EUROBIOX	Page 58
Final filtration wastewater plants	Series IFF	Page 60

PREFABRICATED TANKS

Parallelepiped monobloc tanks	Series SM/P	Page 61
Cylindrical tanks made with cup shaped modular sections	Series SC/A	Page 62

PREFABRICATED CABINS

Equipment housing cabins	Series CAB	Page 63
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PREFABRICATED WASTEWATER PURIFICATION PLANTS

PREFABRICATED WASTEWATER PURIFICATION PLANTS

TREATMENT PLANTS FOR SMALL COMMUNITIES

IMHOFF TANKS

Sewage coming from small communities must be pre-treated in an Imhoff tank before being released into civil water drains.

EURO MEC's Imhoff septic tank, series IMO, dimensioned as prescribed by the Official Gazette n. 48, 21/06/1977 (technical norms legislation Merli 10/05/1976) allows for the near total settling of solid matter and part settling of the organic pollution in wastewater.

Facilitating this process, EURO MEC's production program includes the following:

- Prefabricated monobloc Imhoff tank in reinforced concrete (series IMO)
- Prefabricated Imhoff tank with interconnecting rings (series IMO/A)
- Prefabricated monobloc Imhoff tank in fibreglass (series IMO/VTR)

PURIFICATION AND TOTAL OXIDATION PLANTS

Wastewater from private lots, camping grounds, tourist villages, shopping centres not connected to the public sewer system require water purification treatment plants complete with biological total oxidation processes.

Through this process which is based on intense oxidation from special diffusers fed with compressed air, purification of the water can be achieved along with the simultaneous stabilization of produced sludge.

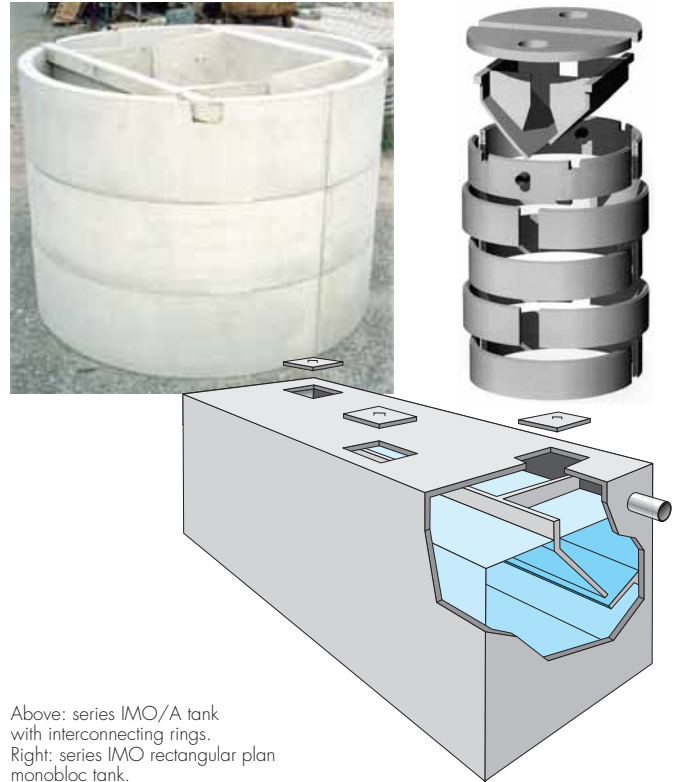
EURO MEC's prefabricated sedimentation housing units, series OXI, are dimensioned in a way that guarantees acceptable discharge limits according to the legislative decree n. 152 of 11/05/1999 regarding discharge into superficial waters.

EURO MEC's OXI series offers the following advantages:

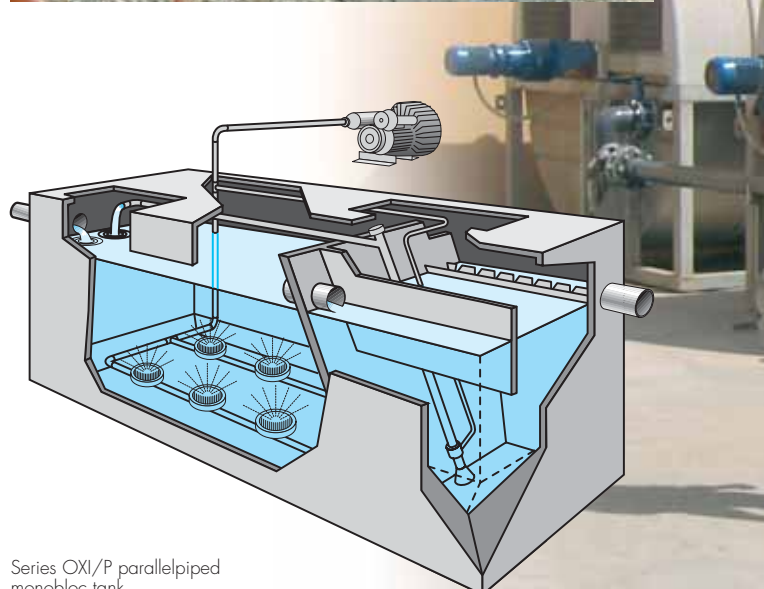
- Simple and cost effective installation
- Zero environmental impact regarding undesirable noise or odours.
- Reduced operating costs

Facilitating this process, EURO MEC's production program includes the following:

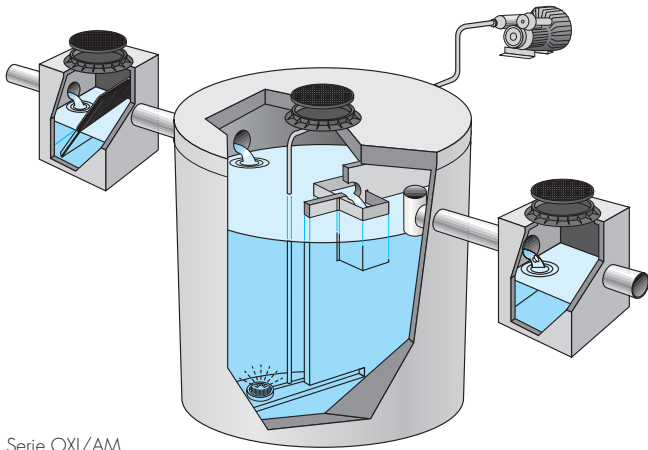
- Cylindrical monobloc total oxidation plant in reinforced concrete from 5 to 600 p.e. (series OXI/C)
- Parallelepiped monobloc total oxidation plant in reinforced concrete from 30 to 800 p.e. (series OXI/P)
- Modular circular tank total oxidation plant from 700 to 3000 p.e. (series OXI/M)
- Total oxidation plant in reinforced concrete rings from 5 to 800 p.e. (series OXI/A)
- Monobloc total oxidation plant in reinforced concrete from 5 to 10 p.e. (series OXI/AM)



Above: series IMO/A tank with interconnecting rings.
Right: series IMO rectangular plan monobloc tank.



Series OXI/P parallelepiped monobloc tank.



Serie OXI/AM.

EURO MEC's series BIO/A prefabricated plants for housing settlements are dimensioned according to legislation n. 152 dated 11.05.1999 regarding waste discharge limits into surface water. EURO MEC's prefabricated plants such as series BIO/A carry the following advantages:

- Easy and cost effective installation
- Zero environmental impact regarding undesirable noise or odours.
- Reduced operating costs

Facilitating this process, EURO MEC's production program includes the following:

- BioDisc biological plant and monobloc tank in reinforced concrete or steel from 50 to 500 p.e. (series BIO/A).



BIODISC PURIFICATION PLANTS

The functioning of the BioDisc biological plants, series BIO/A, is based on the following principle; biological flora, made up of microorganisms and forming the key element of the process, is given an environment in which it can develop, this environment brings the flora into contact with both the organic material in the sewage and atmospheric oxygen, two elements that ensure the growth and activity of the microorganisms. This activity in turn facilitates the direct absorption of as much organic material as possible during the immersion phase and the required proportion of oxygen during the emergence phase.



PREFABRICATED WASTEWATER PURIFICATION PLANTS

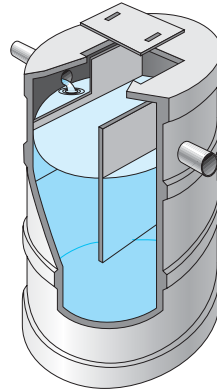
PRE-TREATMENT INSTALLATIONS

OIL & FAT SEPARATORS FOR KITCHENS

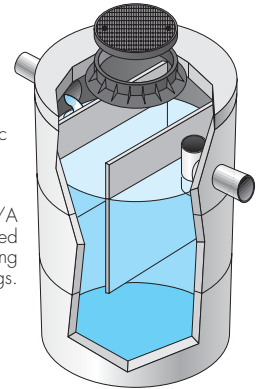
EURO MEC's oil & fats separators, series SCU, are dimensioned according to what has been prescribed by the norms DIN 4040, regarding the fixed limits of floating matter discharge, and according to EEC directive 91/271 dealing with the treatment of urban wastewater. The separators are specifically used to treat wastewater coming from kitchens or, more generally, water that is high in vegetable and animal fats and oils such as that coming from restaurants, canteens, hotels, the food industry and abattoirs.

Facilitating this process, EURO MEC's production program includes the following:

- Prefabricated monobloc oil and fat separators for kitchens made of reinforced concrete (series SCU).
- Prefabricated monobloc oil and fat separators for kitchens made of reinforced concrete interconnecting rings (series SCU/A).
- Prefabricated monobloc oil and fat separators for kitchens made of fibreglass reinforced plastic (series SCU).



Left: Series SCU cylindrical monobloc separator with vertical axle.



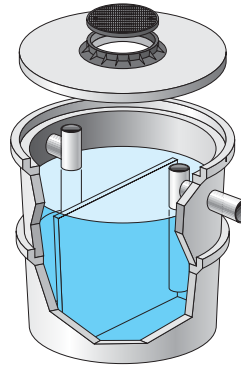
Right: Series SCU/A composed of interconnecting rings.

DISINFECTION PLANTS

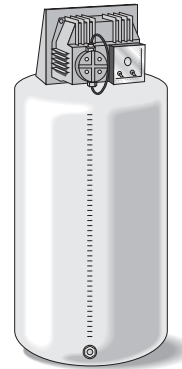
EURO MEC's prefabricated disinfection plants, series VCL and VCL/A, are dimensioned to ensure water disinfection through contact between sewage and chemical reactants, usually sodium hypochlorite and eventually peracetic acid, according to the EEC Directive 91/271 91/271 regarding the treatment of urban wastewater. These prefabricated disinfection basins are made of high resistance reinforced concrete to guarantee zero leakage or filtration of matter into the ground; furthermore, the VCL model can also be installed where groundwater is present.

Facilitating this process, EURO MEC's production program includes the following:

- Prefabricated monobloc disinfection tank in reinforced concrete with parallel piping (series VCL)
- Prefabricated disinfection tank in reinforced concrete modular rings with parallel piping (series VCL)



Left: Series VCL /A disinfection tank made with interconnecting rings.



Right: Series CDL liquid dosing unit.



Drinking water storage area



WASTEWATER LIFTING PLANT

LIFTING STATIONS

EURO MEC's monobloc lifting stations, series SSL, are used for the storage and the lifting of civil and industrial wastewater and consist of a monolithic basin made of high resistance reinforced concrete to guarantee zero leakage or filtration of matter into the ground. These lifting stations come complete with one or more submersible motor pumps and their required piping, level regulators and all appropriate fittings required for operation.

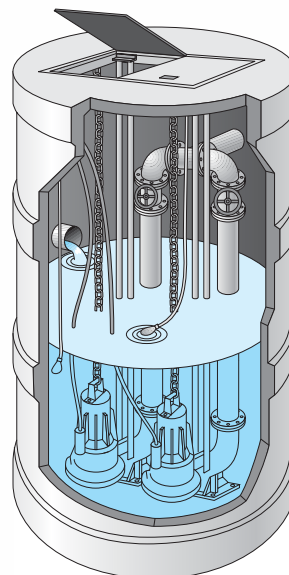
To install and start the lifting stations, which can also be placed in groundwater trenches, all that is required is the filling of the basin, fitting of piping and the connection of the electrical control panel.

Facilitating this process, EURO MEC's production program includes the following:

- Cylindrical monobloc lifting station in reinforced concrete (series SSL/C)
- Parallelepiped monobloc lifting station in reinforced concrete (series SSL/P)
- Lifting station in polyethylene with reinforced concrete base (series SSL/PCA)
- Monobloc lifting station in fibreglass reinforced plastic (series SSL/VTR)
- Lifting stations for domestic applications in polyethylene (series SSL/PE, SSL/PI)



Installation of a lifting station in groundwater.



Series SSL/C, cylindrical monobloc lifting station in reinforced concrete.



Series SSL/PCA, lifting station in polyethylene with a reinforced concrete base.



PREFABRICATED WASTEWATER PURIFICATION PLANTS

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CHEMICAL- PHYSICAL PLANTS

EURO MEC's chemical-physical plants, series ICF, are dimensioned according to the EEC Directive 91/271 regarding urban drainage water treatment to ensure proper discharge levels in rivers. These chemical-physical plants are used to clarify water coming from a range of processing operations. They are made up of; reaction/coagulation tank, decantation tank, activated charcoal filtration column, hose filters for sludge and all fittings necessary for operation and all contained in monobloc carbon steel housing.



Chemical-physical plant, series ICF



Sediment separator with reed valve





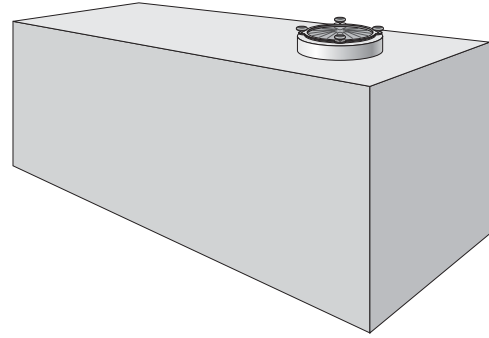
PREFABRICATED TANKS

MONOBLOC TANKS

EURO MEC's monobloc tanks, series SM, are used to store different types of sewage. They are monolithic tanks with a horizontal reinforced concrete axis and are made of high resistance reinforced concrete to guarantee zero leakage or filtration of matter into the ground. The monolithic tanks can also be installed in places where ground water is present.

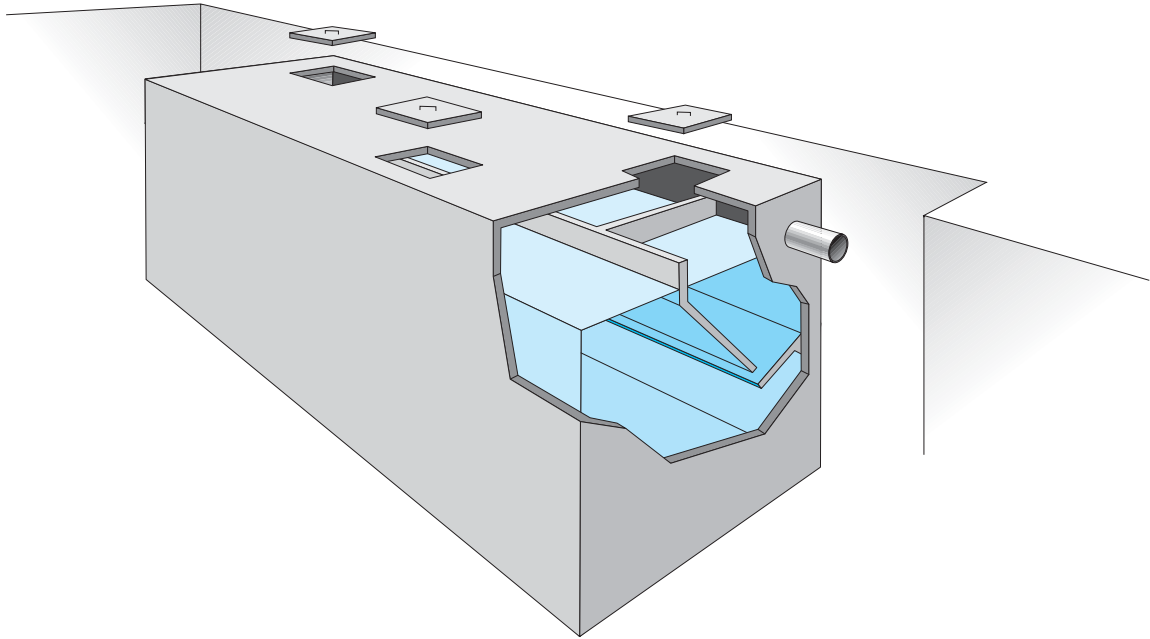
Facilitating this process, EURO MEC's production program includes the following:

- Prefabricated cylindrical monobloc tanks (series SM/C)
- Parallelepiped prefabricated monobloc tank (series SM/P)
- Prefabricated tanks consisting of modular circular sections (series SC/A)



MONOBLOC IMHOFF TANKS

IMO series



WHAT ARE IMHOFF TANKS IMO SERIES

Imhoff septic tanks type EURO MEC IMO series, dimensioned according to what has been prescribed by the Technical Norms of the Official Gazette, are used in the civil sewage water primary treatment. Composed of a monolithic tank made of reinforced concrete, they guarantee a total absence of loss of water and of ground infiltrations.

Complete inside with separators between the decantation zone and the sludge digestion zone, and complete of baffles for the inlet and outlet sewage.

Imhoff septic tanks type EURO MEC IMO series can be installed even in the presence of ground water.

HOW IMHOFF TANKS IMO SERIES WORK

Imhoff septic tanks type EURO MEC IMO series, are divided inside into two different sections: one top section where the sewage is treated and the bottom section where sludge is treated. In the first section we have the decantation of settling solids and the flotation of grease present in the sewage; in the second section we have the collection and digestion of settled sludge by means of anaerobic process. The settled sludge is so completely mineralised.

USED MATERIALS

Tanks	:	highly resistant reinforced vibrated concrete
Shafts	:	concrete (if requested class D 400 cast iron)

SPECIFICATION

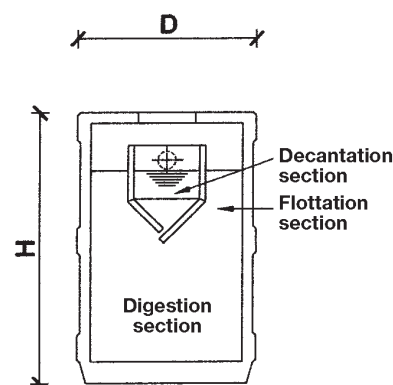
"Supply of an *Imhoff septic tank* type EURO MEC IMO series, prefabricated, monolithic, made of reinforced concrete, perfectly tight, dimensioned according to the Technical Norms of the Official Gazette, complete inside with separators between the decantation zone and the sludge digestion zone, baffles for the inlet and outlet sewage and inspection manholes in concrete."

STANDARD PRODUCTION

Monobloc IMO/C series circular plan

For the discharge in public drainage system – In compliance with the European Norms

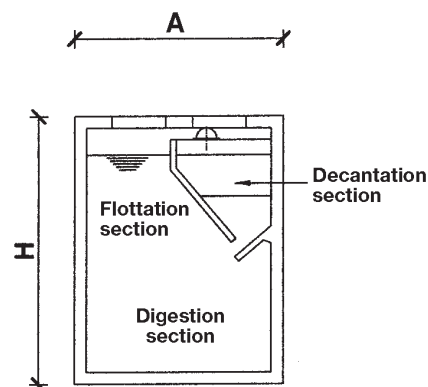
MODEL	USERS		TANK			VOLUME		WEIGHT q.ls
	150	100	ext. Ø D cm	leng. L cm	Height H cm	Decant. liters	Digest. liters	
IMO/C 5	1	6	130	-	200	220	550	23
IMO/C 10	6	12	130	-	250	400	1.130	28
IMO/C 15	11	18	151	-	250	600	1.500	35
IMO/C 20	16	25	151	-	300	800	2.000	39
IMO/C 25	21	31	192	-	250	1.000	2.480	43
IMO/C 30	26	37	192	-	300	1.200	3.020	56
IMO/C 40	31	50	192	-	350	1.590	4.150	75
IMO/C 50	41	62	250	-	300	2.000	4.940	92
IMO/C 60	51	75	250	-	350	2.400	6.150	102
IMO/C 70	61	87	250	-	400	2.800	7.000	112



Monobloc IMO/V series rectangular plan

For the discharge in public drainage system – In compliance with the European Norms

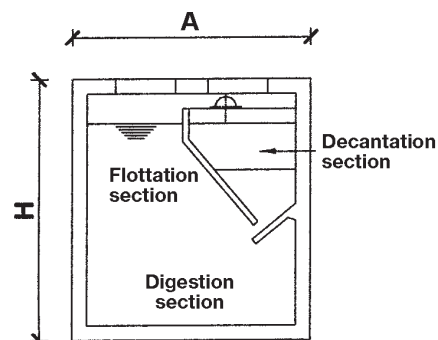
MODEL	USERS		TANK			VOLUME		WEIGHT q.ls
	150	100	Width A cm	leng. L cm	Height H cm	Decant. liters	Digest. liters	
IMO/V 60	60	75	210	250	300	2.400	6.000	85
IMO/V 70	61	87	220	270	310	2.800	7.000	95
IMO/V 80	71	100	250	270	315	3.200	8.000	105
IMO/V 100	81	125	250	270	370	4.000	10.000	117
IMO/V 120	101	150	250	270	425	4.800	12.000	130
IMO/V 140	121	175	250	270	480	5.600	14.000	143
IMO/V 160	141	200	250	270	535	6.400	16.000	155



Monobloc IMO/O series monobloc, horizontal axis, rectangular plan

For the discharge in public drainage system – In compliance with the European Norms

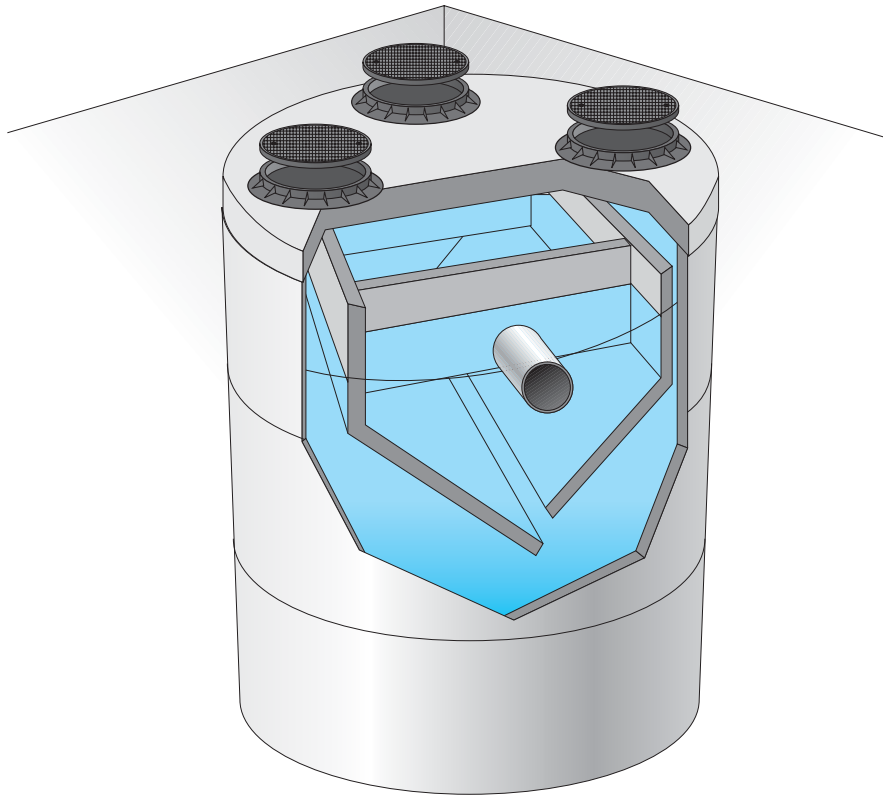
MODEL	UTENTI		TANK			VOLUME		WEIGHT q.ls
	150	100	Width A cm	leng. L cm	Height H cm	Decant. liters	Digest. liters	
IMO/O 75	55	75	160	290	270	2.250	4.500	95
IMO/O 85	60	85	250	200	270	2.550	5.100	110
IMO/O 100	75	100	250	250	270	3.000	6.000	130
IMO/O 115	85	115	250	325	270	3.450	6.900	150
IMO/O 145	105	145	250	400	270	4.350	8.700	165
IMO/O 170	125	170	250	450	270	5.100	10.200	200
IMO/O 235	175	235	250	650	270	7.050	14.100	260
IMO/O 295	220	295	250	750	270	8.850	17.700	320



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

MODULAR RINGS IMHOFF TANKS

IMO/A series



WHAT ARE IMHOFF TANKS IMO/A SERIES

Imhoff septic tanks type EURO MEC IMO/A series, dimensioned according to what has been prescribed by the Technical Norms of the Official Gazette, are used in the civil sewage water primary treatment. Composed of a modular rings tank made of reinforced concrete highly resistant, to seal on site.

Complete inside with separators between the decantation zone and the sludge digestion zone, and complete of baffles for the inlet and outlet sewage.

HOW IMHOFF TANKS IMO/A SERIES WORK

Imhoff septic tanks type EURO MEC IMO/A series, are divided inside into two different sections: one top section where the sewage is treated and the bottom section where sludge is treated. In the first section we have the decantation of settling solids and the flotation of grease present in the sewage; in the second section we have the collection and digestion of settled sludge by means of anaerobic process. The settled sludge is so completely mineralised.

USED MATERIALS

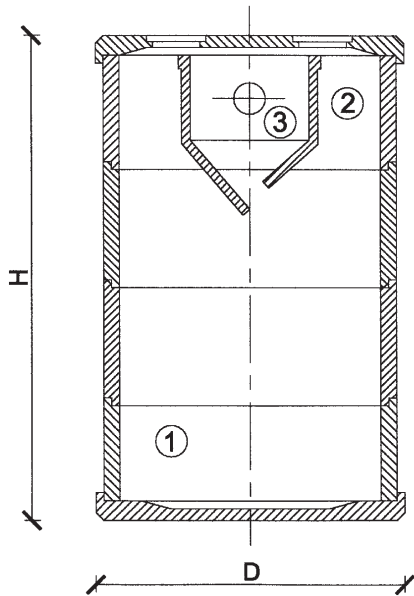
Tanks	:	highly resistant reinforced vibrated concrete
Shafts	:	concrete (if requested class D 400 cast iron)

SPECIFICATION

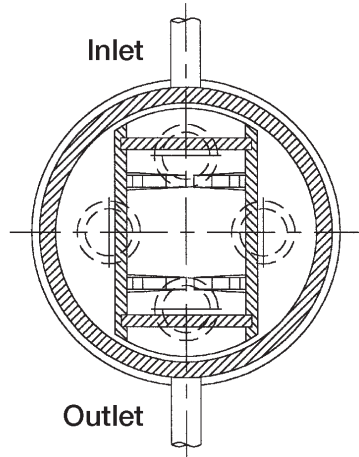
"Supply of an *Imhoff septic tank* type EURO MEC IMO/A series, prefabricated, monolithic, made of reinforced concrete, perfectly tight, dimensioned according to the Technical Norms of the Official Gazette, complete inside with separators between the decantation zone and the sludge digestion zone, baffles for the inlet and outlet sewage and inspection manholes in concrete."

STANDARD PRODUCTION

Section



Plant



- 1 Sludge digestion
- 2 Grease flotation
- 3 Decantation



Imhoff tank
Mod. IMO/A 145 + 350
internal diameter 300 cm.

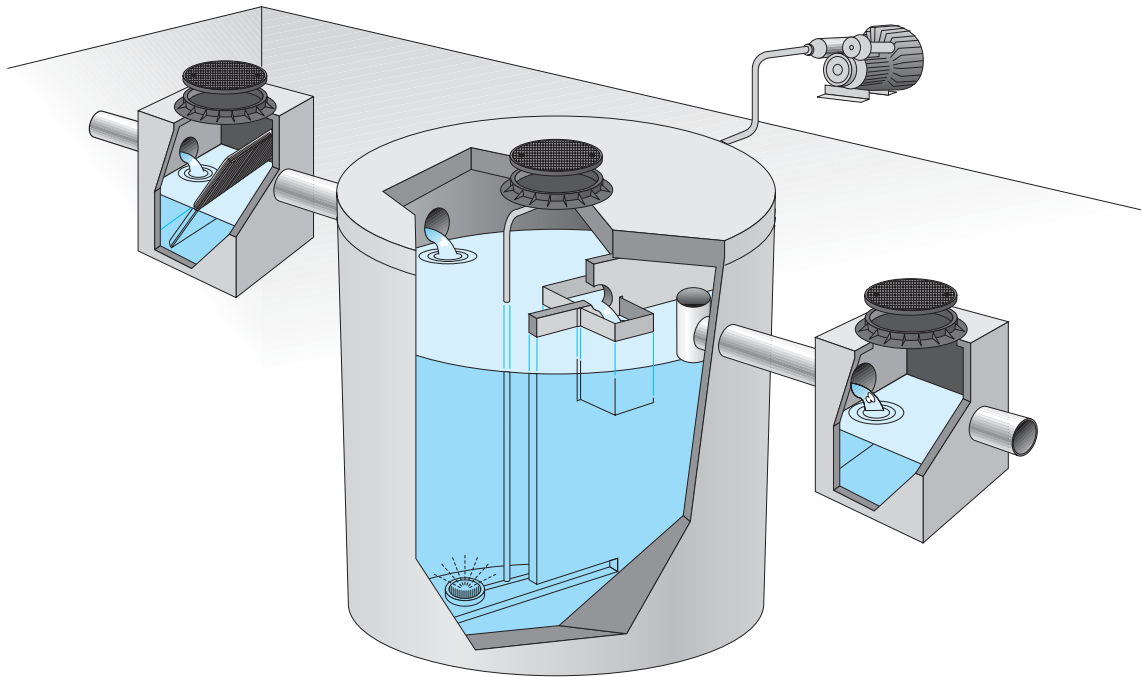
IMO/A series circular plant made of rings
For the discharge in public drainage system – In compliance with the European Norms

MODEL	USERS				VASCA		VOLUME lt	WEIGHT q.ls	MAX. WEIGHT Elements q.ls
	Water consumption l/inhabitant				Int. diameter cm	Height cm			
	250	200	150	100	D	H			
IMO/A 5	-	-	-	5	80	162	600	8	2,22
IMO/A 10	-	-	6	10	100	162	1000	11	2,9
IMO/A 15	-	8	10	15	125	168	1600	17	4,5
IMO/A 25	10	12	16	25	125	218	2450	19	4,5
IMO/A 30	12	15	20	30	150	218	3100	25	6
IMO/A 35	14	17	23	35	150	268	3500	28	6
IMO/A 45	18	22	30	45	150	318	4500	31	6
IMO/A 50	21	26	35	50	150	368	5300	34	6
IMO/A 55	22	28	38	55	200	229	5700	66	11
IMO/A 70	28	36	48	70	200	279	7200	75	11
IMO/A 85	34	43	58	85	200	329	8700	86	11
IMO/A 100	40	51	68	100	200	379	10200	95	11
IMO/A 115	46	58	78	115	200	429	11700	106	11
IMO/A 130	52	66	88	130	200	479	13200	115	11
IMO/A 145	58	72	96	145	300	260	14500	128	26
IMO/A 195	79	99	132	195	300	335	19800	148	26
IMO/A 250	100	125	166	250	300	410	25000	168	26
IMO/A 300	121	152	202	300	300	485	30400	188	26
IMO/A 350	141	176	235	350	300	560	35350	208	26

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

MONOBLOC TOTAL OXIDATION PLANTS FROM 5 TO 30 EQUIVALENT POPULATION

OXI/AM series



WHAT ARE TOTAL OXIDATION PLANTS OXI/AM SERIES

Monobloc prefabricated tanks type EURO MEC OXI/AM series for residential areas from 5 to 30 people equivalent are dimensioned in order to guarantee the acceptance limits to the discharge foreseen by the Directive 91/271/CEE for discharge in superficial water, composed of a cylindrical basin vertical axe divided inside into a biological oxidation section equipped with self-polishing membrane air diffusers and a final sedimentation section with automatic sludge recycling.

The supply includes the blower type side channels for the production of compressed air and the general command and protection electric panel.

HOW TOTAL OXIDATION PLANTS OXI/AM SERIES WORK

Monobloc prefabricated tanks type EURO MEC OXI/AM series for residential areas from 5 till 30 people equivalent, are divided into the following sections: one for biological oxidation, where by means of aeration through air insufflation, happens the complete reduction of sewage organic substance; one of sedimentation, where sludge separation is obtained, which settle on the bottom, and skimming clarified water is send to the discharge.

Active sludge, collected from the bottom of the sedimentation section, is recycled in continuous per gravity to the oxidation, respect to overflow sludge, coming from biological increase, which is periodically extracted.

With the use of timers, that command the on/off of the blower, the functioning of *monobloc prefabricated tanks* type EURO MEC OXI/AM series can be fully automatised.

USED MATERIALS

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

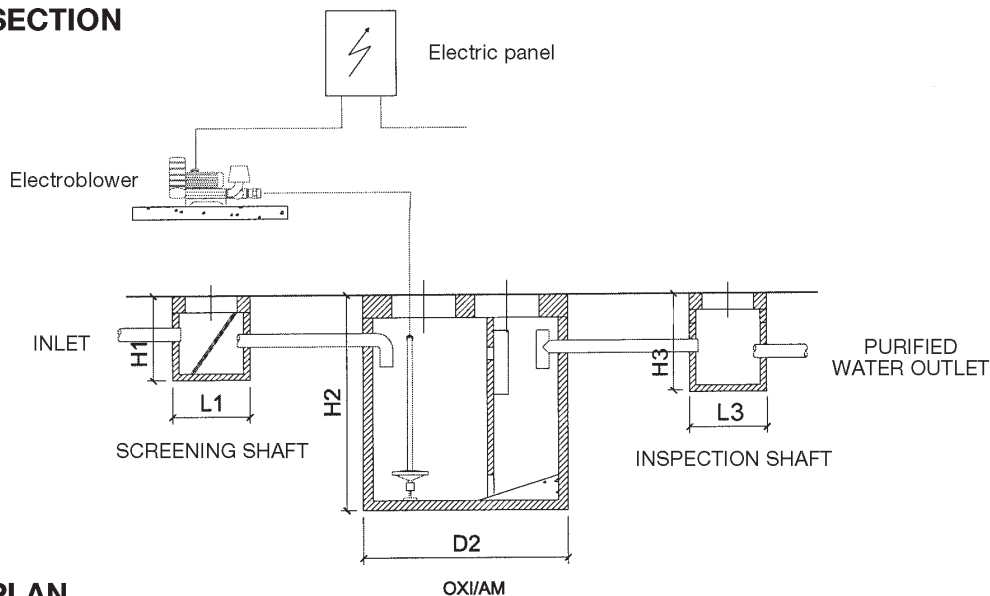
SPECIFICATION

"Supply of prefabricated total oxidation depuration plant made of reinforced concrete type EURO MEC OXI/AM series composed of a monobloc cylindrical basin vertical axe divided inside into a biological oxidation section and a final sludge sedimentation section, complete with sewage inlet and outlet connection pipes, inspection shafts made of hot galvanised concrete, self-polishing membrane air diffusers, command and protection electric panel with timer and all other electromechanical parts for the correct functioning."

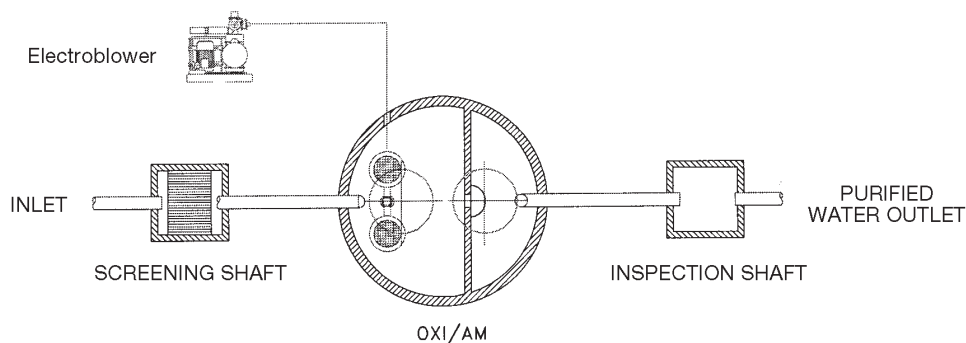


STANDARD PRODUCTION

SECTION



PLAN

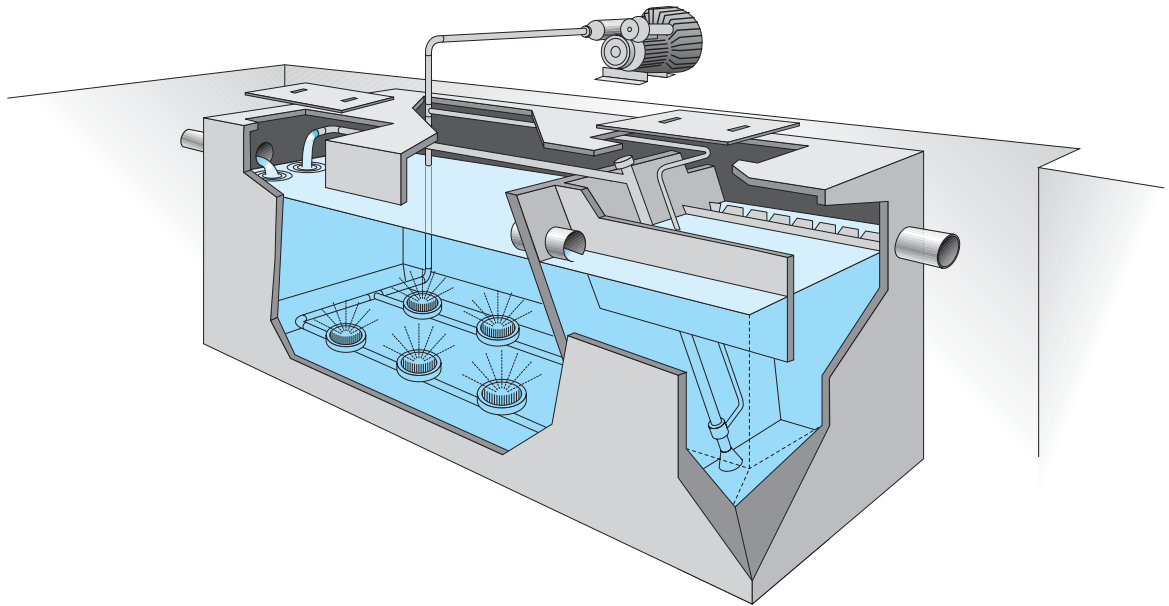


DESCRIPTION	MEASURE UNIT	MODEL			
		OXI/AM 5	OXI/AM 10	OXI/AM 20	OXI/AM 30
People equivalent	n.	5	10	20	30
Daily flow rate	mc/g	0,75	1,5	3,0	4,5
BOD5	kg/g	0,3	0,6	1,2	1,8
Installed power	kW	0,4	0,4	0,55	0,75
Air diffusers	n.	1	2	4	4
Screening	L1	50	50	50	50
	H1	66	66	66	66
Oxid./Sedim.	D2	150	150	250	250
	H2	165	165	235	285
Inspection shaft	L3	50	50	50	50
	H3	66	66	66	66
Inlet level	cm	-35	-35	-35	-35
Outlet level	cm	-46	-46	-46	-46
Weight	q.ls	25	25	85	105

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

MONOBLOC PARALLELEPIPED TOTAL OXIDATION PLANTS FROM 30 TO 200 EQUIVALENT POPULATION

OXI/P series



WHAT ARE TOTAL OXIDATION PLANTS OXI/P SERIES

Monobloc parallelepiped prefabricated plants type EURO MEC OXI/P series for residential areas from 30 to 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, principally composed of a parallelepiped tank horizontal axe divided inside into two sections: an oxidation section equipped with self-polishing membrane air diffusers and a final sedimentation section with automatic sludge recycling.

The supply includes the blower type side channels for the production of compressed air and the general command and protection electric panel.

The tanks of the *monobloc prefabricated tanks* type EURO MEC OXI/P series are composed of monolithic tanks 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/P SERIES WORK

Monobloc parallelepiped prefabricated plants type EURO MEC OXI/P series are divided into the following sections: one for biological oxidation, where by means of aeration through air insufflation, happens the complete reduction of sewage organic substance; one of sedimentation, where sludge separation is obtained, which settle on the bottom, and skimming clarified water is send to the discharge.

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

With the use of timers, that command the on/off of the blower, the functioning of parallelepiped *monobloc prefabricated plants* type EURO MEC OXI/P series can be fully automatised.

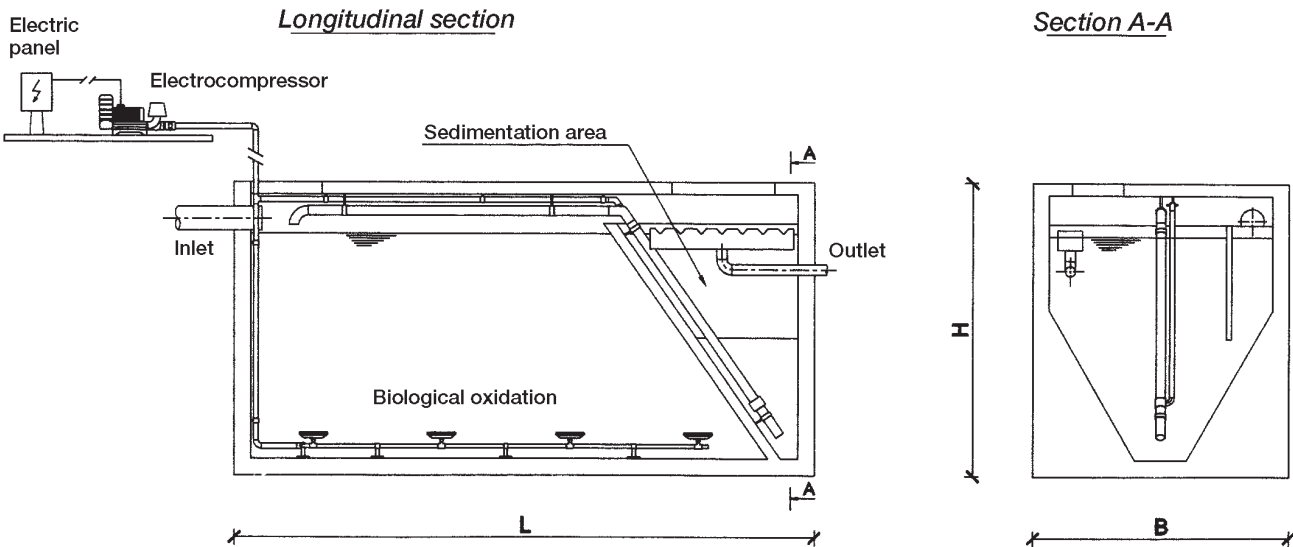
USED MATERIALS

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

SPECIFICATION

"Supply of prefabricated total oxidation depuration plant made of reinforced concrete type EURO MEC OXI/P series composed of a monolithic parallelepiped basin made of reinforced concrete horizontal axe divided inside into a biological oxidation section and a final sludge sedimentation section, complete with sewage inlet and outlet connection pipes, inspection shafts made of concrete, self-polishing membrane air diffusers, command and protection

STANDARD PRODUCTION



Parallelepiped monobloc total oxidation OXI/P series
For discharge in superficial water - Directive 91/271/CEE

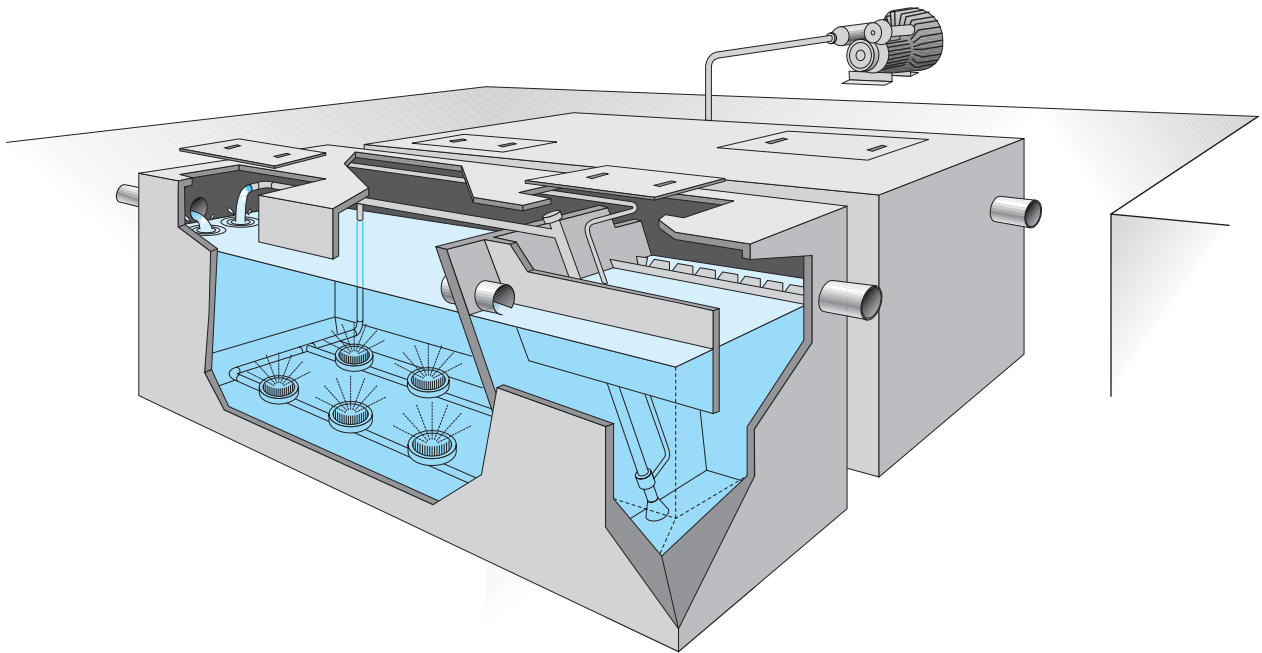
DESCRIPTION	MEASURE UNIT	MODEL									
		OXI/P 30	OXI/P 40	OXI/P 50	OXI/P 60	OXI/P 80	OXI/P 100	OXI/P 125	OXI/P 150	OXI/P 175	OXI/P 200
Equivalent population	n.	30	40	50	60	80	100	125	150	175	200
Daily flow rate	mc/g	4,50	6	7,50	9	12	15	18,75	22,50	26,25	30
Daily organic load (BOD5)	Kg/g	1,80	2,40	3	3,60	4,80	6	7,50	9	10,50	12
Oxidation volume	mc	4,50	6	7,50	9	12	15	18,80	22	26	28
Sedimentation volume	mc	1,15	1,75	2	2,20	4,20	4,60	5,60	6,60	7,90	8,25
Sedimentation surface	mq	0,94	1,45	1,62	1,80	3,20	3,50	3,90	6,60	5,52	5,75
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	800
Width	B	cm	200	200	200	200	220	250	250	250	250
Height	H	cm	220	220	220	220	220	250	250	250	250
Total weight	q.l.s	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.

MONOBLOC PARALLELEPIPED TOTAL OXIDATION PLANTS FROM 250 TO 800 EQUIVALENT POPULATION

OXI/P series



WHAT ARE TOTAL OXIDATION PLANTS OXI/P SERIES

Parallelepiped monobloc prefabricated tanks type EURO MEC OXI/P series for residential areas from 250 to 800 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 for superficial water discharge, principally composed of a parallelepiped basin horizontal axe divided inside into two sections: an oxidation section equipped with self-polishing membrane air diffusers and a final sedimentation with automatic sludge recycling.

The supply includes the blower type side channels for the production of compressed air and the general command and protection electric panel.

The basins of the *prefabricated monobloc tanks* type EURO MEC OXI/P series are composed of monolithic tanks 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/P SERIES WORK

Monobloc parallelepiped prefabricated plants type EURO MEC OXI/P series are divided into the following sections: one for biological oxidation, where by means of aeration through air insufflation, happens the complete reduction of sewage organic substance; one of sedimentation, 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 pneumatic ejector to the oxidation, respect to overflow sludge, coming from biological increase, which is periodically extracted.

With the use of timers, that command the on/off of the blower, the functioning of *parallelepiped monobloc prefabricated tanks* type EURO MEC OXI/P series can be fully automatised.

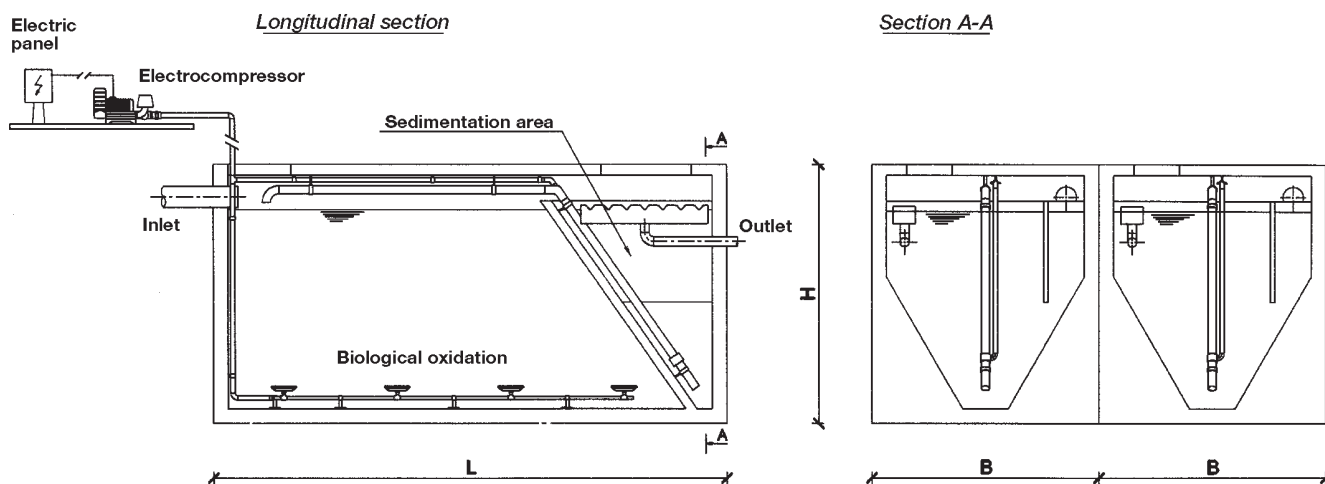
USED MATERIALS

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

SPECIFICATION

"Supply of prefabricated total oxidation depuration plant made of reinforced concrete type EURO MEC OXI/P series composed of a monolithic parallelepiped tank made of reinforced concrete horizontal axe divided inside into a biological oxidation section and a final sludge sedimentation section, complete with sewage inlet and outlet connection pipes, inspection shafts made of concrete, self-polishing membrane air diffusers, command and protection electric panel with timer and all other electromechanical parts for the correct functioning."

STANDARD PRODUCTION



Parallelepiped monobloc total oxidation OXI/P series
For discharge in superficial water – Directive 91/271/CEE

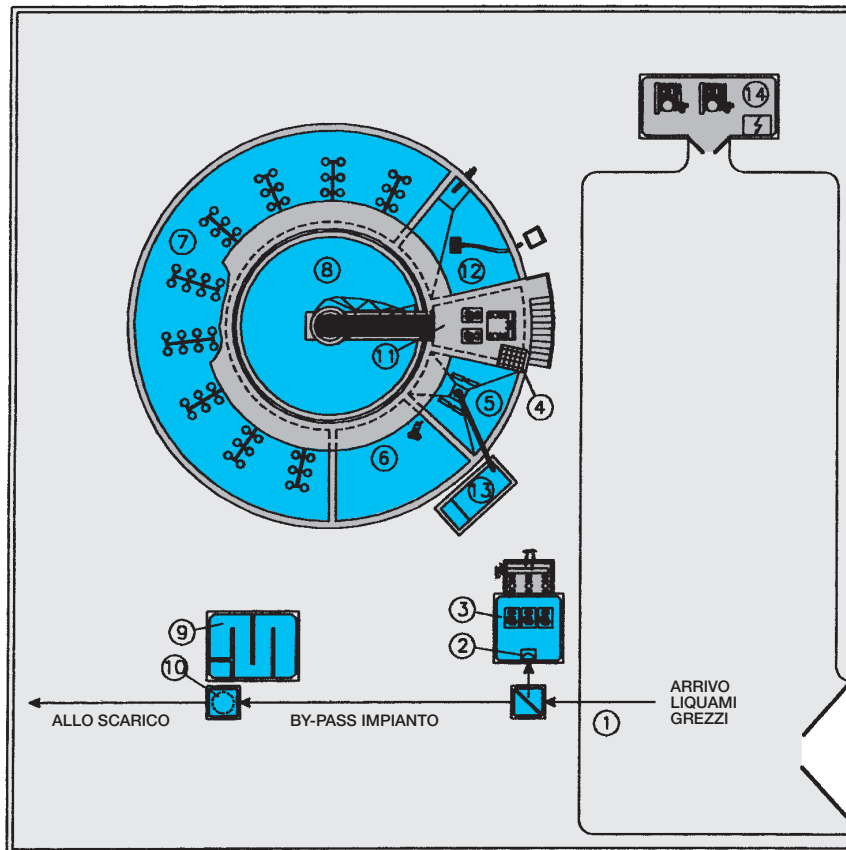
DESCRIPTION	MEASURE UNIT	MODEL						
		OXI/P 250	OXI/P 300	OXI/P 400	OXI/P 500	OXI/P 600	OXI/P 700	OXI/P 800
Equivalent population	n.	250	300	400	500	600	700	800
Daily flow rate	mc/g	37,50	45	60	75	90	105	120
Daily organic load (BOD5)	Kg/g	15	18	24	30	36	42	48
Oxidation volume	mc	37,50	45	60	75	90	105	120
Sedimentation volume	mc	7	10	13	17	25	29	34
Sedimentation surface	m ²	5,70	6,83	9,10	11,40	13,67	15,95	18,23
Air request	mc/h	115	115	190	230	230	380	380
Lift	mm	2000	2000	2000	2000	2000	2000	2000
Installed power	kW	2,2	2,2	3,00	2 x 2,2	2 x 2,2	2 x 3,00	2 x 3,00
Blowers	n.	24	24	32	36	36	48	48
Oxidation modules	n.	-	-	-	2	2	2	2
Combined modules Ox. and Sedim.	n.	2	2	2	2	2	2	2
* Length	cm	600	700	800	500	600	700	800
DIMENSIONS * Width B	cm	250	250	250	250	250	250	250
* Height H	cm	250	250	250	250	250	250	250
Total weight	q.l.s	460	520	600	720	920	1040	1120

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.

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 by one or more compressors.

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.

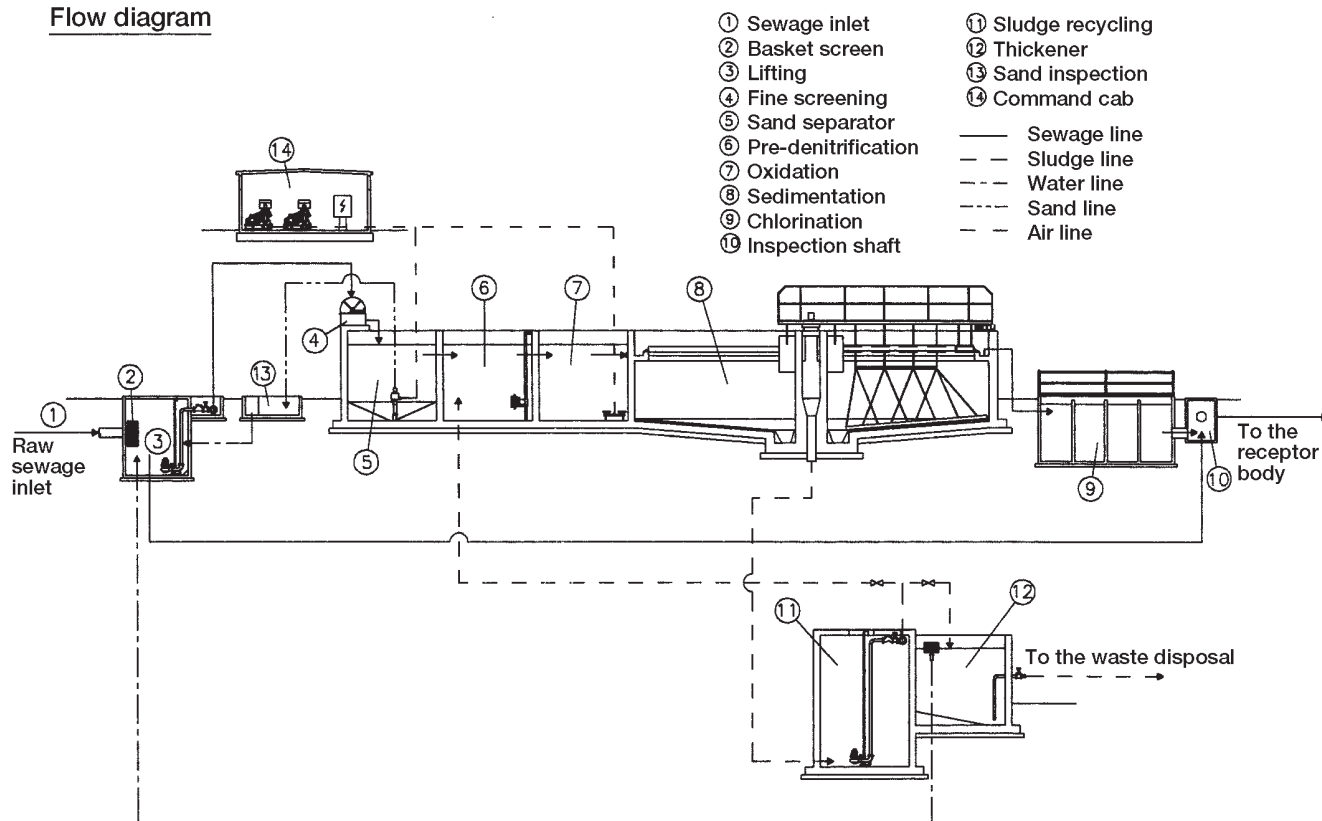
Active sludge, collected from the bottom of the sedimentation section, is recycled in continuous by means of a submersible electropump to the oxidation, respect to overflow sludge, coming from biological increase, which under static thickening, is periodically extracted.

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

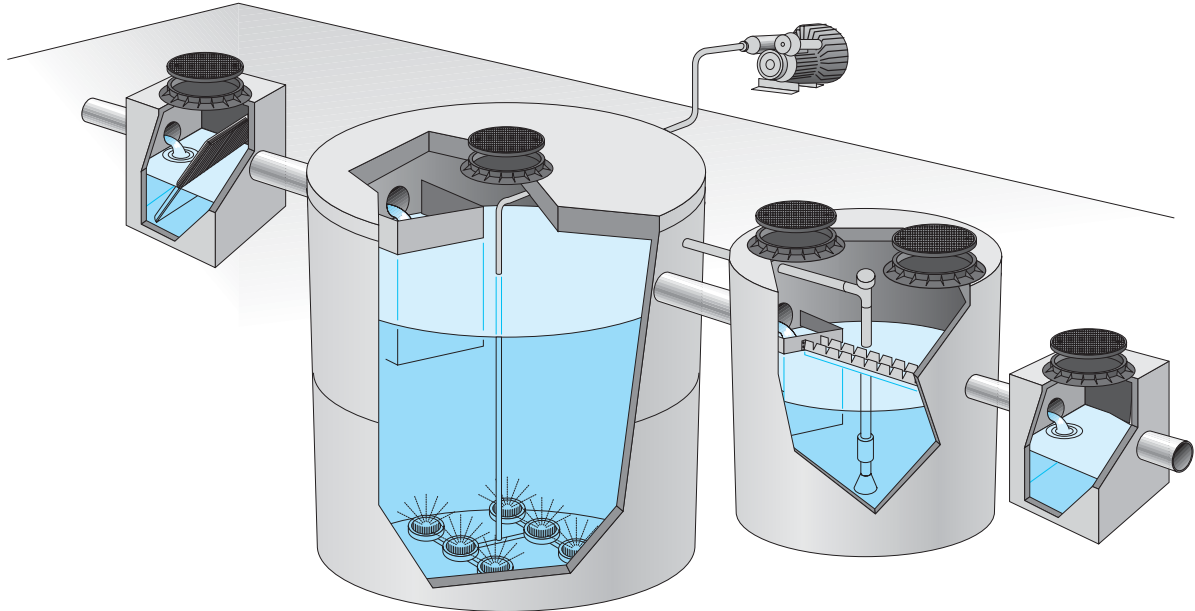
DESCRIPTION	MEASURE UNIT	MODEL								
		OXI/M 700	OXI/M 800	OXI/M 900	OXI/M 1000	OXI/M 1250	OXI/M 1500	OXI/M 2000	OXI/M 2500	OXI/M 3000
Daily flow rate	mc/d	140	160	180	200	250	300	400	500	600
Organic load (BOD5)	Kg/d	42	48	54	60	75	90	120	150	180
Air request	Nmc/h	250	280	300	350	450	540	700	900	1100
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.

MODULAR RING TOTAL OXIDATION PLANTS FROM 15 TO 250 EQUIVALENT POPULATION

OXI/A series



WHAT ARE TOTAL OXIDATION PLANTS OXI/A SERIES

Modular ring prefabricated plants type EURO MEC OXI/A series for residential areas from 5 to 250 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 cylindrical tank vertical axe of biological oxidation equipped with self-polishing membrane air diffusers and a final sedimentation with automatic sludge recycling.

The supply includes the blower type side channels for the production of compressed air and the general command and protection electric panel.

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

HOW TOTAL OXIDATION PLANTS OXI/A SERIES WORK

Modular ring prefabricated plants type EURO MEC OXI/A series for residential areas from 5 to 250 equivalent population are divided into the following sections: one for biological oxidation, where by means of aeration through air insufflation, happens the complete reduction of sewage organic substance; one of sedimentation, 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 pneumatic ejector to the oxidation, respect to overflow sludge, coming from biological increase, which is periodically extracted.

With the use of timers, that command the on/off of the blower, the functioning of modular rings prefabricated plants type EURO MEC OXI/A series can be fully automatised.

Modular ring prefabricated plants type EURO MEC OXI/AS series foresee before the biological treatment a sewage gross screening by means of an Imhoff tank, in which gross and sedimentable substances are kept from the inlet sewage.

USED MATERIALS

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

SPECIFICATION

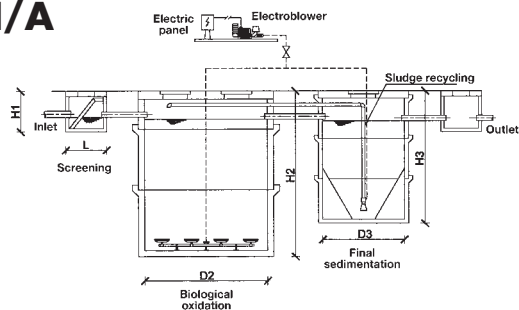
OXI/A: "Supply of prefabricated total oxidation depuration plant made of reinforced concrete type EURO MEC OXI/A series composed of tanks vertical axe made of modular rings to seal on site divided into biological oxidation and final sedimentation, complete with sewage inlet and outlet connection pipes, inspection shafts made of concrete, self-polishing membrane air diffusers, command and protection electric panel with timer and all other electromechanical parts for the correct functioning."

OXI/AS: "Supply of prefabricated total oxidation depuration plant made of reinforced concrete type EURO MEC OXI/A series composed of tanks vertical axe made of modular rings to seal on site divided into initial gross screening type Imhoff, biological oxidation and final sedimentation, complete with sewage inlet and outlet connection pipes, inspection shafts made of concrete, self-polishing membrane air diffusers, command and protection electric panel with timer and all other electromechanical parts for the correct functioning."

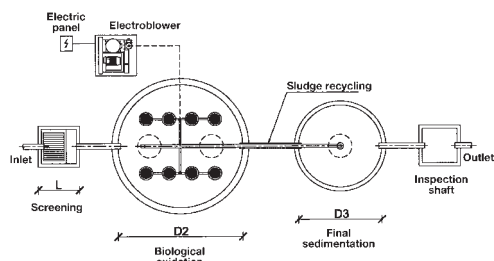
STANDARD PRODUCTION

OXI/A

Section

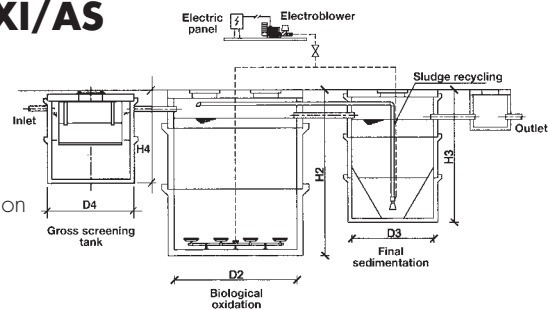


Plan

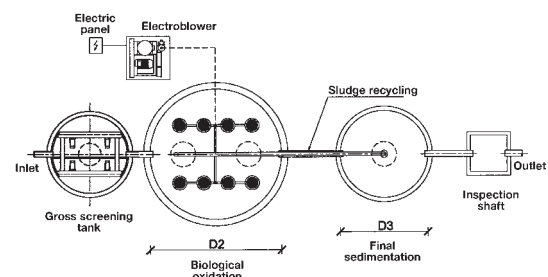


OXI/AS

Section



Plan



Modular ring total oxidation series OXI/A
For discharge in superficial water – Directive 91/271/CEE

DESCRIPTION	MEASURE UNIT	MODEL														
		OXI/A 15	OXI/A 20	OXI/A 30	OXI/A 40	OXI/A 50	OXI/A 60	OXI/A 80	OXI/A 100	OXI/A 125	OXI/A 150	OXI/A 175	OXI/A 200	OXI/A 225	OXI/A 250	
Equiv. population	n.	15	20	30	40	50	60	80	100	125	150	175	200	225	250	
Daily flow rate	mc/g	2,25	3,00	4,50	6,00	7,50	9,00	12,00	15,00	18,75	22,50	26,25	30,00	33,75	37,5	
BOD5	Kg/g	0,90	1,20	1,80	2,40	3,00	3,60	4,80	6,00	7,50	9,00	10,50	12,00	13,50	15	
Installed power	kW	0,55	0,55	1,10	1,10	1,10	1,10	2,20	1,50	2,20	2,20	3,00	3,00	4,00	4,00	
Blowers	n.	2	2	4	4	4	4	6	8	8	8	12	12	12	12	
Screening	L1	cm	50	50	50	50	50	50	50	80	80	80	80	80	80	
	H1	cm	66	66	66	66	66	66	66	96	96	96	96	96	96	
Oxidation	D2	cm	150	150	200	200	200	200	300	300	300	300	300	300	300	
	H2	cm	168	218	229	229	329	379	429	260	335	410	410	485	485	
Sedimentat.	D3	cm	100	100	100	100	100	125	150	150	200	200	200	200	200	
	H3	cm	108	108	158	208	258	258	208	258	229	229	279	279	329	
Inlet level	cm	-20	-20	-20	-20	-20	-20	-20	-20	-25	-25	-25	-25	-25	-25	
Outlet level	cm	-35	-40	-40	-40	-40	-45	-45	-45	-45	-45	-45	-45	-45	-45	
Weight	q.ls	30	35	45	55	58	75	85	135	165	175	190	210	220	230	

Initial gross screening type Imhoff series OXI/AS

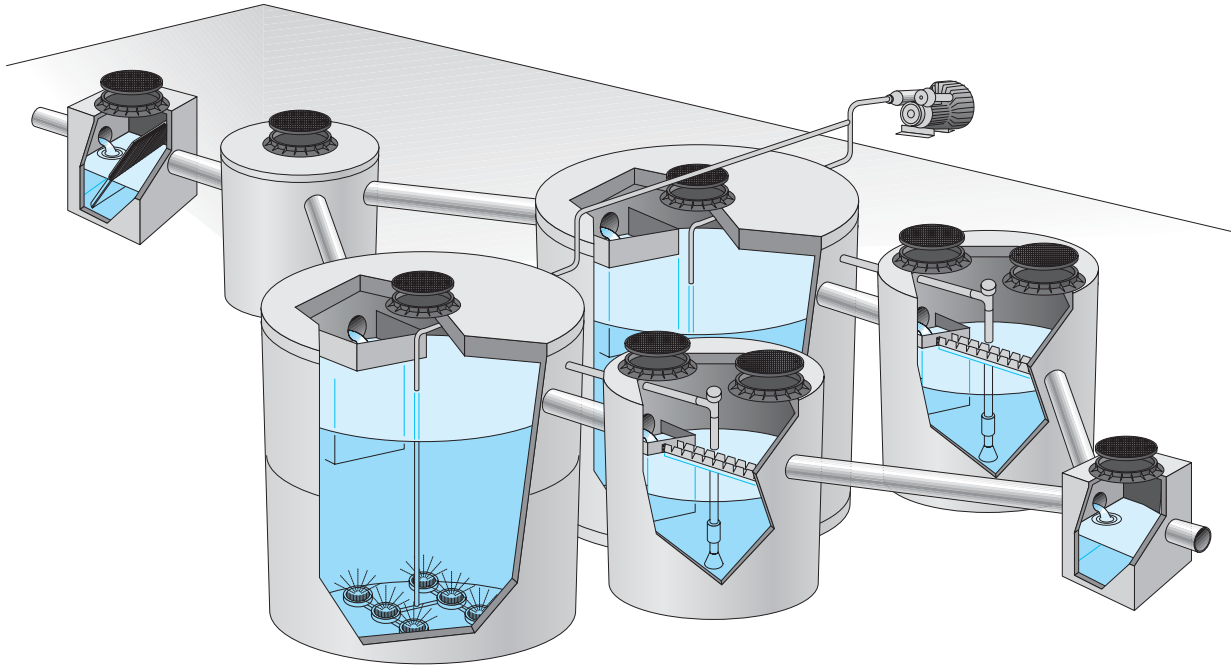
DESCRIPTION	MEASURE UNIT	MODEL														
		OXI/AS 15	OXI/AS 20	OXI/AS 30	OXI/AS 40	OXI/AS 50	OXI/AS 60	OXI/AS 80	OXI/AS 100	OXI/AS 125	OXI/AS 150	OXI/AS 175	OXI/AS 200	OXI/AS 225	OXI/AS 250	
Gross screening type	D4	cm	125	125	125	125	125	125	150	150	200	200	200	200	200	
	H4	cm	168	168	168	168	218	218	218	218	229	229	229	329	329	
Total weight	q.ls	17	17	17	17	19	19	25	25	66	66	66	86	86	86	

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.

MODULAR RING TOTAL OXIDATION PLANTS FROM 300 TO 800 EQUIVALENT POPULATION

OXI/A series



WHAT ARE TOTAL OXIDATION PLANTS OXI/A SERIES

Modular ring prefabricated plants type EURO MEC OXI/A series for residential areas from 300 to 800 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 cylindrical basin vertical axe of biological oxidation equipped with self-polishing membrane air diffusers and a final sedimentation with automatic sludge recycling.

The supply includes the blower type side channels for the production of compressed air and the general command and protection electric panel.

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

HOW TOTAL OXIDATION PLANTS OXI/A SERIES WORK

Modular ring prefabricated plants type EURO MEC OXI/A series for residential areas from 300 to 800 equivalent population are divided into the following sections: one for biological oxidation, where by means of aeration through air insufflation, happens the complete reduction of sewage organic substance; one of sedimentation, 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 pneumatic ejector to the oxidation, respect to overflow sludge, coming from biological increase, which is periodically extracted.

With the use of timers, that command the on/off of the blower, the functioning of modular rings prefabricated plants type EURO MEC OXI/A series can be fully automatised.

Modular ring prefabricated plants type EURO MEC OXI/AS series foresee before the biological treatment a sewage gross screening by means of an Imhoff tank, in which gross and sedimentable substances are kept from the inlet sewage.

USED MATERIALS

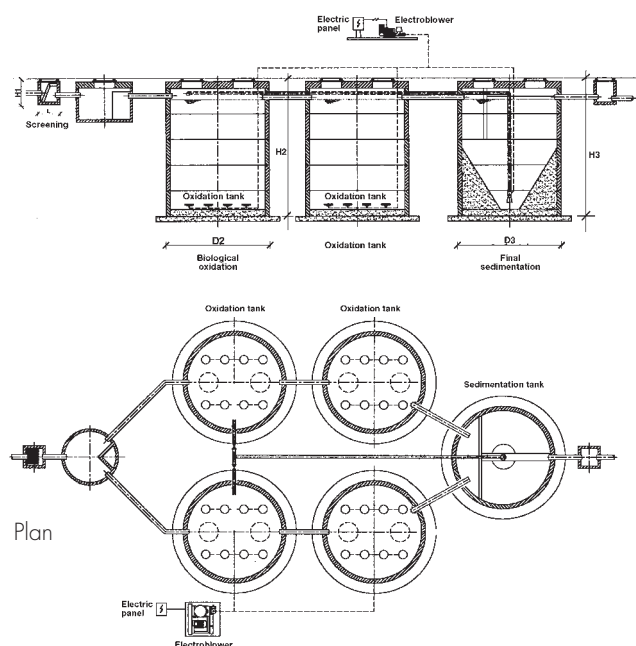
Tanks	:	highly resistant reinforced vibrated concrete
Shafts	:	concrete (if requested class D 400 cast iron)
Piping	:	galvanised steel and polyethylene
By request	:	stainless steel AISI 304

SPECIFICATION

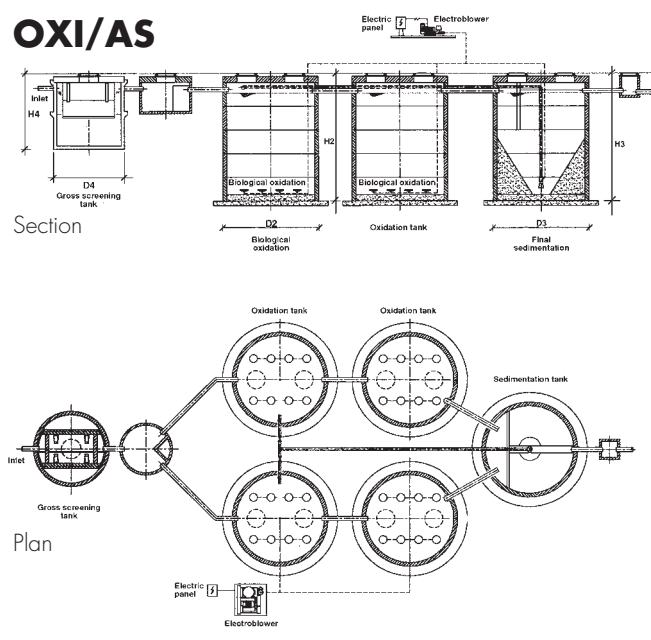
OXI/A: "Supply of prefabricated total oxidation depuration plant made of reinforced concrete type EURO MEC OXI/A series composed of tanks vertical axe made of modular rings to seal on site divided into biological oxidation and final sedimentation, complete with sewage inlet and outlet connection pipes, inspection shafts made of concrete, self-polishing membrane air diffusers, command and protection electric panel with timer and all other electromechanical parts for the correct functioning."

OXI/AS: "Supply of prefabricated total oxidation depuration plant made of reinforced concrete type EURO MEC OXI/A series composed of tanks vertical axe made of modular rings to seal on site divided into initial gross screening type Imhoff, biological oxidation and final sedimentation, complete with sewage inlet and outlet connection pipes, inspection shafts made of concrete, self-polishing membrane air diffusers, command and protection electric panel with timer and all other electromechanical parts for the correct functioning."

STANDARD PRODUCTION



OXI/AS



Modular ring total oxidation series OXI/A
For discharge in superficial water – Directive 91/271/CEE

DESCRIPTION	MEASURE UNIT	MODEL								
		OXI/A 300	OXI/A 350	OXI/A 400	OXI/A 450	OXI/A 500	OXI/A 550	OXI/A 600	OXI/A 700	OXI/A 800
Equiv. population	n.	300	350	400	450	500	550	600	700	800
Daily flow rate	mc/g	45	52,5	60	67,5	75	82,5	90	105	120
BOD5	Kg/g	18	21	24	27	30	33	36	42	48
Installed power	kW	4	4	5,50	5,50	5,50	7,50	7,50	7,50	9,2
Blowers	n.	24	28	32	36	40	44	48	56	64
Screening	L1	cm	80	80	80	80	80	80	80	80
	H1	cm	96	96	96	96	96	96	96	96
Oxidation	D2	cm	2x300	2x300	2x300	4x300	4x300	4x300	4x300	4x300
	H2	cm	395	395	470	320	320	320	395	470
Sedimentat.	D3	cm	2x200	2x200	2x200	300	300	2x300	2x300	2x300
	H3	cm	279	279	329	370	370	320	320	320
Inlet level	cm	-25	-25	-25	-25	-25	-25	-25	-25	-25
Outlet level	cm	-50	-50	-50	-50	-50	-50	-50	-50	-50
Weight	q.l.s	310	310	330	430	430	500	500	500	550

Initial gross screening type Imhoff series OXI/AS

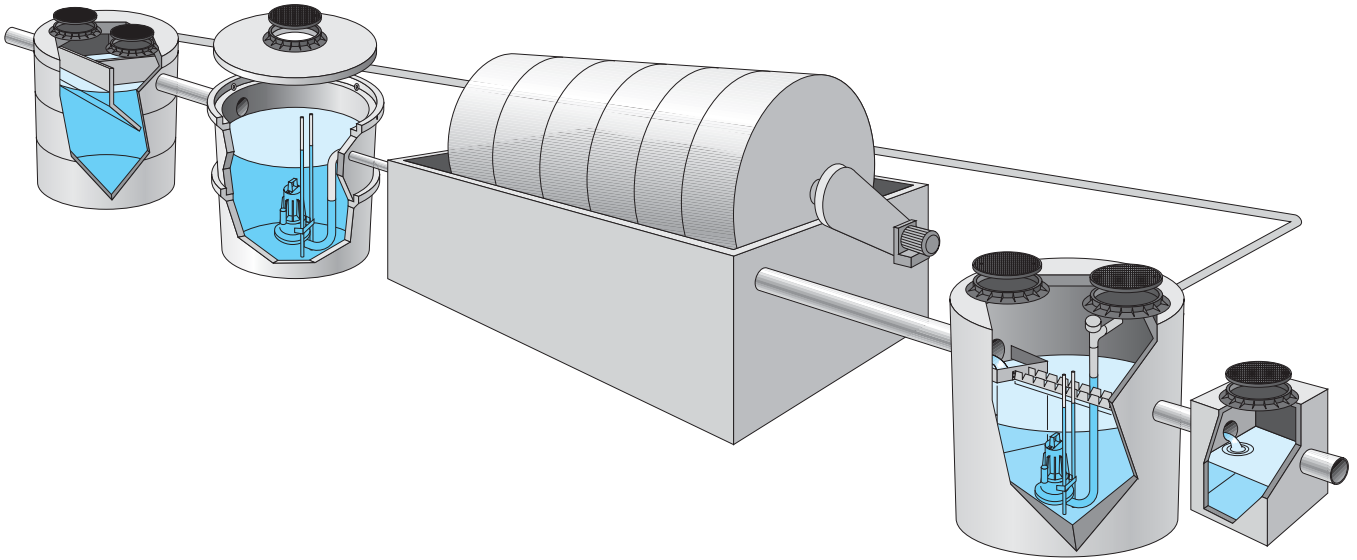
DESCRIPTION	MEASURE UNIT	MODEL								
		OXI/AS 300	OXI/AS 350	OXI/AS 400	OXI/AS 450	OXI/AS 500	OXI/AS 550	OXI/AS 600	OXI/AS 700	OXI/AS 800
Gross screening type	D4	IMO/100	IMO/100	IMO/115	IMO/115	IMO/145	IMO/145	IMO/145	IMO/195	IMO/195
	H4	cm	200	200	200	200	300	300	300	300
Total weight		q.l.s	68	68	74	74	97	97	97	117
			68	68	74	74	97	97	117	117

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.

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

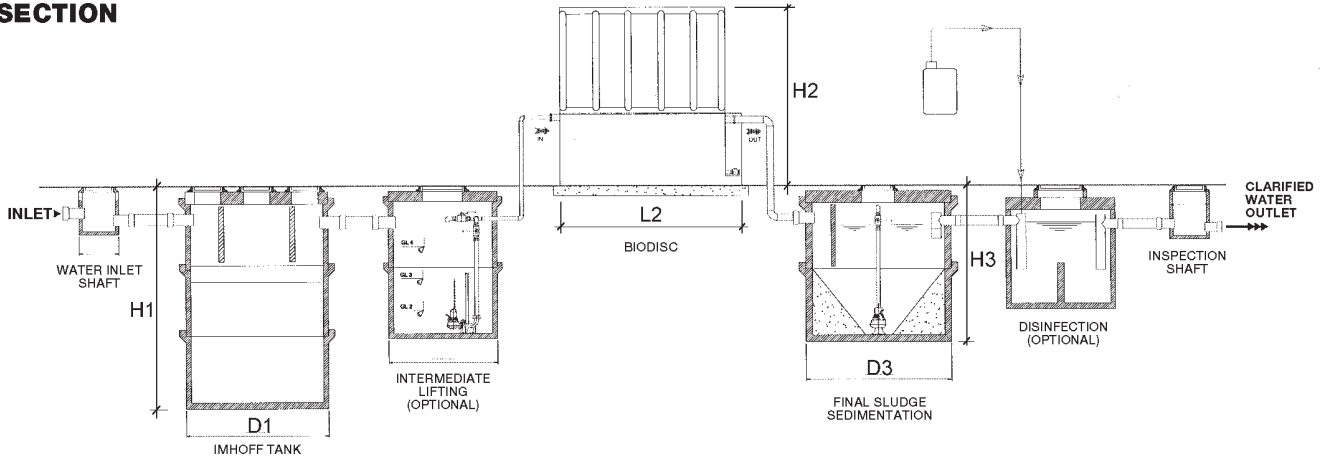
SPECIFICATION

"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."

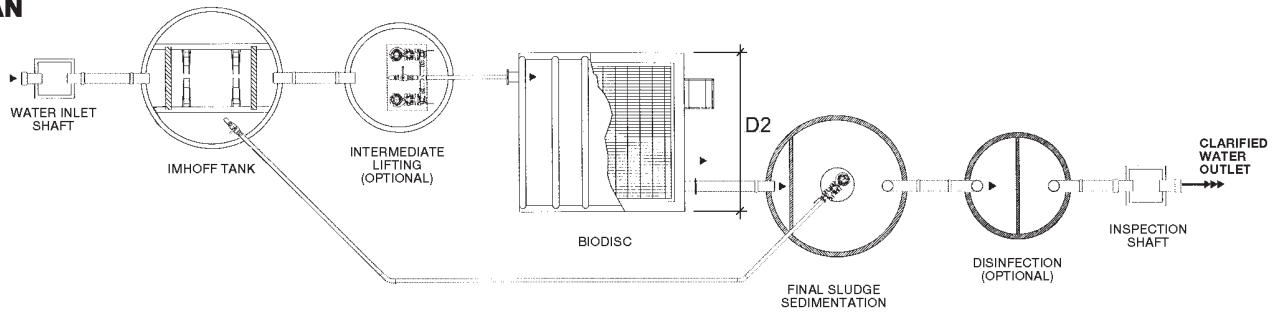


STANDARD PRODUCTION

SECTION



PLAN



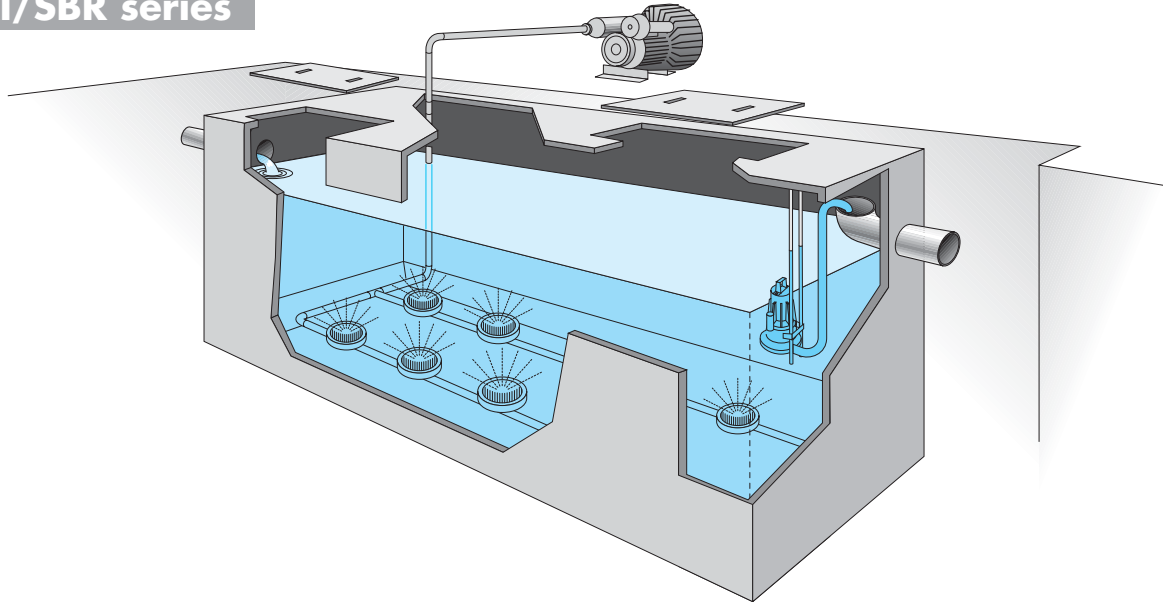
DESCRIPTION	MEASURE UNIT	MODEL										
		OXI/B 50	OXI/B 100	OXI/B 150	OXI/B 200	OXI/B 250	OXI/B 300	OXI/B 350	OXI/B 400	OXI/B 450	OXI/B 500	
Equivalent population	n.	50	100	150	200	250	300	350	400	450	500	
Daily flow rate	mc/g	10	20	30	40	50	60	70	80	90	100	
BOD5	kgBOD/g	3	6	9	12	15	18	21	24	27	30	
Biodisc surface	m ²	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.

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 connected to working cycles.

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

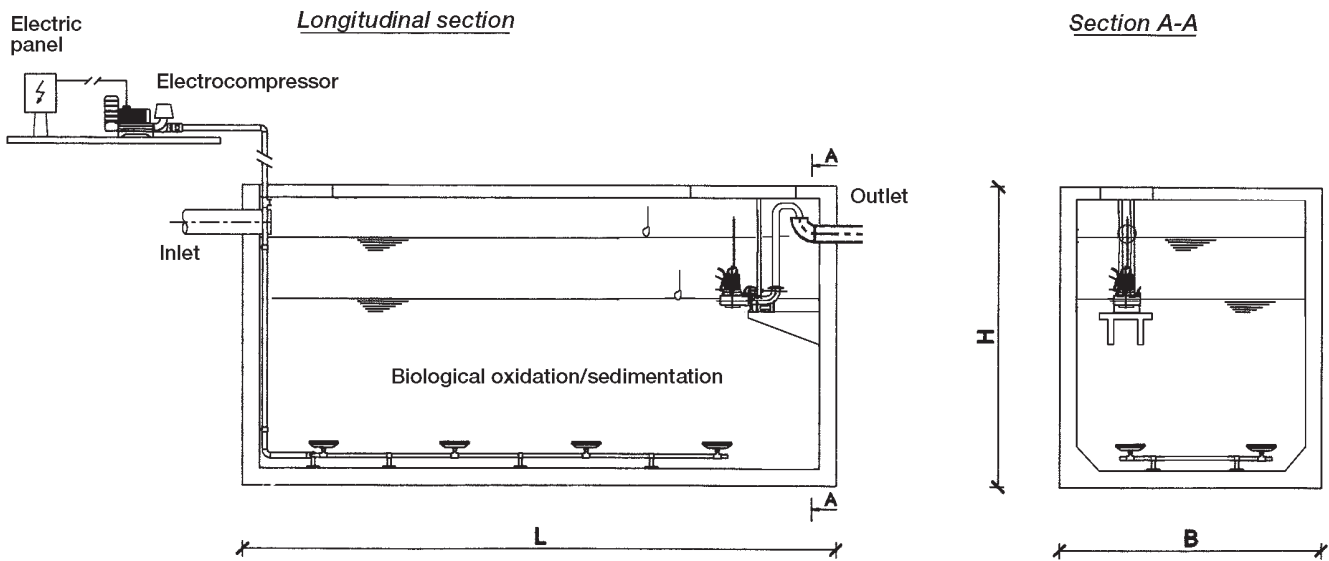
Tanks	:	highly resistant reinforced vibrated concrete
By request	:	painted steel fiberglass
Shafts	:	concrete (if requested class D 400 cast iron)
Piping	:	galvanised steel and polyethylene
By request	:	stainless steel AISI 304

SPECIFICATION

"Supply of total oxidation prefabricated depuration plant made of reinforced concrete type EURO MEC OXI/SBR series composed of a parallelepiped monolithic 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 11.05.99

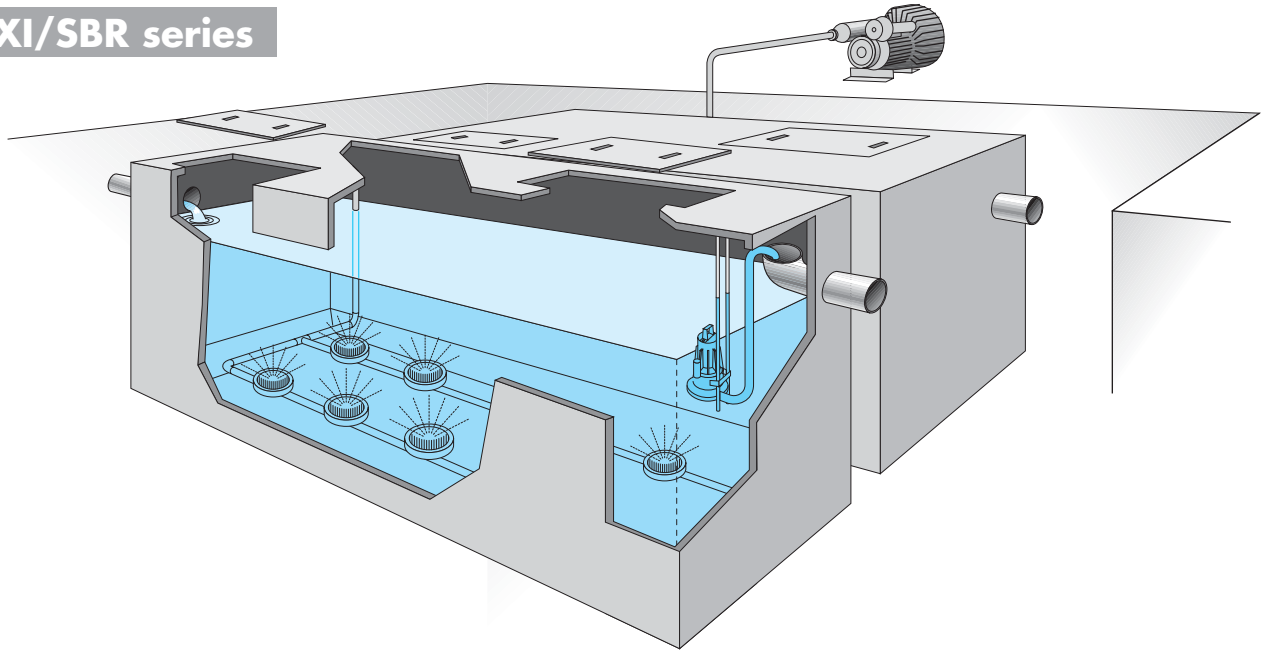
DESCRIPTION	MEASURE UNIT	MODEL									
		OXI/SBR 30	OXI/SBR 40	OXI/SBR 50	OXI/SBR 60	OXI/SBR 80	OXI/SBR 100	OXI/SBR 125	OXI/SBR 150	OXI/SBR 175	OXI/SBR 200
Equivalent population	n.	30	40	50	60	80	100	125	150	175	200
Daily flow rate	mc/g	4,50	6	7,50	9	12	15	18,75	22,50	26,25	30
Daily organic load (BOD5)	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.l.s	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.

MONOBLOC PARALLELEPIPED TOTAL OXIDATION PLANTS FROM 250 TO 800 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 250 to 800 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, reduced maintenance, odour and noise absence.

Monobloc parallelepiped prefabricated plants type EURO MEC OXI/SBR series are principally composed of two parallelepiped tanks 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 connected to working cycles.

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

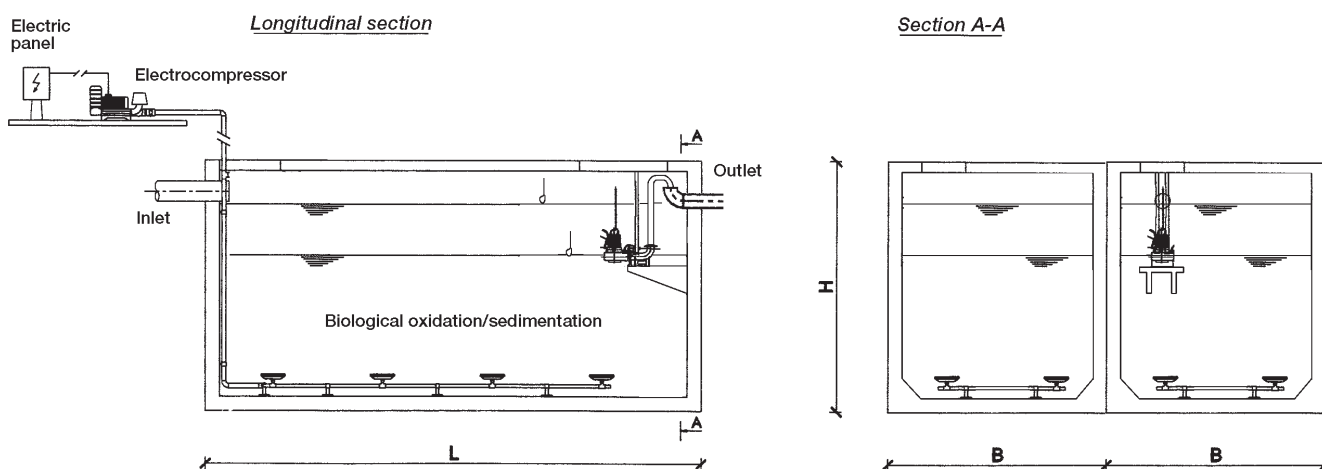
SPECIFICATION

"Supply of total oxidation depuration prefabricated plant made of reinforced concrete type EURO MEC OXI/SBR series composed of two parallelepiped monolithic tanks 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

Technical file



Monobloc parallelepiped total oxidation OXI/P series.
For discharge in superficial water – Directive 91/271/CEE

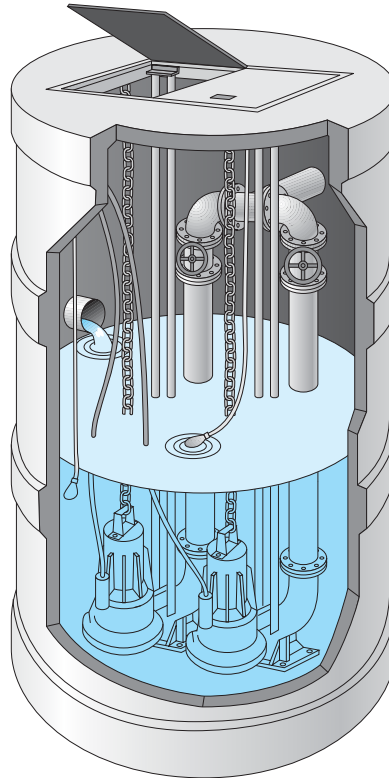
DESCRIPTION	MEASURE UNIT	MODEL							
		OXI/SBR 250	OXI/SBR 300	OXI/SBR 400	OXI/SBR 500	OXI/SBR 600	OXI/SBR 700	OXI/SBR 800	
Equivalent population	n.	250	300	400	500	600	700	800	
Daily flow rate	mc/g	37,50	45	60	75	90	105	120	
Daily organic load (BOD5)	Kg/g	15	18	24	30	36	42	48	
Oxidation/sedimentation volume	mc	44,50	55,00	73,00	92,00	115,00	134,00	154,00	
Air request	mc/h	115	115	190	230	230	380	380	
Lift	mm	2000	2000	2000	2000	2000	2000	2000	
Installed power	kW	2,2	2,2	3,00	2 x 2,2	2 x 2,2	2 x 3,00	2 x 3,00	
Blowers	n.	24	24	32	36	36	48	48	
Oxidation/sedimentation modules	n.	2	2	2	4	4	4	4	
DIMENSIONS	* Length L	cm	500	600	800	500	600	700	800
	* Width B	cm	250	250	250	250	250	250	250
	* Height H	cm	250	250	250	250	250	250	250
Total weight	q.l.s	360	460	560	720	920	1040	1120	

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.

CYLINDRICAL MONOBLOC LIFTING STATIONS

SSL/C series



WHAT ARE CYLINDRICAL MONOBLOC LIFTING STATIONS SSL/C SERIES

Cylindrical monobloc lifting stations type EURO MEC SSL/C series, used for the accumulation and the lifting of civil and industrial sewage water, are composed of a monolithic tank made of reinforced concrete highly resistant, to guarantee total leak absence and absence of ground infiltrations.

Cylindrical monobloc lifting stations type EURO MEC SSL/C series are already supplied with inside one or more submersible pumps with pipes, level regulators and their devices for the correct functioning; the standard model also includes inspection manholes made of hot galvanised steel.

In order to install and start the lifting stations, to position even in presence of ground water in the excavation, the only operations to do are monobloc earthing, pipe connection, command electric panel connection.

HOW CYLINDRICAL MONOBLOC LIFTING STATIONS SSL/C SERIES WORK

Cylindrical monobloc lifting stations type EURO MEC SSL/C series are supplied with submersible pumps proportioned to the sewage flow rate to lift, commanded by floating level regulators with automatic functioning. For a good functioning it is important to calculate the effective volume obtained according to the formula written hereafter, taking care for the starts per hour permitted to the electropumps.

For guidance for an optimal functioning it is suggested that the lifting station volume permits to every installed power from eight to twelve starts per hour.

By request for the protection of the lifting pumps, a basket screen sliding on guides complete with extraction chain can be supplied.

USED MATERIALS

Tanks	:	highly resistant reinforced vibrated concrete
By request	:	painted steel, reinforced fiberglass
Shafts	:	concrete
By request	:	hot galvanised steel, stainless steel AISI 304, class D 400 cast iron
Piping	:	galvanised steel
By request	:	stainless steel AISI 304

SPECIFICATION

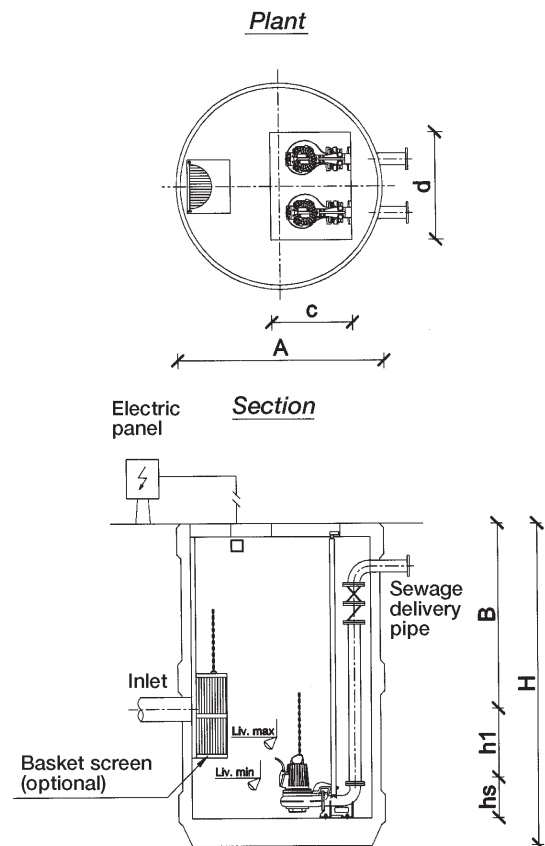
"Supply of a monobloc lifting station type EURO MEC SSL/C series, composed of a cylindrical monolithic tank vertical axe, made of highly resistant reinforced concrete, complete with inspection manholes made of hot galvanised steel sheet, one or two submersible electropumps each with automatic coupling system and extraction chain, delivery pipes with terminal flange equipped with sluice valve and non-return valve of the same diameter, hot galvanised guide pipes of the pumps with brackets, automatic floating switch level with support, complete with electric panel constructed according to the CEI norms, in water-proof case type IP55, with wiring and assembly inside of all devices necessary for the automatic alternated working of the electropumps."

STANDARD PRODUCTION

MODEL	Tank diam. cm	External height cm	Inspection manhole dimensions cm	Weight q.l.s
	A	H	cx d	
SSL/C 130	130	200	50x70	10
		250	50x70	18
		300	50x70	25
SSL/C 151	151	250	50x70	23
		300	50x70	30
SSL/C 192	192	200	50x70	27
		250	50x70	30
		300	50x70	35
		350	50x70	42
		400	50x70	46
SSL/C 244	244	250	70x140	60
		300	70x140	65
		350	70x140	69
		400	70x140	73
SSL/C 250*	250	235	70x140	90
		285	70x140	120

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

(*) Model with cover detached from the tank.



DIMENSIONING

Lifting station volume:

The effective volume necessary for a good functioning of the electropumps is calculated on the basis of the number of starts per hour, adopting the following formula:

$$V = \frac{(0,9 \times Q)}{z}$$

where:

V = effective volume of the tank (mc) Q = electropump flow rate in l/s z = number of starts per hour per pump

For the good functioning of the electropumps it is appropriate that the lifting station volume consents a number of starts from 8 till 12 per hour.

Pumping volume height (H 1):

In order to determine the difference between the start and the stop of the pumps (H 1), the following formula is used:

$$H1 = (V \times 4) / (A^2 \times 3,14)$$

where:

A = tank standard diameters V = required effective volume

Control of the lifting station total height (H):

The total external height of the tank is obtained from the following sum:

$$H = B + (h/n) + hs + 0,4$$

where:

H = total tank height B = entry pipe width from ground level n = n. of installed pumps
hs = minimum level submergence pump 0,4 = tank thickness + security margin

The lifting station can be supplied with the following accessories:

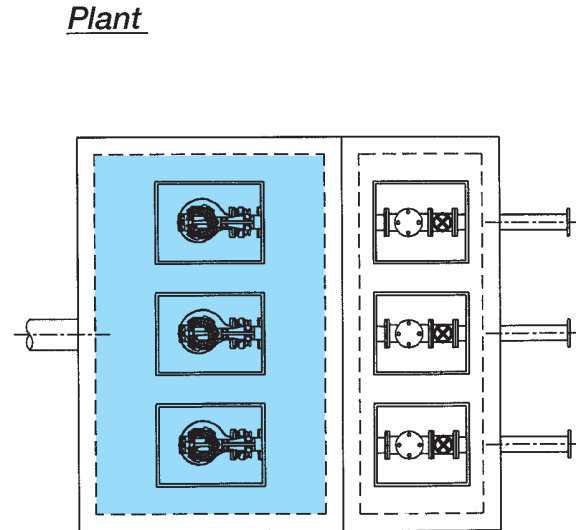
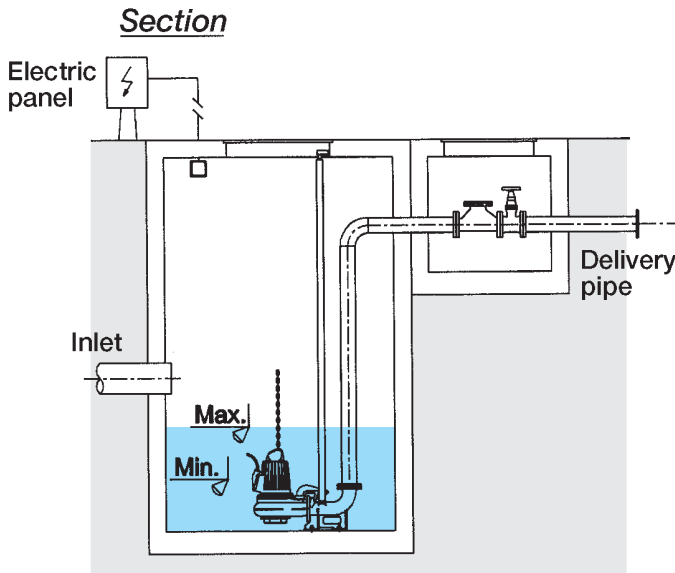
- non-return valve made of cast iron or ball valve
- flat body sluice valve made of cast iron
- sliding guides manual screen, complete with fixing frame, recovery chain, carreaageable inspection shaft made of hot galvanised sheet.

By request made of AISI 304.

- manholes made of cast iron
- electric panel arranged for eventual telecontrol
- electronic alarm device with buffer battery and flash lamp.

MONOBLOC PARALLELEPIPED LIFTING STATIONS

SSL/P series



WHAT ARE MONOBLOC PARALLELEPIPED LIFTING STATIONS SSL/P SERIES

Monobloc parallelepiped lifting stations type EURO MEC SSL/P series, used for the accumulation and the lifting of civil and industrial sewage water, are composed of a monolithic tank made of reinforced concrete highly resistant, to guarantee a total leak absence and absence of ground infiltrations.

Monobloc parallelepiped lifting stations type EURO MEC SSL/P series are already supplied with inside one or more submersible pumps with pipes, level regulators and their devices for the correct functioning; the standard model also includes inspection manholes made of hot galvanised steel.

In order to install and start the lifting stations, to position even in presence of ground water in the excavation, the only operations to do are monobloc earthing, pipe connection, command electric panel connection.

By request, and in this case when the station is particularly deep, it is possible to supply the plant in more modular elements easy to transport and to place.

HOW MONOBLOC PARALLELEPIPED LIFTING STATIONS SSL/P SERIES WORK

Monobloc parallelepiped lifting stations type EURO MEC SSL/P series are supplied with submersible pumps proportioned to the sewage flow rate to lift, commanded by floating level regulators with automatic functioning. For a good functioning it is important to calculate the effective volume obtained according to the formula written in the technical sheet n. 3/1 regarding monobloc cylindrical lifting stations, taking care for the starts per hour permitted to the electropumps.

For guidance for an optimal functioning it is suggested that the lifting station volume permits to every installed power from eight to twelve starts per hour.

By request for the protection of the lifting pumps, a basket screen sliding on guides complete with extraction chain can be supplied.

USED MATERIALS

Tanks	: highly resistant reinforced vibrated concrete
By request	: painted steel, reinforced fiberglass
Shafts	: concrete
By request	: hot galvanised steel, stainless steel AISI 304, class D 400 cast iron
Piping	: galvanised steel
By request	: stainless steel AISI 304

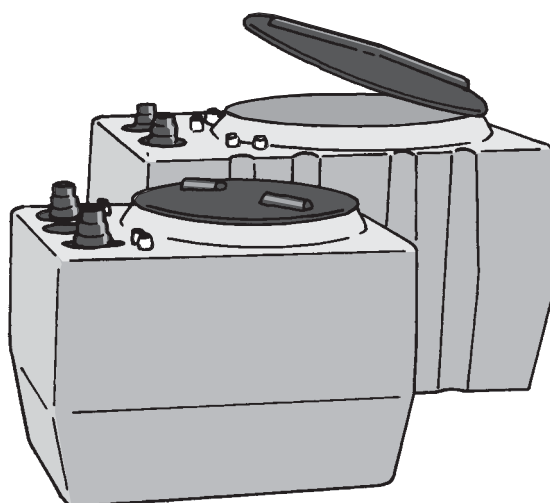
SPECIFICATION

"Supply of a monobloc lifting station type EURO MEC SSL/P series, composed of a parallelepiped monolithic tank vertical axe, made of reinforced concrete, complete with inspection manholes made of hot galvanised steel sheet, one or two submersible electropumps each with automatic coupling system and extraction chain, delivery pipes with terminal flange equipped with sluice valve and non-return valve of the same diameter, guide pipes of the hot galvanised pumps with brackets, automatic floating switch level with support, complete with electric panel constructed according to the CEI norms, in water-proof case type IP55, with wiring and assembly inside of all devices necessary for the automatic alternated working of the electropumps."



POLYETHYLENE LIFTING STATIONS

SSL/PI series



WHAT ARE POLYETHYLENE LIFTING STATIONS SSL/PI SERIES

Polyethylene lifting stations type EURO MEC SSL/PI series, used for the lifting of civil sewage water when the drainage system is at a level that doesn't permit the gravity disposal.

Polyethylene lifting stations type EURO MEC SSL/PI series are composed of a strong tank made of polyethylene with inside a real pumping station completely automatic and reliable, composed of a submersible electropump, level regulators, piping and fixing accessories.

Polyethylene lifting stations type EURO MEC SSL/PI series differs from other plants for the low cost assembly, the inspection and maintenance facility and a functioning without noises and irritating odours.

USED MATERIALS

- Tanks : polyethylene
- Shafts : polyethylene
- Piping : stainless steel AISI 304

SPECIFICATION

"Supply of a polyethylene lifting station type EURO MEC SSL/PI series for the lifting of civil sewage water made of rotomoulded polyethylene, complete with submersible electropump with fast automatic coupling to the pipe, command and protection electric panel and all the equipment suitable for a correct functioning."

STANDARD PRODUCTION

DESCRIPTION	MEASURE UNIT	MODEL	
		SSL/PI 200	SSL/PI 400
Volume	lit.	200	400
Length	cm.	75	100
Width	cm.	56	75
Height	cm.	60	70
N. of electropumps	n.	1	2
Flow rate	lit./s	3	3+3
Lift	mH ₂ O	5	5
Installed power	kW	0,8	0,8+0,8
Delivery pipe diameter	mm	50	50
Weight*	kg	14	48

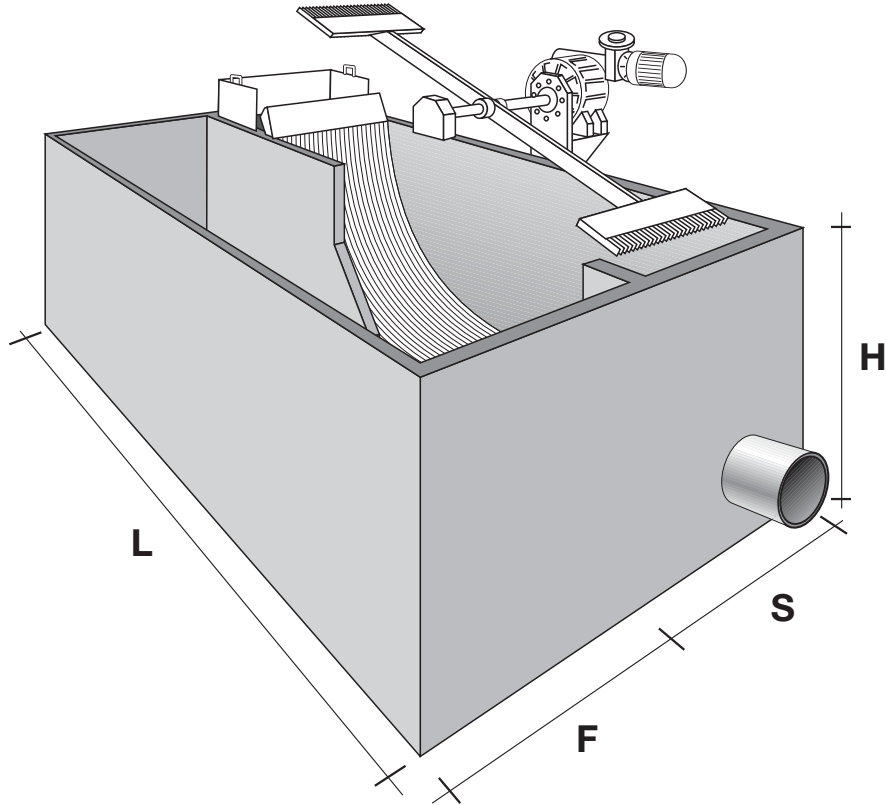
The above written data are given as information. The Society EURO MEC S.r.l. reserves the right to change them in every moment.

(*) The reported value does not consider the electropump weight.

The lifting stations can be equipped with pumps differing from those indicated according to the specific necessities.

MONOBLOC SCREENING BASINS

CGR series



WHAT ARE MONOBLOC SCREENING BASINS CGR SERIES

Monobloc screening basins type EURO MEC CGR series, used for the installation of bow mechanical screens or rotating brushes separators, are made of highly resistant reinforced concrete.

HOW MONOBLOC SCREENING BASINS CGR SERIES WORK

Monobloc screening basins type EURO MEC CGR series allow a quick installation of bow mechanical screens or rotating brushes separators, and are correctly dimensioned in order to obtain an optimal sewage speed to avoid accumulation of sedimentable substances on the bottom of the tanks.

USED MATERIALS

Screening basins : highly resistant reinforced vibrated concrete

SPECIFICATION

"Supply of prefabricated monobloc screening basin type EURO MEC CGR series made of highly resistant reinforced concrete, with the arrangement for automatic bow screen, equipped with sewage inlet and outlet pipes."

STANDARD PRODUCTION

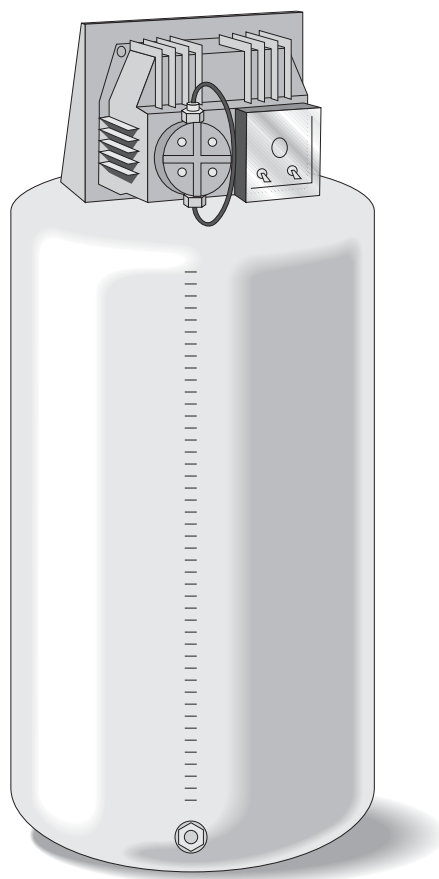
1 CHANNEL MODEL					2 CHANNELS MODEL					
MODEL	L cm	H cm	S cm	Weight q.l.s	MODEL	L cm	H cm	S cm	F cm	Weight q.l.s
CGR/1/30	400	100	30	30	CGR/2/30	400	100	30	20	47
CGR/1/40	400	100	40	33	CGR/2/40	400	100	40	30	51
CGR/1/50	400	100	50	35	CGR/2/50	400	100	50	40	55
CGR/1/60	400	100	60	37	CGR/2/60	400	100	60	50	60
CGR/1/80	400	100	80	40	CGR/2/80	400	100	80	70	68
CGR/1/90	400	100	90	43	CGR/2/90	400	100	90	80	73
CGR/1/100	400	100	100	46	CGR/2/100	400	100	100	90	76
CGR/1/120	400	100	120	49	CGR/2/120	400	100	120	110	85
CGR/1/140	400	100	140	53						
CGR/1/160	400	100	160	58						

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LIQUID DOSAGE STATIONS

CDL series



WHAT ARE LIQUID DOSAGE STATIONS CDL SERIES

The *liquid dosage stations* type EURO MEC CDL series are used to control the dosage of various liquid chemicals and are composed of a polyethylene storage reservoir complete with a loading cover and a metal support for the dosing pump (the latter completely built in anti acid material) and an electrical panel complete with electronic programmer for the pump timed control.

HOW LIQUID DOSAGE STATIONS CDL SERIES WORK

The *liquid dosage stations* type EURO MEC CDL series are conceived for dosing the reagents through a membrane dosing pump set in operation by an variable frequency electromagnet controlled by an electronic circuit with a manual flow adjusting device from 10% to 100%.

The pump is programmed to work automatically and for the necessary hours, taking into account the maximal foreseen flow rate for the sewage and dosing a reactant quantity set on the regulation knob.

USED MATERIALS

Reservoir : rotomoulded polyethylene
Dosing pump : anti acid material

SPECIFICATION

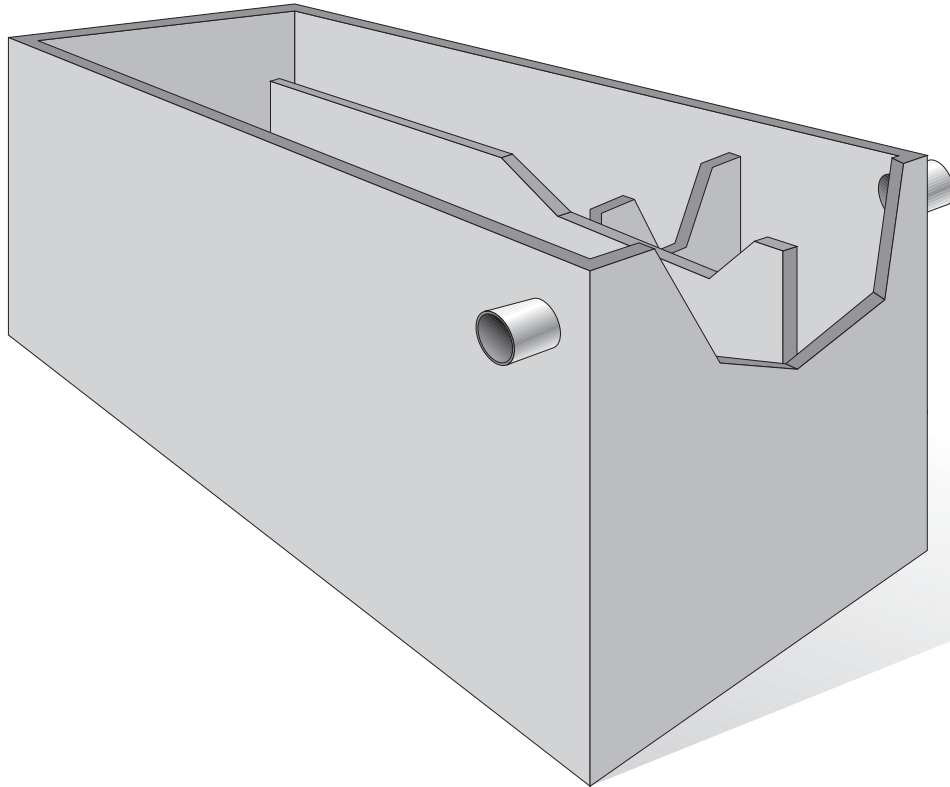
"Supply of a liquid dosage station type EURO MEC CDL series composed of a storage basin with loading cover and support for the pump; membrane dosing pump made of anti acid material complete with an electrical panel for its electronically timed control."

MODEL	RESERVOIR	FLOW RATE	POWER	FEED. TENS.
	liters	l/h	W	V
CDL 1	100	10	30	220
CDL 2	200	10	30	220
CDL 5	500	10	30	220
CDL 10	1000	10	30	220

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MONOBLOC CHLORINATION TANKS

VCL series



WHAT ARE MONOBLOC CHLORINATION TANKS SERIES VCL

The *prefabricated monobloc chlorination tanks* type EURO MEC VCL series are dimensioned to guarantee a disinfecting process complying with the Directive 91/271/CEE and allow a certain contact time between sewage and chemical reagent, which is usually sodium hypochlorite and peracetic acid.

The *prefabricated monobloc chlorination tanks* type EUROMECC VCL series are built with highly resistant reinforced concrete to ensure a total absence of leakages and infiltrations into the ground; furthermore, they can even be installed in presence of ground water.

HOW MONOBLOC CHLORINATION TANKS VCL SERIES WORK

The sewage is forced into a serpentine route created with inner sects therefore increasing the contact time with the chemical reagent used to disinfect.

USED MATERIALS

Tanks : highly resistant vibrated reinforced concrete

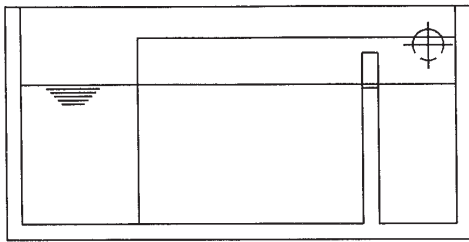
SPECIFICATION

"Supply of a prefabricated monobloc chlorination tank type EUROMECC VCL series made of reinforced concrete with rectangular section with flat bottom complete with inner sects for the sewage forced serpentine path, dimensioned to guarantee enough contact time between the sewage and the chemical reagent, which will not have to be less than 20 minutes during the maximal flow rate in order to ensure the best possible mixing and disinfecting process."

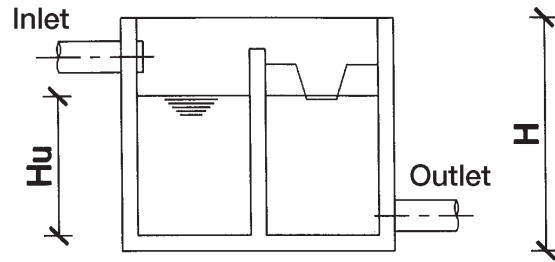


STANDARD PRODUCTION

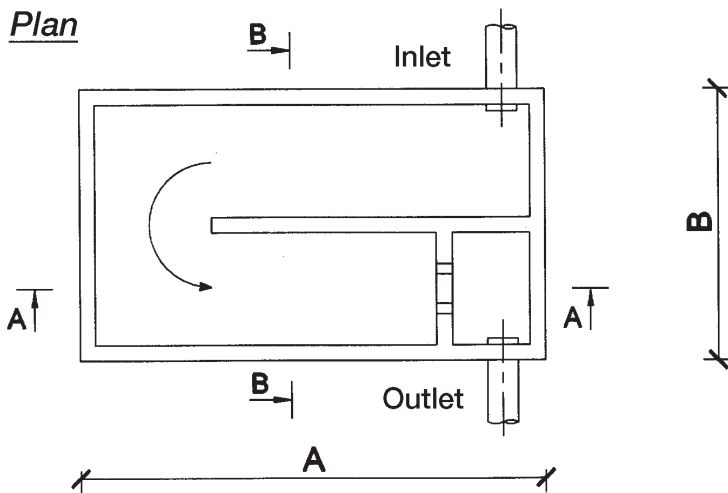
Section A-A



Section B-B



Plan



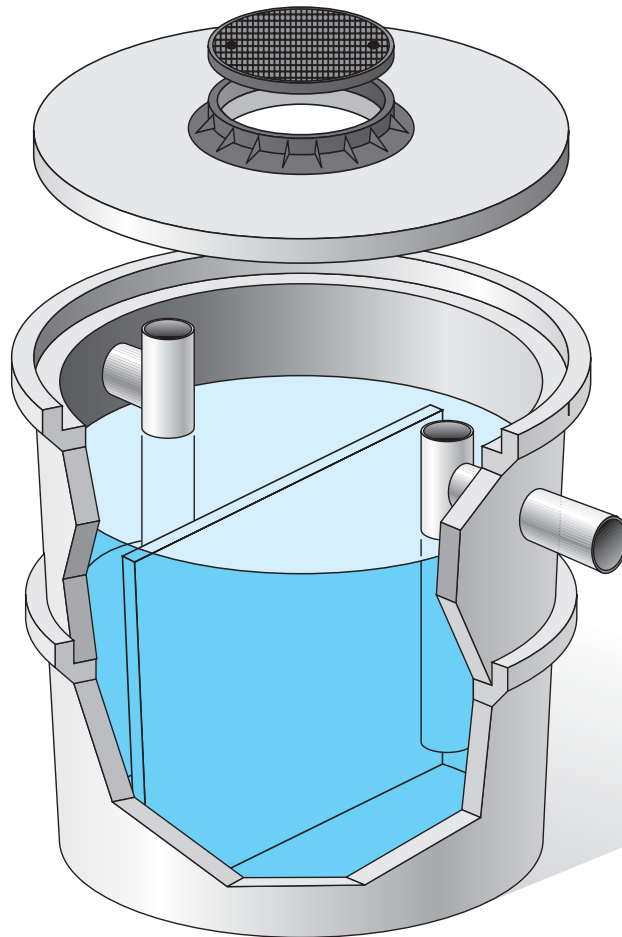
DESCRIPTION	MEASURE UNIT	MODEL								
		VCL 500	VCL 750	VCL 1000	VCL 1600	VCL 1900	VCL 2200	VCL 2500	VCL 3200	VCL 5000
Equivalent population	n.	500	750	1000	1600	1900	2200	2500	3200	5000
Unit flow rate	l/people day	200	200	200	200	200	200	200	200	200
Max. flow rate	mc/h	12,75	19,50	25,50	31,5	38,25	38,25	51	63,75	82,5
Contact time	min.	20	20	20	20	20	20	20	20	20
Effective volume	mc	4,25	6,38	8,5	10,63	12,75	14,88	17	21,25	27,63
Length A	cm	250	250	250	250	320	320	420	520	670
Width B	cm	120	170	220	250	250	250	250	250	250
Total height H	cm	210	210	210	210	210	210	210	210	210
Effective height Hu	cm	170	170	170	170	170	170	170	170	170
Internal walls	n.	1	1	1	3	3	3	3	3	3
Installation weight	q.ls	45	50	63	70	85	85	110	120	160

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The installations can be supplied with flow rates and hydraulic charges different from the ones indicated on the table above (200 l/ people day).

MODULAR RING DISINFECTION TANKS

VCL/A series



WHAT CYLINDRICAL CHLORINATION TANKS WITH VERTICAL AXIS VCL/A SERIES ARE

The *prefabricated cylindrical chlorination tanks with vertical axis* type EUROMEC VCL/A series are dimensioned to comply with the disinfection's standards set on the Directive 91/271/CEE and are therefore designed to allow a certain contact time between the sewage and the chemical reagent, usually sodium hypochlorite and if necessary peracetic acid.

The *prefabricated cylindrical chlorination tanks with vertical axis* type EUROMEC VCL/A series are built with highly resistant reinforced concrete in order to ensure a total absence of leakages and infiltrations into the ground. Furthermore, they can be installed also in presence of ground water.

HOW CYLINDRICAL CHLORINATION TANKS WITH VERTICAL AXIS VCL/A SERIES WORK

The sewage is forced into a serpentine route created with dividing sects inside the tanks and therefore increasing the contact time with the chemical reagent used for the disinfecting process.

USED MATERIALS

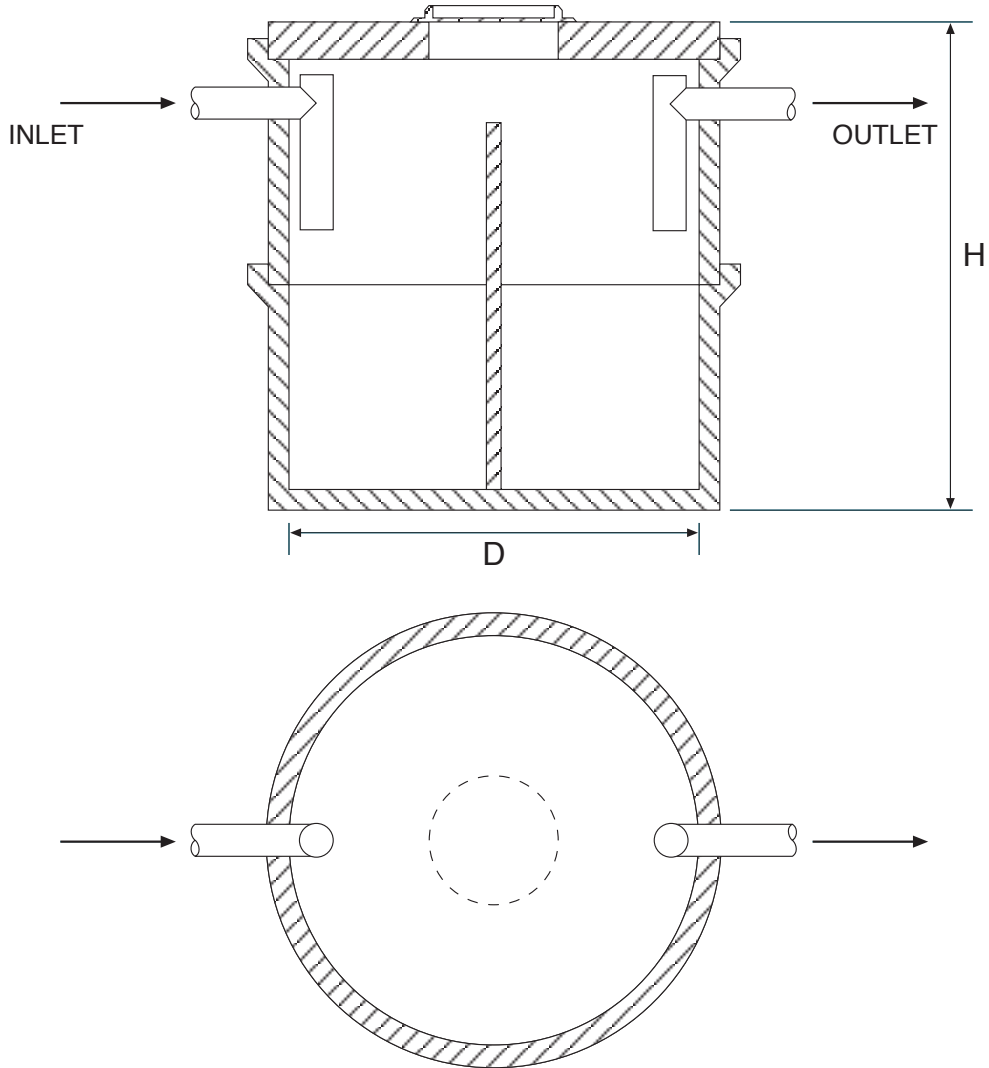
Tanks : highly resistant vibrated reinforced concrete

SPECIFICATION

"Supply of a prefabricated vertical axis cylindrical chlorination tank with modular rings to seal on site type EUROMEC VCL/A series complete with inner sects for the sewage forced serpentine path, dimensioned to guarantee enough contact time between the sewage and the chemical reagent, which will not have to be less than 20 minutes during the maximal flow rate in order to obtain the best possible mixing and disinfection process."



STANDARD PRODUCTION



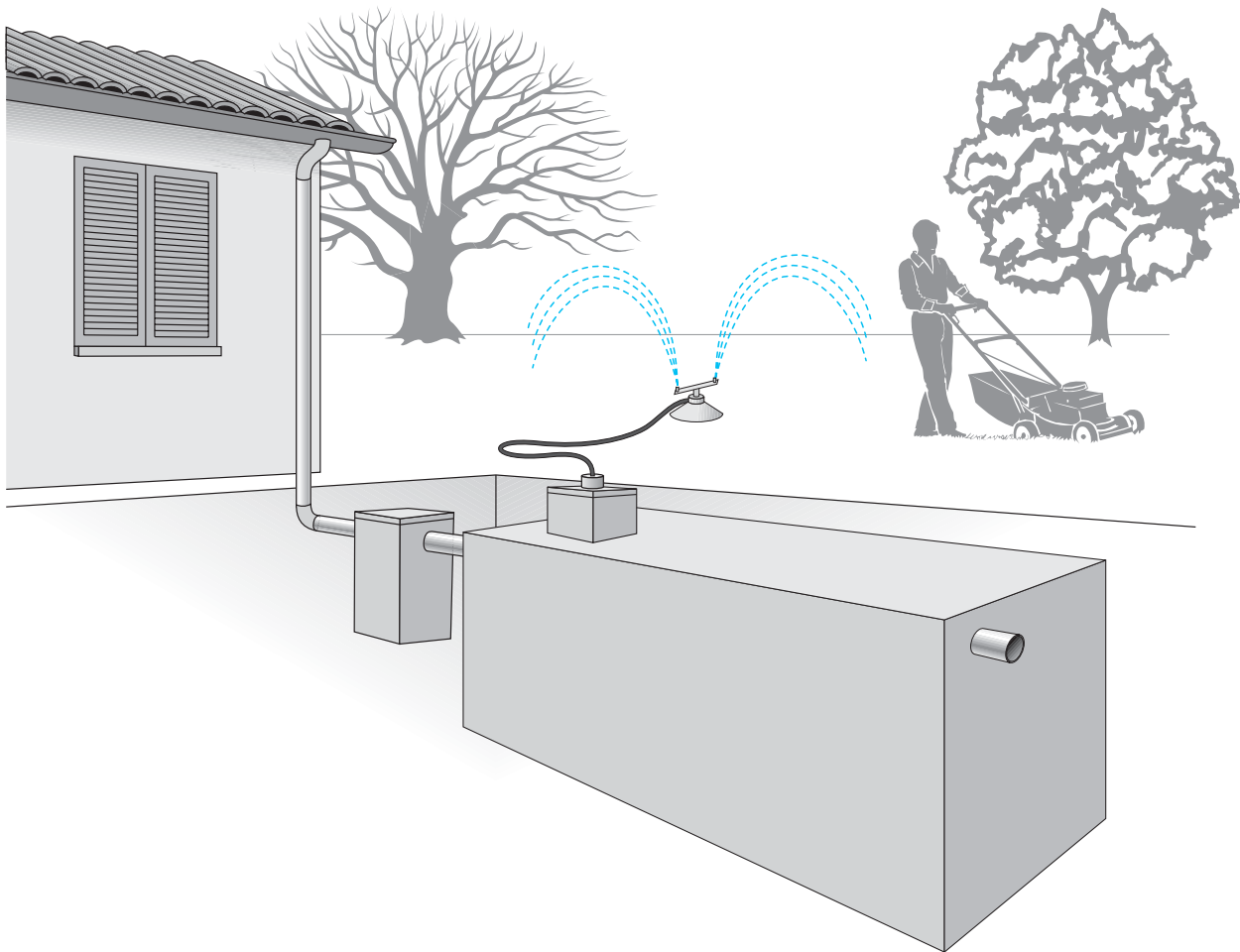
Technical file

DESCRIPTION	MEASURE UNIT	MODEL									
		VCL/A 40	VCL/A 60	VCL/A 80	VCL/A 100	VCL/A 150	VCL/A 200	VCL/A 250	VCL/A 300	VCL/A 400	VCL/A 500
Equivalent popul.	n.	40	60	80	100	150	200	250	300	400	500
Unit flow rate	l/peopl. d	200	200	200	200	200	200	200	200	200	200
Max flow rate	mc/h	1	1,5	2	2,5	3,75	5	6,25	7,5	10	12,5
Contact time	min.	20	20	20	20	20	20	20	20	20	20
Effective volume	mc	0,33	0,5	0,66	0,83	1,25	1,67	2,1	2,5	3,3	4,2
Internal diameter D	cm	80	100	125	125	125	150	200	200	200	200
Height H	cm	112	112	118	118	168	168	129	129	179	179
Installation weight	q.l.s	5	8	13	13	16	20	46	46	54	54

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MONOBLOC METEORIC WATER RECOVERY TANKS

VRM series



WHAT ARE MONOBLOC METEORIC WATER RECOVERY TANKS VRM SERIES

Monobloc tanks for the recovery of meteoric water type EURO MEC VRM series, used for the stockage and the re-use of rain water, are composed of a cylindrical monolithic tank made of highly resistant reinforced concrete, to guarantee a total absence of leakages and infiltrations into the ground, and of all the necessary devices, placed in a container positioned over the tank.

HOW MONOBLOC METEORIC WATER RECOVERY TANKS VRM SERIES WORK

Monobloc tanks for the recovery of meteoric water type EURO MEC VRM series stock rain water, collecting it with traditional systems, permitting the following re-use. The containers of the monobloc tanks are dimensioned exploiting the maximum collection capacity allowing the excess water overflow. A floating regulator controls the minimum water level.

USED MATERIALS

Tanks	:	highly resistant reinforced vibrated concrete
By request	:	painted steel, reinforced fiberglass
Shafts	:	concrete
By request	:	hot galvanised steel, stainless steel AISI 304, class D 400 cast iron

SPECIFICATION

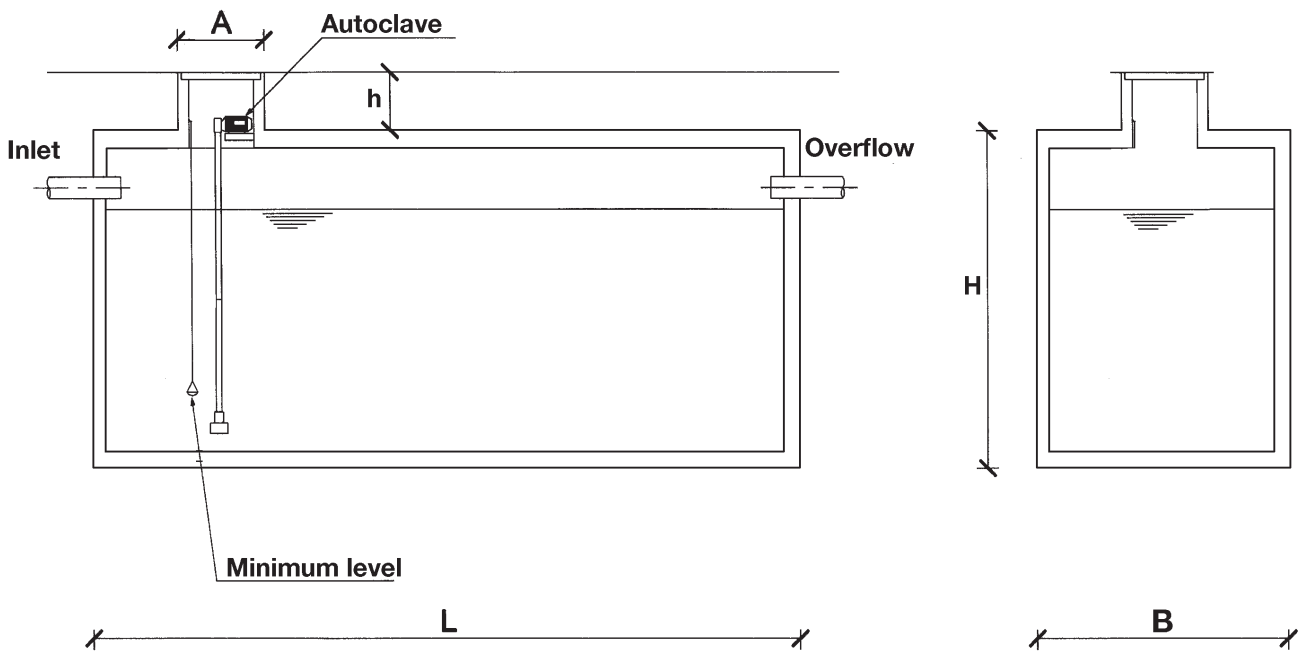
"Supply of cylindrical monobloc tank to recover meteoric water type EURO MEC VRM series made of highly resistant reinforced concrete, with electropump with pipe and aspiration filter, floating minimum level switch, overflow outlet and complete with inspection shaft."



STANDARD PRODUCTION

The prefabricated tanks made of reinforced concrete monobloc type are of fast and easy installation and can be installed in or out of ground.

By request it is possible to install in the tank's walls special elements like inlet and outlet pipes or manholes. The tanks of the plants type EURO MEC series VRM, can be vitrified with alimentary epoxy resin.



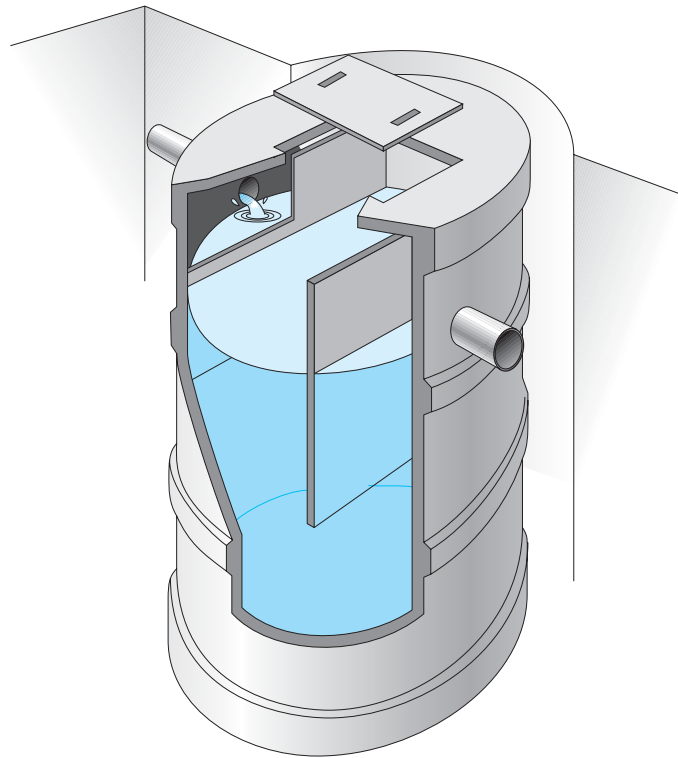
Technical file

MODEL	POWER kW	FLOW RATE l/m	CAPACITY liters	L cm	B cm	H cm	A cm	h cm	WEIGHT q.ls
VRM 50	0,45	40	5000	250	160	270	80	60	69
VRM 80	0,45	40	7500	250	200	270	80	60	80
VRM 100	0,45	40	10000	250	250	270	80	60	93
VRM 125	0,45	40	12500	325	250	270	80	60	122

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MONOBLOC KITCHEN OILS AND GREASE SEPARATORS

SCU series



WHAT ARE MONOBLOC KITCHEN OILS AND GREASE SEPARATORS SCU SERIES

Monobloc oils and grease separators type EURO MEC SCU series are dimensioned according to what has been prescribed by the Norms DIN 4040 to guarantee the acceptance limits for floating substances from the Directive 91/271/CEE; are particularly used to treat kitchen discharge water, and in general, for high values of vegetal and animal oils and grease, and are composed of a monolithic tank cylindrical plan made of highly resistant reinforced concrete to guarantee a total leak absence and the absence of ground infiltrations.

In the cylindrical tank, supplied with inspection manholes, are placed baffles which divide the inlet sewage section from the outlet one and form a flotation section, where water is divided from oil and grease substances.

Monobloc oils and grease separators type EURO MEC SCU series can be installed even in the presence of ground water.

HOW MONOBLOC KITCHEN OILS AND GREASE SEPARATORS SCU SERIES WORK

Oils and grease are of vegetal and animal origin and are principally pollutants present in the discharges coming from kitchens.

The pollutants mustn't be send directly to the drainage system as they would obstruct it with subsequent irritating odours.

Monobloc oils and grease separators type EURO MEC SCU series have the function, as the word itself indicates, of separating these two substances by means of a flotation so as to be stored in the proper section.

In order to obtain the final result and a good functioning, the separators must be placed near the kitchen discharge column, the main grease source.

USED MATERIALS

Tanks	:	highly resistant reinforced vibrated concrete
By request	:	painted steel, reinforced fiberglass
Shafts	:	concrete
By request	:	hot galvanised steel, stainless steel AISI 304, class D 400 cast iron

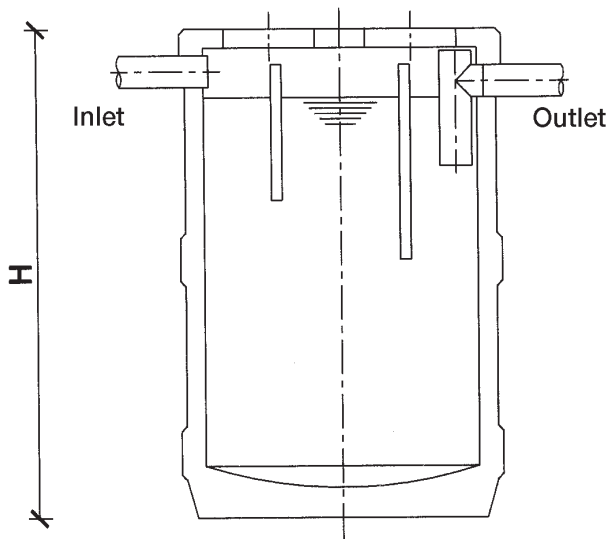
SPECIFICATION

"Supply of prefabricated monobloc cylindrical separator vertical axe type EURO MEC SCU series made of highly resistant reinforced concrete, dimensioned according to what has been prescribed by the DIN Norms DN 4040, complete with inside baffles, oils and grease collection section and inspection manholes."

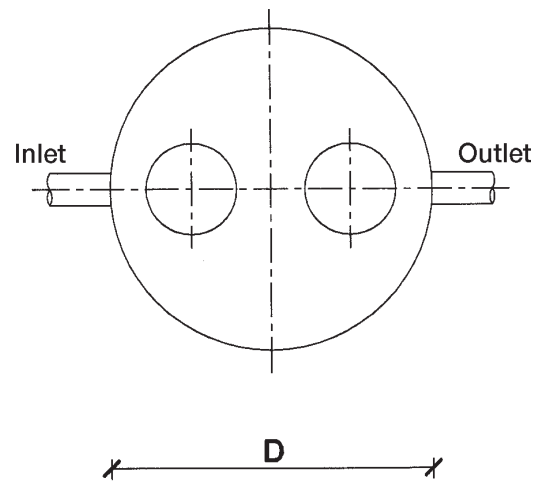


STANDARD PRODUCTION

Section



Plan



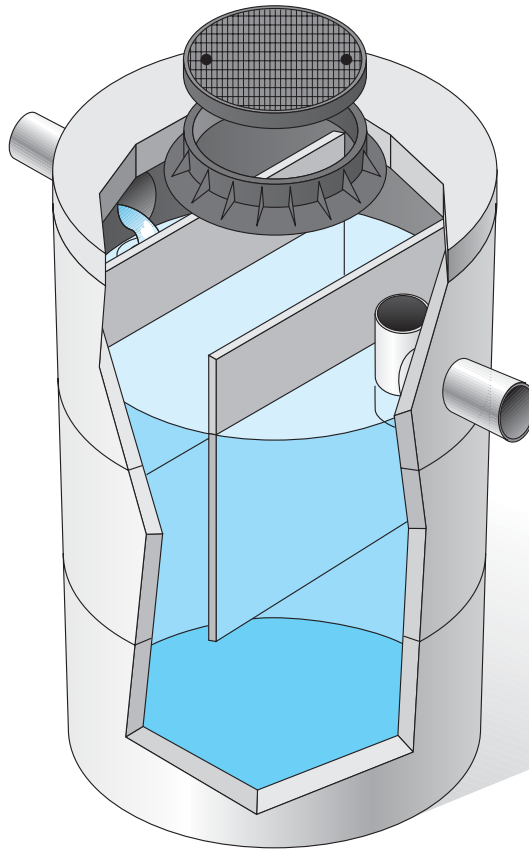
In compliance with the DIN Norms 4040; Discharge in drainage system - Directive 91/271/CEE

MODEL	MEALS NUMBER PER DAY	D cm	H cm	WEIGHT q.l.s
SCU30	Fino a 30	130	220	12
SCU70	da 31 a 70	151	230	31
SCU120	da 71 a 120	192	250	35
SCU200	da 121 a 200	192	306	42
SCU300	da 201 a 300	248	310	70
SCU400	da 301 a 400	248	365	77
SCU500	da 401 a 500	248	400	79
SCU600	da 501 a 600	248	430	85

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MODULAR RING KITCHEN OILS AND GREASE SEPARATORS

SCU/A series



WHAT ARE MODULAR RING KITCHENS OILS AND GREASE SEPARATORS SCU/A SERIES

Oils and grease separators type EURO MEC SCU/A series are dimensioned according to what has been prescribed by the Norms DIN 4040 to guarantee the acceptance limits for floating substances from the Directive 91/271/CEE; are particularly used to treat kitchen discharge water, and in general, for high values of vegetal and animal oils and grease, are composed of a modular rings tank cylindrical plan made of highly resistant reinforced concrete to guarantee a total leak absence and the absence of ground infiltrations.

In the cylindrical tank, supplied with inspection manholes made of concrete, are placed baffles, which divide the inlet sewage section from the outlet one and form a flotation section, where water is divided from oil and grease substances.

Oils and grease separators type EURO MEC SCU/A series can be installed even in the presence of ground water.

HOW MODULAR RING KITCHENS OILS AND GREASE SEPARATORS SCU/A SERIES WORK

Oils and grease are of vegetal and animal origin and are principally pollutants present in the discharges coming from kitchens.

The pollutants mustn't be send directly to the drainage system as they would obstruct it with subsequent irritating odours.

Oils and grease separators type EURO MEC SCU/A series have the function, as the word itself indicates, of separating these two substances by means of a flotation so as to be stored in the proper section.

In order to obtain the final result and a good functioning, the separators must be placed near the kitchen discharge column, the main grease source.

USED MATERIALS

Tanks	:	highly resistant reinforced vibrated concrete
<i>By request</i>	:	polyethylene
Shafts	:	concrete
<i>By request</i>	:	hot galvanised steel, stainless steel AISI 304, class D 400 cast iron

SPECIFICATION

"Supply of prefabricated modular rings separator made of vibrated reinforced concrete to seal on site, type EURO MEC SCU/A series, dimensioned according to what has been prescribed by the DIN Norms DN 4040, complete with inside baffles, oils and grease collection section and inspection manholes."

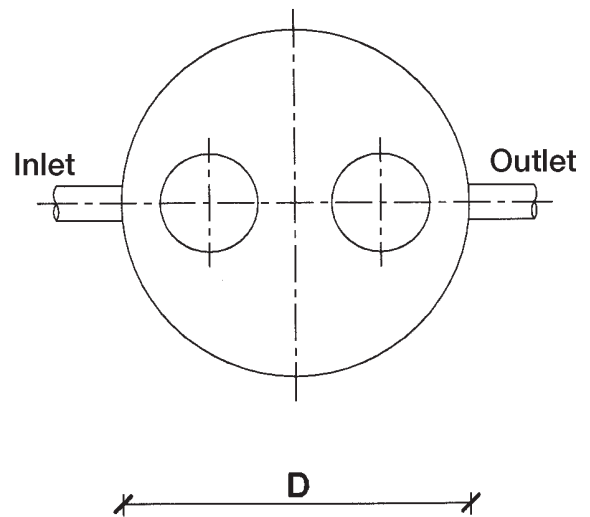
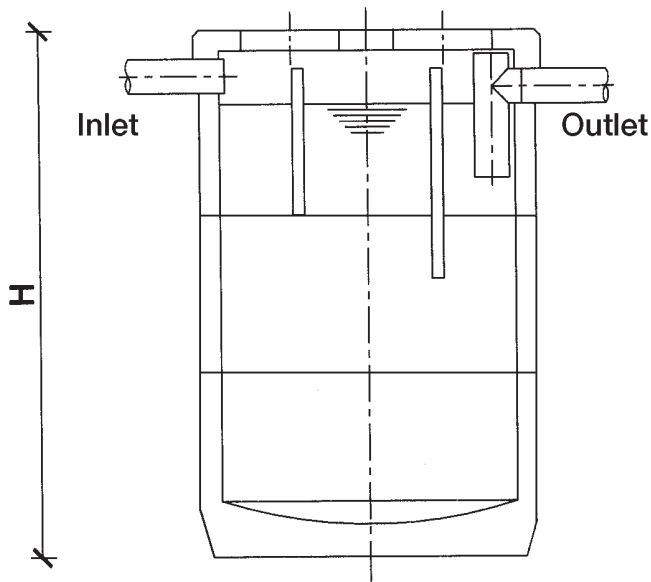


STANDARD PRODUCTION

Technical file

Section

Plan



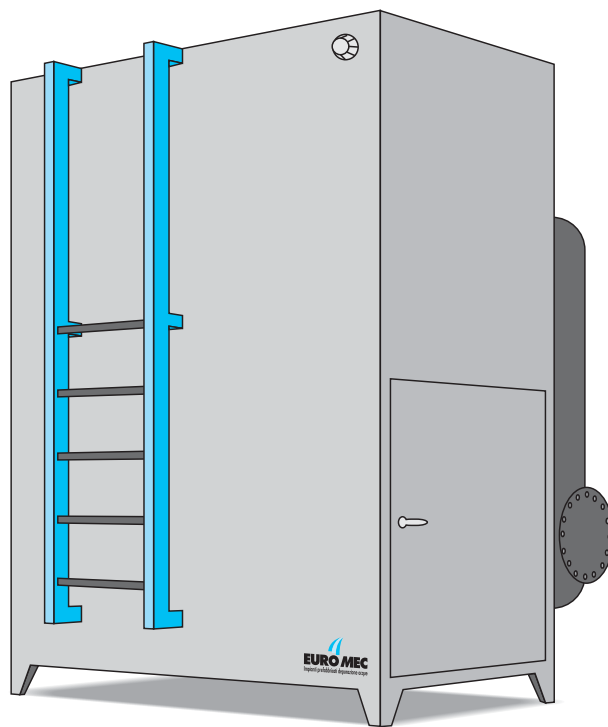
In compliance with the DIN Norms 4040; Discharge in drainage system - Directive 91/271/CEE

OILS AND GREASE STATIC SEPARATOR					STORAGE TANK		
MODEL	MEALS NUMBER PER DAY	D1 cm	H1 cm	Weight q.l.s	D1 cm	H1 cm	Weight q.l.s
SCU/A 30	30	150	168	23	125	168	16
SCU/A 70	70	150	218	30	125	168	16
SCU/A 120	120	150	318	42	125	168	16
SCU/A 200	200	200	229	66	150	218	30
SCU/A 300	300	200	329	86	150	218	30
SCU/A 400	400	200	379	95	200	229	66
SCU/A 500	500	300	260	128	200	229	66
SCU/A 600	600	300	335	148	200	229	66

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CHEMICAL-PHYSICAL PLANTS

ICF series



WHAT CHEMICAL-PHYSICAL PLANTS ICF SERIES ARE

The chemical-physical plants type EUROMECC ICF series are dimensioned in accordance with the Directive 91/271/CEE in order to comply with the acceptance limits of the A Table for the discharge on surface water.

The chemical-physical plants type EUROMECC ICF series are used for the treatment of water coming from different types of activities and are composed of a carbon steel monobloc structure containing a reaction/coagulation tank, a decantation tank, an active carbon filter column, sludge hose filters and all other devices necessary to ensure a good functioning of the plant.

The chemical-physical plants type EUROMECC ICF series can be installed outdoors with no trouble for their good functioning or their duration.

HOW CHEMICAL-PHYSICAL PLANTS ICF SERIES WORK

The chemical-physical plants type EUROMECC ICF series receive the sewage water directly from two earthed tanks effectuating the sand separation and oil separation process. The treated water goes through a submersible electropump into the reaction/flocculation section in which the water will be in close contact with the substances contained in the chemical reagents tanks (flocculating agent, coagulant and assistant reagent) with an automatic Ph control. The water subsequently passes from the reaction/flocculation section into the decantation section in order to separate clarified water from process sludge.

In order to comply with the acceptance limits the clarified water is sent to an active carbons filtering section (with high absorption power) and is discharged only after this treatment. Differently, the process sludge is periodically taken from the decantation section and dehydrated with hose filters in order to make their removal easier.

USED MATERIALS

Pre-treatment tanks	:	highly resistant vibrated reinforced concrete
Chemical-physical plant	:	carbon steel
Various carpentry	:	AISI 304 stainless steel

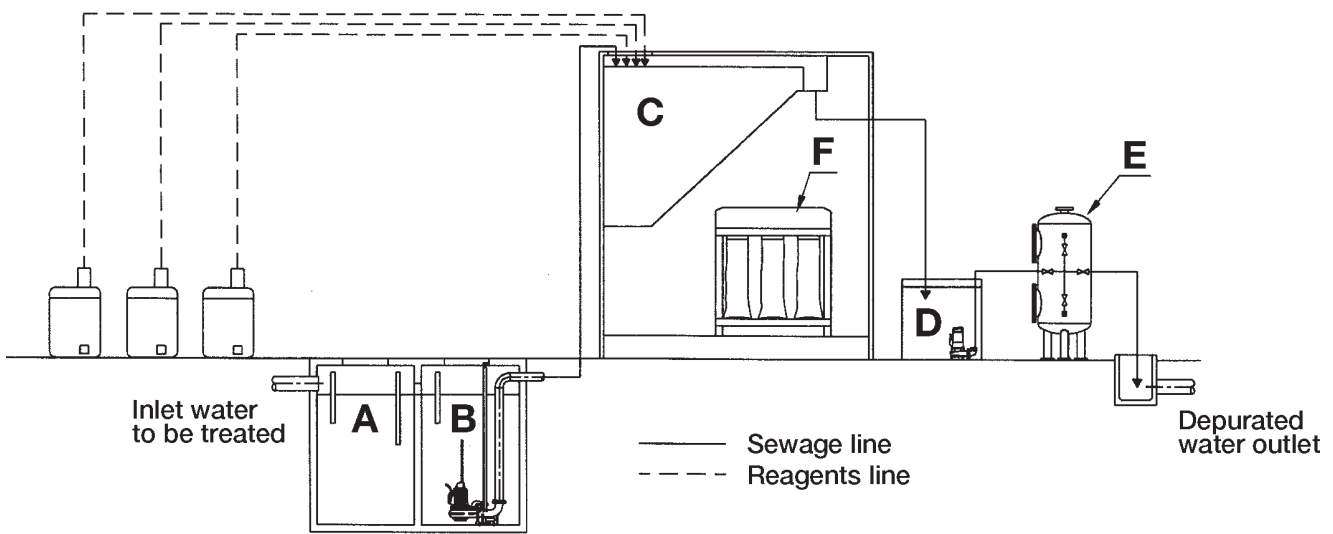
SPECIFICATION

"Supply of a chemical-physical installation type EUROMECC ICF series for the depuration of water coming from different types of washing (car washings, car stations, engine deposits and car demolition sites) composed of two earthed tanks for sand separation and oil separation, sewage feeding submersible pump, with a monobloc stainless steel structure with reaction/flocculation phases, decantation, hose filter and active carbons filtering column."



STANDARD PRODUCTION

Functional scheme



External plants dimensions

PLANT MODEL	Length cm	Width cm	Height cm	HOURLY FLOW RATE CAPACITY (lt/h)
ICF 0.4	130	90	220	600
ICF 1.0	130	90	220	1000
ICF 1.5	130	90	220	1500
ICF 3.0	200	120	260	3000
ICF 6.0	200	120	260	6000

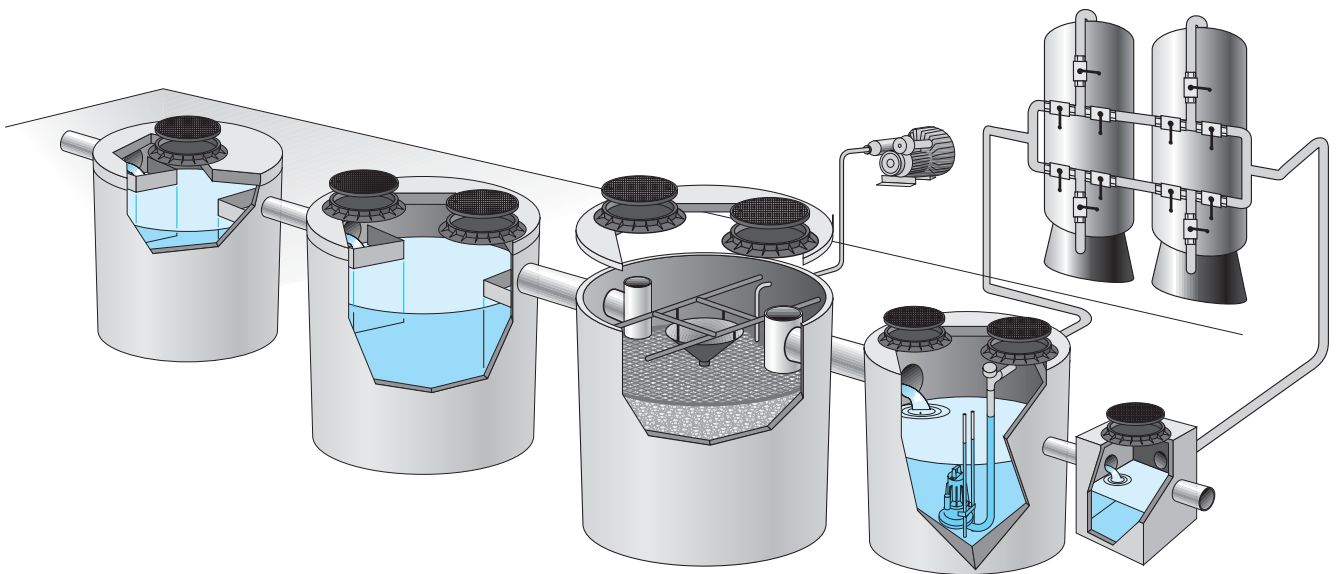
Filtering columns dimensions

PLANT MODEL	COLUMN DIAMETER cm	HEIGHT cm
ICF 0.4	450	1500
ICF 1.0	450	1500
ICF 1.5	450	1500
ICF 3.0	650	1500
ICF 6.0	650	1500

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DEPURATION PLANTS FOR CAR WASHES WITH BIO-OXIDATION PROCESS

EUROBIOX series



WHAT BIO-OXIDATION PLANTS EUROBIOX SERIES ARE

Prefabricated bio-oxidation plants type EUROMEC EUROBIOX series are used for the depuration of discharge water coming from car washes and are dimensioned to allow the compliance of the discharge water with the acceptability limits stated on the Directive 91/271/CEE regarding the discharge in superficial water. They also allow the complete water recycling for the washing operations with a considerably quantity of recycled water and no odour problems.

Prefabricated bio-oxidation plants type EUROMEC EUROBIOX series are suitable for the depuration of discharge water coming from washes with hydro cleaner, manual, brushes and multi-track self washes. We guarantee their correct working and their management costs are limited because these installations do not require conditioning chemical products or qualified personnel to be operational.

Prefabricated bio-oxidation plants type EUROMEC EUROBIOX series are mainly composed of a monobloc highly resistant reinforced concrete tank, vertical-cylindrical shaped with a pre-installed biological filter inside made of highly specific surface plastic material, air diffusers and sludge/surface foam recycling equipment. The supply comprehends also the side-channels blower for the compressed air production and the electrical command and protection panel.

HOW BIO-OXIDATION PLANTS EUROBIOX SERIES WORK

Prefabricated bio-oxidation plants type EUROMEC EUROBIOX series imply a biological treatment of prolonged blowing on the "adherent biomass" after a series of sand separation and oil separation pre-treatments.

The sewage to be depurated goes from the top to the bottom of the bio-filter contained in the EUROBIOX reactor, counter current aerated with special air diffusers fed by a side-channels electroblower.

The biological film activated by the oxygenation determines the transformation of the polluted organic substances and their demolition.

The floating substances and sedimentable sludge are collected through a series of suitable hydro-pneumatic devices, which continuously recycle them to the pre-treatment section.

The outlet water is collected into the depurated water collection tank in order to be conveniently reused during the washing operations or also to be discharged to the final destination after having undergone a final quartziferous sand and active carbon filtering treatment.

USED MATERIALS

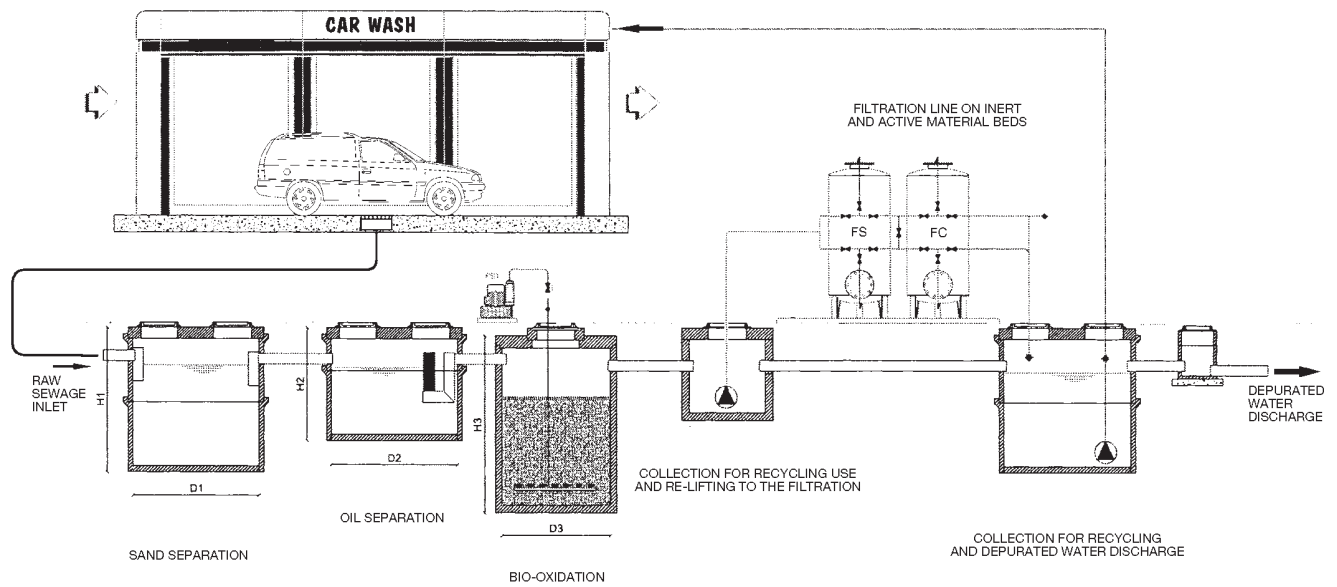
Tanks	:	highly resistant vibrated reinforced concrete
By request	:	Painted steel fiberglass
Shafts	:	concrete (by request D400 cast iron)
Piping	:	galvanized steel and polyethylene
By request	:	AlSi 304 stainless steel

SPECIFICATION

"Supply of a prefabricated reinforced concrete bio-oxidation depuration plant type EUROMEC EUROBIOX series composed of a series of sand separation and oil separation pre-treatments, adherent biomass oxidation reactor with filling body made of highly specific surface plastic material with foam/sedimental sludge pneumatic recycling system, complete with side-channel blower for air production and electrical command and protection panel equipped with timer clock and all electromechanical parts necessary for a correct functioning. The supply also comprehends the final filtering section consisting of two columns filled with quartziferous sand and active carbon fed by a pump group."



STANDARD PRODUCTION



Technical file

DESCRIPTION	MEASURE UNIT	MODEL	
		EUROBIOX 1	EUROBIOX 2
Nominal flow rate	mc/h	10,00	18,00
Daily washed cars	n.	160	250
Washing system	type	5 brushes / self 3 tracks	tunnel / self 6 tracks
Pre-treatment dimensions:			
- Sand separator diameter D1	cm	200	200
- Sand separator height H1	cm	228	228
- Oil separator diameter D2	cm	200	200
- Oil separator height H2	cm	178	228
Bio-oxidation dimensions:			
- Diameter D3	cm	250	250
- Height H3	cm	235	285
Air request	Nmc/h	65	80
Installed power	kW	0,8	0,1
Total weight	q.ls	220	260
Max. weight of a single element	q.ls	60	90

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

FINAL FILTERING PLANTS FOR DISCHARGE WATER

IFF series



WHAT FINAL FILTERING PLANTS IFF SERIES ARE

Final filtering plants for discharge water type EUROMECC IFF series are suitable for the elimination of suspended solids and pollutants in the sewage water coming from pre-treatment plants, car washes, which are therefore already sand and oil separated.

Final filtering plants for discharge water type EUROMECC IFF series are equipped with a series of sand and active carbons filters which are pre-assembled on a palletised support frame complete with centrifugal feeding pump, electrical panel and level regulators for an automatic functioning.

HOW FINAL FILTERING PLANTS IFF SERIES WORK

A self-starting centrifugal pump controlled by level regulators sends the sewage water into a filtering mass of silica sand with different gradations to eliminate the suspended solids and subsequently into another filter through a layer of granular active carbon, which absorbs the remaining polluting traces of hydrocarbons or possible solvents.

Occasionally the filtering masses are counterwashed with network water using the proper interceptor sluice gates.

By request final filtering plants for discharge water IFF series can be implemented by an automatic counter-washing device with hydropneumatic valves, which can be timed or set according to the differential pressure of the obstruction degree.

USED MATERIALS

Tanks : carbon steel / reinforced fiberglass
 Piping : hot galvanized carbon steel
 Support frame : painted carbon steel

SPECIFICATION

"Supply of final filtering plants for discharge water type EUROMECC IFF series with manual counterwashing and various sand and active carbons filters, which are pre-assembled on a support frame complete with a self-starting feeding pump controlled by level regulators and an electrical panel installed according to the CEI Norms."

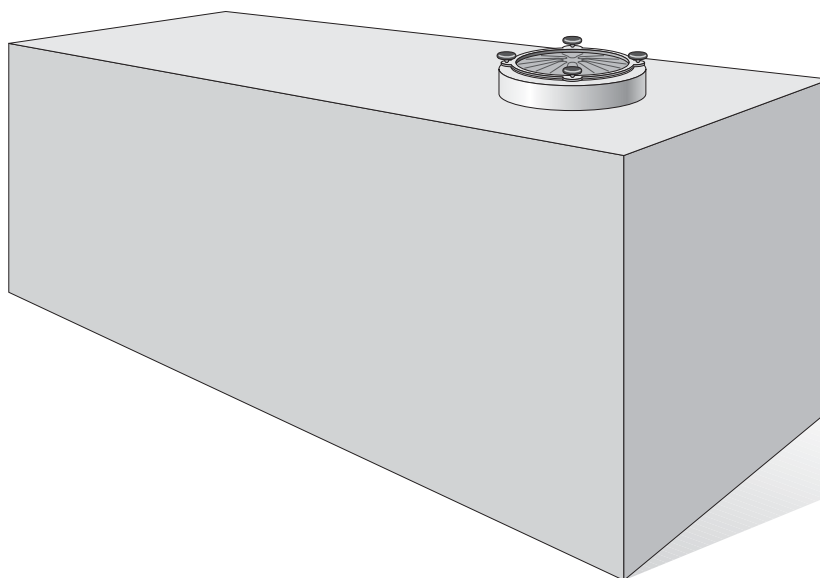
IFF SERIES MODEL	CARS PER DAY	DAILY FLOW RATE	HOURLY FLOW RATE	COLUMN DIAMETER	EXTERNAL DIMENSIONS	HEIGHT
	n.	lt/day	lt/hour	mm	mm	mm
IFF 150	10	1500	150	300	500 x1400	1600
IFF 250	16	2400	250	300	500 x1400	1600
IFF 500	32	4800	500	300	500 x1400	1600
IFF 750	48	7200	750	400	600 x1500	1700
IFF 1000	64	9600	1000	500	700 x1600	1800
IFF 1250	80	12000	1250	600	800 x1700	1900
IFF 1500	96	14400	1500	600	800 x1700	2000

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



MONOBLOC PARALLELEPIPED TANKS

SM/P series



WHAT ARE MONOBLOC PARALLELEPIPED TANKS SM/P SERIES

Monobloc parallelepiped tanks type EURO MEC SM/P series are used to stock sewage of different type, and are composed of a cylindrical monolithic tank horizontal axe made of highly reinforced concrete to guarantee a total absence of leakages and infiltration into the ground.

Monobloc parallelepiped tanks type EURO MEC SM/P series can be installed also in presence of groundwater.

Monobloc parallelepiped tanks type EURO MEC SM/P series support static road loads and can be supplied with inspection manholes.

Monobloc parallelepiped tanks type EURO MEC SM/P series can be divided inside into walls made of concrete, PVC, steel with different inclinations and shapes.

Monobloc parallelepiped tanks type EURO MEC SM/P series are reliable during the time for different sewage types, with absolute resistance and corrosion absence and/or losses.

By means of inspection manholes it is possible to control inside the tanks every time it is necessary.

USED MATERIALS

- Tanks : highly resistant reinforced vibrated concrete
- Shafts : concrete
- By request : hot galvanized steel
AISI 304 stainless steel
Cast iron D400

SPECIFICATION

"Supply of prefabricated monobloc tank type EURO MEC SM/P series parallelepiped horizontal axe made of highly resistant reinforced concrete, with inspection manholes."

STANDARD PRODUCTION

MODEL	VOLUME litres	Length cm	Width cm	Height cm	WEIGHT q.l.s
SM/P 2.5	2500	140	100	270	29
SM/P 3	3000	160	100	270	37
SM/P 5	5000	250	100	270	49
SM/P 8.5	8500	290	160	270	74
SM/P 10	10000	250	200	270	80
SM/P 12.5	12500	250	250	270	93
SM/P 17	17000	325	250	270	120
SM/P 20.5	20500	400	250	270	146
SM/P 24	24000	450	250	270	165
SM/P 26.5	26500	500	250	270	193
SM/P 29	29000	550	250	270	204
SMP 33	33000	600	250	270	225
SM/P 35	35000	650	250	270	236
SM/P 37.5	37500	700	250	270	252
SM/P 40	40000	750	250	270	268
SM/P 43	43000	800	250	270	295
SM/P 50	50000	1000	250	270	350

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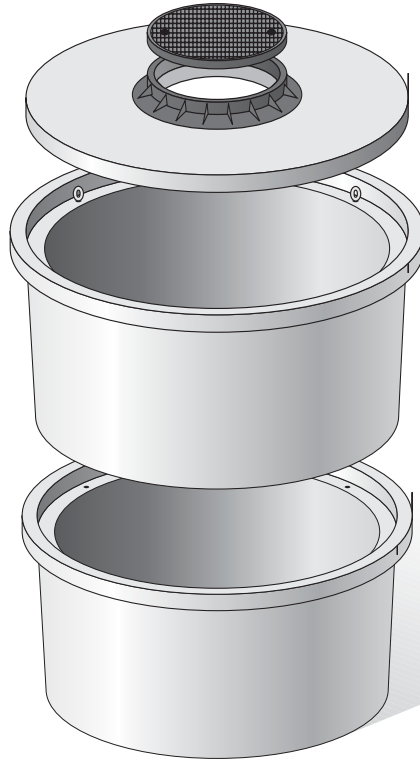
The prefabricated cylindrical tanks type EURO MEC SM/P series made of reinforced concrete are of fast and easy installation and can be installed in or out of ground.

By request it is possible to install in the tank's walls special elements like inlet and outlet pipes or manholes.

The prefabricated cylindrical tanks type EURO MEC SM/P series, can be vitrified with alimentary epoxy resin.

GLASS-SHAPED CYLINDRICAL TANKS WITH MODULAR RINGS

SC/A series



WHAT ARE GLASS-SHAPED CYLINDRICAL TANKS WITH MODULAR RINGS SC/A SERIES

Glass-shaped cylindrical tanks with modular rings type EURO MEC SC/A series are used to stock sewage of different type, and are composed of a modular rings tank to seal on site cylindrical vertical axe made of highly resistant reinforced concrete.

Glass-shaped cylindrical tanks with modular rings type EURO MEC SC/A series support static road loads and can be supplied with inspection manholes made of cast iron D 400.

Glass-shaped cylindrical tanks with modular rings type EURO MEC SC/A series can be divided inside into walls made of concrete, PVC, steel with different inclinations and shapes.

Glass-shaped cylindrical tanks with modular rings type EURO MEC SC/A series are reliable during the time for different sewage types, with absolute resistance and corrosion absence and/or losses.

USED MATERIALS

- Tanks : highly resistant reinforced vibrated concrete
- Shafts : concrete
- By request : hot galvanized steel
AISI 304 stainless steel
Cast iron D400

SPECIFICATION

"Supply of glass-shaped modular rings tank type EURO MEC SC/A series made of highly resistant reinforced concrete, with inspection manholes made of cast iron D 400."

STANDARD PRODUCTION

MODEL	VOLUME mc	DIAMETER	External HEIGHT	WEIGHT q.l.s
SC/A 2	2	150	168	20
SC/A 3	3	150	218	23
SC/A 4	4	150	268	26
SC/A 5	5	150	318	29
SC/A 5.5	5,5	200	229	66
SC/A 7	7	200	279	75
SC/A 8.5	8,5	200	329	86
SC/A 10	10	200	379	95
SC/A 12	12	200	429	106
SC/A 13	13	300	260	128
SC/A 18	18	300	335	148
SC/A 23	23	300	410	168
SC/A 28.5	28,5	300	485	188
SC/A 35	35	300	560	208

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The glass-shaped modular rings tanks type EURO MEC SC/A series made of reinforced concrete are of fast and easy installation.

By request it is possible to install in the tank's walls special elements like inlet and outlet pipes or manholes.

The glass-shaped modular rings tanks type EURO MEC SC/A series, can be vitrified with alimentary epoxy resin.



ELECTROMECHANICAL DEVICES HOUSING CABINS

CAB series



CAB 1



CAB 2

WHAT ELECTROMECHANICAL DEVICES HOUSING CABINS ARE

Electromechanical devices housing cabins type EURO MEC CAB series are suitable for the finishing of waste water treatment plants to store the compressed air production equipment necessary for the biological process, the possible dosing of hypochlorite or peracetic acid for the final disinfection section and the electrical control panel.

Electromechanical devices housing cabins type EURO MEC CAB series are composed of prefabricated highly resistant reinforced concrete monolithic units complete with window and door frames and locked metallic door.

USED MATERIALS

Unit : highly resistant reinforced concrete
Window and door frames : hot galvanized carbon steel
By request : AISI 304 stainless steel

SPECIFICATION

"Supply of a prefabricated monobloc housing cabin for the electromechanical equipment and electrical panel type EURO MEC CAB series complete with internal window and door frames transom type and hot galvanized metal door with lock."

CAB SERIES MODEL	LENGHT A cm	WIDTH B cm	HEIGHT H cm	WEIGHT q.l.s
CAB 1	100	100	120	15
CAB 2	140	160	250	45
CAB 3	200	250	250	85
CAB 4	550	250	250	170

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Rain water treatment plants for large, medium and small surface areas, standardized according to Regional Technical Specifications and conforming to European Norms.

Oil extracting systems, rainwater treatment and flow regulation into sewer systems.

Automatic flywheel cleaning systems.

RAINWATER TREATMENT PLANTS AND HYDROCARBON SEPERATORS

Parallelepiped monobloc catchment basins for first rain waters	Series SSP	Page 70
Cylindrical catchment basins for first rain waters	Series SSP/A	Page 72
Monobloc separators for service areas, parking lots, garages, auto wreckers	Series SO/P	Page 74
Monobloc separators for automotive workshops and car washes	Series SO/L	Page 76
Monobloc separators for enclosed automotive workshops	Series SO/C	Page 78
Mineral oil separators for service areas, parking lots, garages, auto wreckers	Series SA/P	Page 80
Mineral oil separators for automotive workshops and car washes	Series SA/L	Page 82
Mineral oil separators for enclosed automotive workshops	Series SA/C	Page 84
Rainwater treatment plants for areas of 600 to 5000m ²	Series IPP/B	Page 86
Rainwater treatment plants for areas of 4000 to 10000m ²	Series IPP/AA	Page 88
Rainwater treatment plants for areas of 4000 to 30000m ²	Series IPP/AM	Page 90
Rainwater treatment plants for very large areas	Series IPP/GS	Page 92
Mineral oil separators for low use NG 1.5	Series DISOPAC	Page 94
Mineral oil separators for low use NG 3	Series DISOMECC	Page 96
Mineral oil separators for surface areas of 500 to 1000m ²	Series SA/PU	Page 98



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RAIN WATER TREATMENT PLANTS AND EQUIPMENT

RAIN WATER TREATMENT PLANTS AND EQUIPMENT

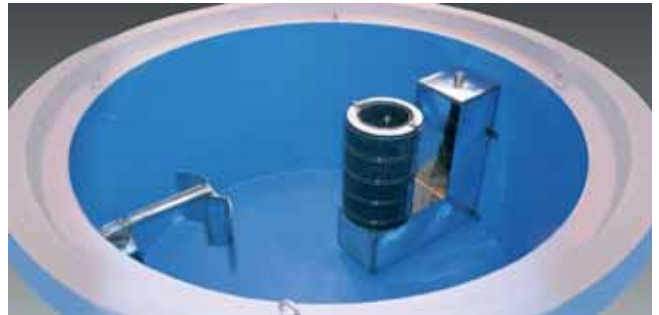
HYDROCARBON SEPARATION PLANTS

EURO MEC's prefabricated separators are dimensioned according to the European Norm EN 858-1 and conform to the parameters set by legislation 152 dated 11/05/1999 regarding the discharge of floating substances, settleable solids and hydrocarbons into public sewers or surface water.

SEPARATORS FOR SERVICE AREAS, PARKING LOTS, GARAGES, AUTO WRECKERS

EURO MEC's prefabricated separators, series SO/P and SA/P, are used to clarify water coming from large service area lots such as car parks and wrecking yards where the principal water pollutants derive from car bodies and include mineral oils, sand and organic matter. Facilitating this process, EURO MEC's production program includes the following:

- Monobloc prefabricated separators in reinforced concrete (series SO/P)
- Monobloc prefabricated separators in reinforced concrete modular rings (series SA/P)
- Monobloc prefabricated separators in reinforced concrete modular circular sections (series SA/PU)



SEPARATORS FOR AUTOMOTIVE WORKSHOPS AND CAR WASHES

EURO MEC's prefabricated separators, series SO/P and SA/P, are used to clarify water coming from large service area lots such as car parks and wrecking yards where the principal water pollutants derive from car bodies and include mineral oils, sand and organic matter. Facilitating this process, EURO MEC's production program includes the following:

- Monobloc prefabricated separators in reinforced concrete (series SO/L)
- Monobloc prefabricated separators in reinforced concrete modular rings (series SA/L)

SEPARATORS FOR ENCLOSED AUTOMOTIVE WORKSHOPS

EURO MEC's prefabricated separators, series SO/C, SA/C and DISOPAC, are used to clarify water resulting from the washing of enclosed garages and workshops where the principal water pollutants derive from car bodies and include mineral oils, sand and organic matter.

Facilitating this process, EURO MEC's production program includes the following:

- Monobloc prefabricated separators in reinforced concrete (series SO/C)
- Monobloc prefabricated separators in reinforced concrete modular rings (series SA/C)
- Monobloc prefabricated separators in reinforced concrete (series DISOPAC)



RAINWATER TREATMENT PLANTS

CATCHMENT BASINS FOR FIRST RAIN WATER DIVERSION

These catchment basins, series SSP, direct the flow of storm water entering the drainage system allowing the more polluted first flush of rain water to be directed to a sewage system or purification plant before being released into the environment.

Facilitating this process, EURO MEC's production program includes the following:

- Monobloc, parallelepiped catchment basin in reinforced concrete (series SSP)
- Cylindrical monobloc catchment basin in reinforced concrete (series SSP/A)



CONTINUAL WATER TREATMENT (SMALL SURFACE AREAS FROM 0 TO 3000m²)

EURO MEC's rain water treatment systems, series IPP/C, are generally used for small surface areas and allow for the continual treatment of water through the separation of sands then oils and hydrocarbons with or without a coalescence filter.

The basins used in the rain water treatment systems, series IPP/C consist of prefabricated circular rings in reinforced concrete with carriageable covering slabs and cast iron manhole covers class D400.



RAIN WATER TREATMENT PLANTS AND EQUIPMENT

BY-PASS TREATMENT SYSTEMS (MEDIUM SURFACE AREAS 1000 TO 4000m²)

EURO MEC's rain water treatment system, series IPP/B, is used for medium sized surface areas and facilitates the partial treatment of rain water through the use of an initial catchment basin then sand, oil and hydrocarbon separation units with or without a coalescence filter.

These systems consist of circular prefabricated basins constructed with reinforced concrete circular rings in reinforced concrete with carriageable covering slabs and cast iron manhole covers class D400.

TREATMENT USING STORAGE BASINS (LARGE SURFACE AREAS 4000 TO 50,000m²)

EURO MEC's rain water treatment system, series IPP/A, is used for medium and large sized surface areas where it diverts and holds rain water in retention basins to be later pumped, with a restricted flow, into public drainage systems within approximately 48 hours according to relevant norms.

Downstream from these rain water basins, series IPP/A, oil separators with or without coalescence filters and dimensioned according to the norm EN 858-1 can be installed.

These rain water systems, series IPP/AA, consist of circular prefabricated basins constructed with reinforced concrete circular rings in reinforced concrete with carriageable covering slabs and cast iron manhole covers class D400 or series IPP/AM monoblocs which are prefabricated or cast on-site using reinforced concrete.

CONTINUOUS TREATMENT FOR LARGE SURFACE AREAS

The rain water treatment plants, series IPP/GS, for large surface areas are used to service large surface areas and are dimensioned and structured according to what's prescribed in L.R. n. 62 of the Lombardy region, dated 27/05/1985.

These plants consist of parallelepiped prefabricated monobloc basins in reinforced concrete with carriageable covering slabs and cast iron manhole covers class D400.

Rain water treatment system, series IPP/AA



Rain water treatment system for large surface areas, series IPP/GS





AUTOMATIC SELF-CLEANING STORAGE BASINS

EURO MEC's rain water and retention basins are generally constructed as rectangular or circular tanks with inclined bases which accommodate settleable solids and floating greasy matter. The cleaning of these basins is carried out, by emptying the tank, before deposited material becomes encrusted or odorous.

The self-cleaning tank, series VL, functions without the use of electricity and doesn't require maintenance. It can be fed with water coming from the drainage system or clarified water.

The cleaning tank is suspended from the highest point in the basin and has a unique shape, when filled with fresh water it turns automatically upon a shift in the centre of mass. This fresh water falls to the bottom of the tank with great speed and impact and thus drags built-up sediment the length of the tank and into a collection chamber ready for evacuation.

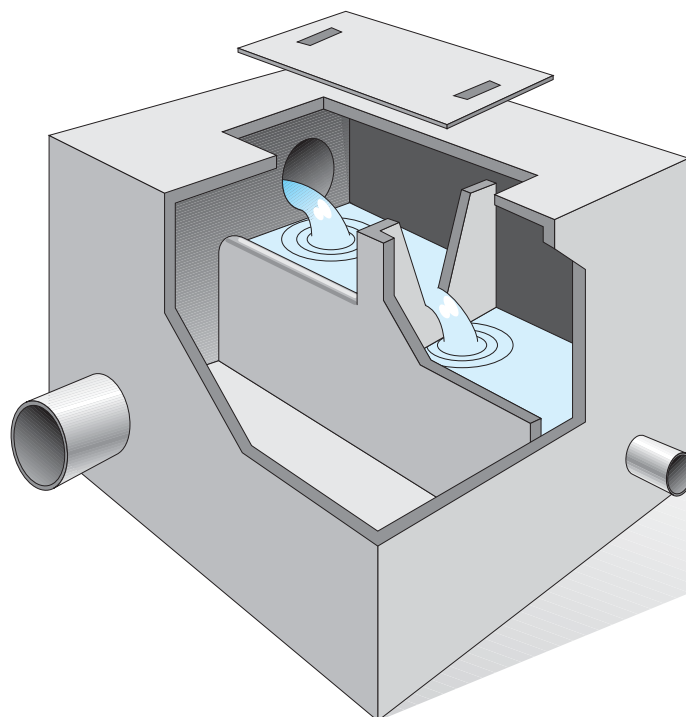
The evacuation of the eliminated impurities occurs automatically via submersed pumps, located at the lowest point of the tank, which ensure the slow but total emptying of the tank.

Given that the tank's internal environment can be particularly corrosive, all internal devices are made with stainless steel AISI 304 to ensure a long, maintenance free life.



MONOBLOC PARALLELEPIPED FIRST RAIN WATER DIVIDING PLANTS

SSP series



WHAT MONOBLOC PARALLELEPIPED FIRST RAIN WATER DIVIDING PLANTS SSP SERIES ARE

Monobloc parallelepiped first rain water dividing plants type EURO MEC SSP series are used to limit the pollution and impoverishment of the underground water resources, thanks to the first rain water treatment. They are composed of a monobloc highly resistant reinforced concrete parallelepiped tank ensuring a total leak absence and the absence of ground infiltrations, a carriageable cover and concrete inspection shafts.

The installation can be located also in presence of ground water. Monobloc parallelepiped first rain water dividing plants type EURO MEC SSP series are necessary to control the water coming into the drainage system, because they allow its drainage through the natural filtering into the ground by separating the first rain water for the drainage system or for the depuration plant, without pollution for the ground water.

According to the Directive 91/271/CEE we consider first rain water the water corresponding to the first 5 mm of each precipitation (equal to 50 mc/h) evenly distributed on the total draining area treated by the draining network. In order to calculate such flow rates it has been established that this data can be obtained in 15 minutes.

The following afflux coefficients have been considered: 1 for covered/paved/waterproofed surfaces, and 0,3 for every kind of permeable surface except for cultivated areas.

HOW MONOBLOC PARALLELEPIPED FIRST RAIN WATER DIVIDING PLANTS SSP SERIES WORK

First rain water is pollutant because it contains sand, oils and hydrocarbons and therefore it is separated from the subsequent water (with no relevant pollution) by a calibrated overflow pipe "cipolletti" type designed according to the udometric coefficient comparing the "hourly afflux coefficient" (which considers a 15 minutes rain precipitation in the tank area) with the "delay coefficient" (which considers the basin area as well as the tank/network slope)

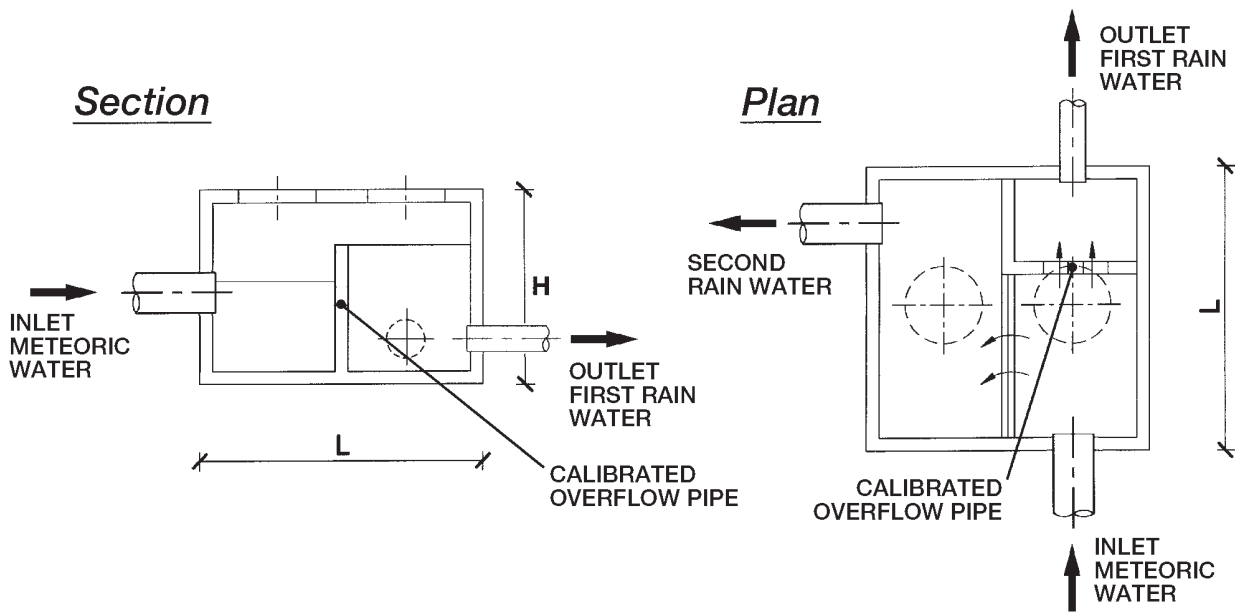
USED MATERIALS

- | | | |
|--------|---|--|
| Tanks | : | highly resistant reinforced vibrated concrete |
| Shafts | : | concrete
(by request: class D400 cast iron) |

SPECIFICATION

"Supply of a monobloc parallelepiped water dividing plant for first rain water type EURO MEC SSP series made of highly resistant reinforced concrete, with carriageable cover, concrete manholes and dimensioned with internal overflow pipe type "cipolletti". "

STANDARD PRODUCTION

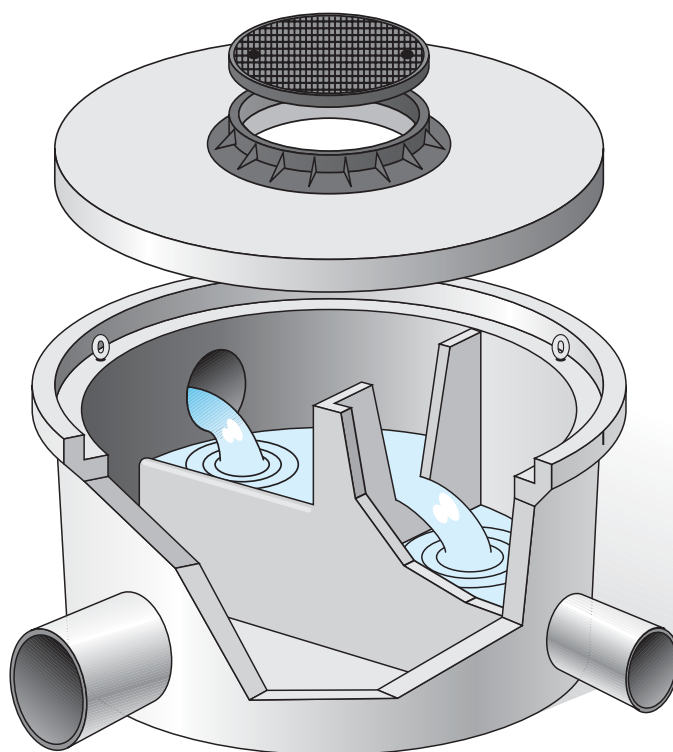


MODEL	DRAINING SURFACE mq.	UDOMETRIC COEFFICIENT l/s	SIDE L cm	HEIGHT H cm	WEIGHT q.l.s
SSP 10	1000	0,7	130 x 130	150	18
SSP 20	2000	1,4	130 x 130	150	18
SSP 30	3000	2,1	130 x 130	150	18
SSP 40	4000	2,8	130 x 130	150	18
SSP 50	5000	3,5	160 x 160	150	28
SSP 60	6000	4,2	160 x 160	150	28
SSP 70	7000	4,9	160 x 160	150	28
SSP 80	8000	5,6	160 x 160	150	28
SSP 90	9000	6,3	160 x 160	150	28
SSP 100	10000	7,0	160 x 160	150	28
SSP 110	11000	7,7	200 x 200	150	50
SSP 120	12000	8,4	200 x 200	150	50
SSP 130	13000	9,1	200 x 200	150	50
SSP 140	14000	9,8	200 x 200	150	50
SSP 150	15000	10,5	200 x 200	150	50

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MONOBLOC CYLINDRICAL FIRST RAIN WATER DIVIDING PLANTS

SSP/A series



WHAT THE MONOBLOC CYLINDRICAL FIRST RAIN WATER DIVIDING PLANTS SSP SERIES ARE

Monobloc cylindrical first rain water dividing plants type EURO MEC SSP/A series are used to limit the underground water resources pollution and impoverishment through the first rain water treatment. These installations are composed of a monobloc highly resistant reinforced concrete cylindrical tank ensuring a total leak absence and the absence of ground infiltrations, a carriageable cover and galvanized steel inspection shafts (alternatively D400 cast iron). This water dividing plant can be installed also in presence of ground water.

Monobloc cylindrical first rain water dividing plants type EURO MEC SSP/A series are necessary to control how sewage water goes into the drainage system because they allow its elimination through a natural filtering into the ground and separate it from the first rain water for the drainage system or the depuration plant without polluting the ground water.

According to the Directive 91/271/CEE we consider first rain water the water corresponding to the first 5 mm of each precipitation (equal to 50 mc/h) evenly distributed on the total draining area treated by the draining network. In order to calculate such flow rates we established that this data can be obtained in 15 minutes. We consider the following afflux coefficients: 1 for covered/paved/waterproof surfaces, and 0,3 for every kind of permeable surface except for cultivated areas.

HOW MONOBLOC CYLINDRICAL FIRST RAIN WATER DIVIDING PLANTS SSP SERIES WORK

"First rain water is pollutant because it contains sand, oils and hydrocarbons and therefore it is separated from the subsequent water (with no relevant pollution) by a calibrated overflow pipe "Cipolletti" type designed according to the udometric coefficient comparing the "hourly afflux coefficient" (which considers a 15 minutes rain precipitation in the tank area) with the "delay coefficient" (which considers the basin area as well as the tank/network slope)."

USED MATERIALS

Tanks	:	highly resistant reinforced vibrated concrete
By request	:	painted steel, fiberglass
Shafts	:	hot galvanised steel (by request: class D400 cast iron)

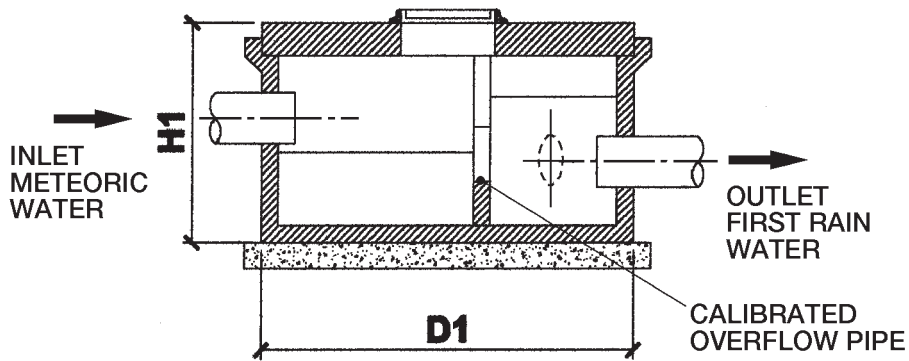
SPECIFICATION

"Supply of a monobloc cylindrical water dividing plant for first rain water type EURO MEC SSP/A series made of highly resistant reinforced concrete, with carriageable cover, concrete manholes and dimensioned with internal overflow pipe type "cipolletti". "

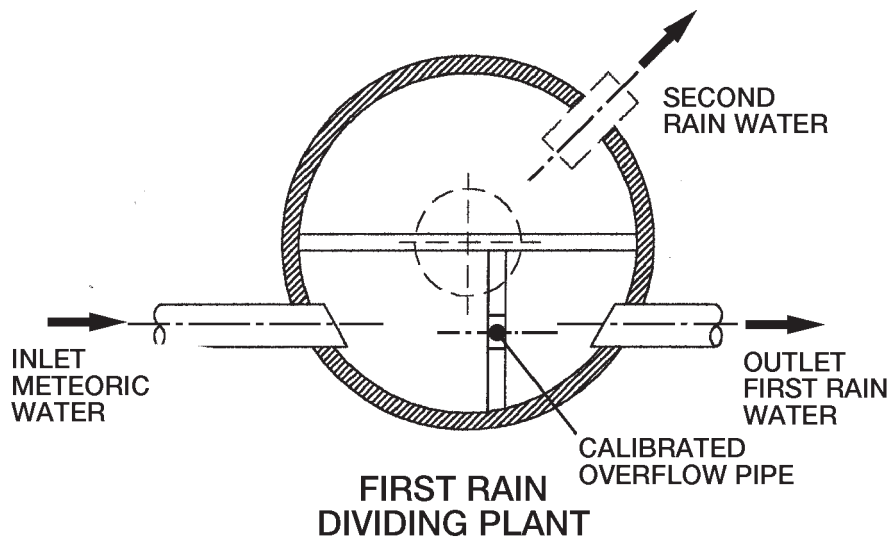


STANDARD PRODUCTION

Section



Plan



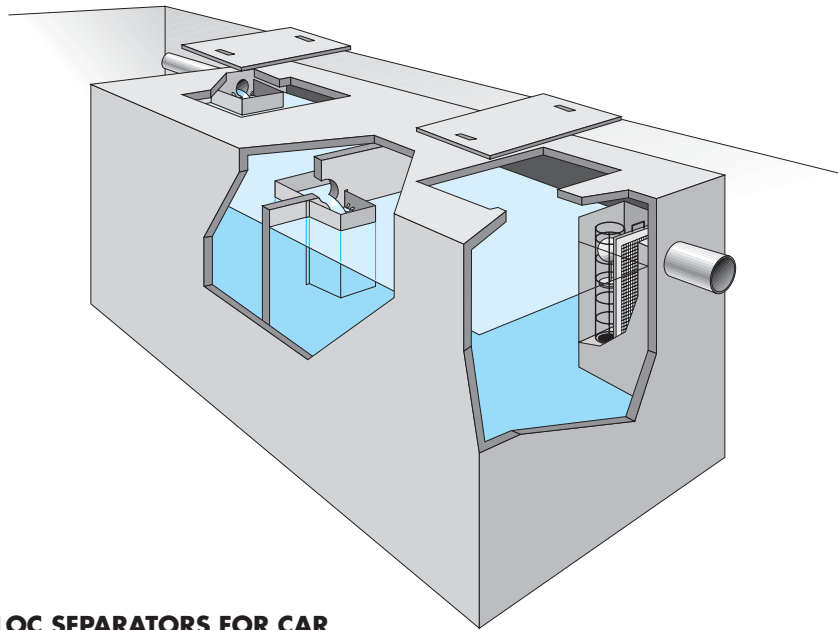
MODEL	DRAINING SURFACE mq	DIAMETER D cm	HEIGHT H cm	WEIGHT q.l.s
SSP/A 150	1000 ÷ 8000	165	118	21
SSP/A 200	7000 ÷ 15000	220	129	46

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All models have a carriageable cover.

MONOBLOC SEPARATORS FOR CAR STATIONS, CAR PARKING, CAR DEMOLITION SITES, INDOOR PARKING GARAGES

SO/P series



WHAT ARE MONOBLOC SEPARATORS FOR CAR STATIONS, CAR PARKINGS, CAR DEMOLITION SITES, INDOOR PARKING GARAGES SO/P SERIES

Monobloc prefabricated separators type EURO MEC SO/P series are dimensioned according to the DIN 1999 regulations and therefore ensure the compliance with the acceptability parameters with the Directive 91/271/CEE regarding the discharge in public sewers or superficial water of fluctuating substances and sedimentable solids.

These separators are used to depurate water coming from car stations, car parkings and/or car demolition sites, which are mainly polluted by accidental spilling of parked cars, mineral oils, sand and mud.

The *monobloc prefabricated separators type EURO MEC SO/P series* are composed of a monobloc rectangular tank with a flat bottom made of highly resistant reinforced concrete guaranteeing a total leak absence and the absence of ground infiltrations and can therefore be installed also in presence of ground water into the excavation.

The tank is separated into two sections: sand separation and oil separation. The cover is carriageable and complete with concrete inspection manholes.

Monobloc prefabricated separators type EURO MEC SO/P series are used for the depuration of sewage water before their discharge into superficial water (Directive 91/271/CEE) and are complete with a coalescence filter separating also the suspended oil microparticles.

All the SO/P models are also equipped with a floating obstructor in order to prevent oil spilling when the collection chamber is completely full.

HOW MONOBLOC SEPARATORS FOR CAR STATIONS, CAR PARKINGS, CAR DEMOLITION SITES, INDOOR PARKING GARAGES SO/P SERIES WORK

The parkings subject to meteoric precipitations have to be equipped to carry such precipitations into a single point in which the separator will be located.

The water starts its treatment as soon as it reaches the separator and will stay into the sand separation section or sludge separator

for an optimal separation of the sedimentable substances. This pre-treated water is subsequently sent to the oil separator in which the light substances in the water undergo a fluctuation treatment and then collected into a chamber as soon as they reach the surface. The discharge water which has to comply with the acceptance limits stated on the Directive 91/271/CEE for the discharge into superficial water through the use of a coalescence filter. Thanks to this filter the micro-particles adhere to a particular coalescent material (absorption effect), join up (coalescence effect) favouring their fluctuation into surface.

The separator discharge is automatically closed by a floating shutter to prevent oil spilling when it reaches a certain level in the collection chamber.

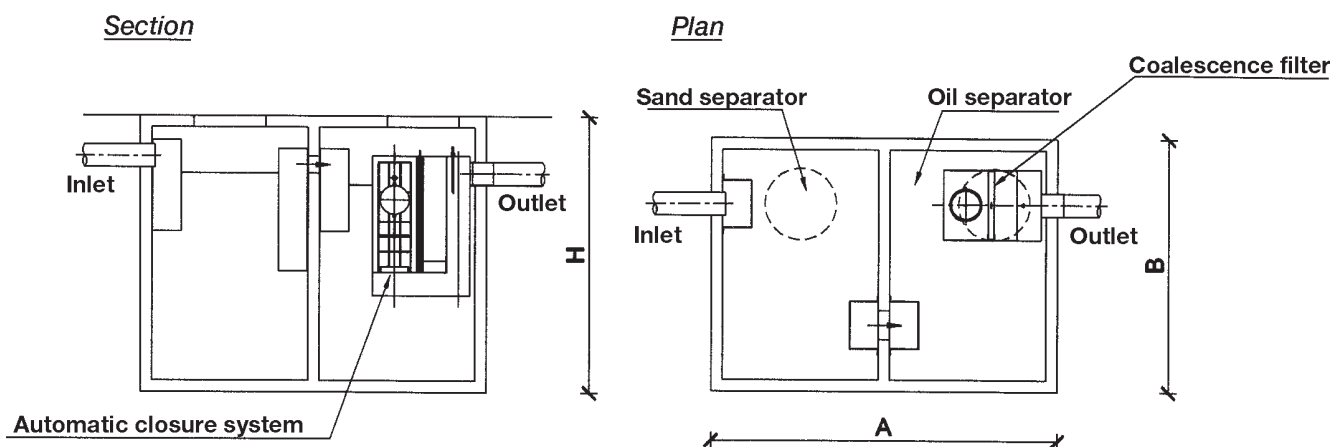
USED MATERIALS

Tanks	:	highly resistant vibrated reinforced concrete
Shafts	:	concrete
By request	:	hot galvanized steel, AISI 304 stainless steel, D400 cast iron
Internal carpentry	:	AISI 304 stainless steel

SPECIFICATION

"Supply of a monobloc separator type EURO MEC SO/P series, dimensioned according to the DIN 1999 prescriptions, monobloc parallelepiped prefabricated tank for the treatment of water coming from car stations, car parkings, car demolition sites, indoor parking garages made of highly resistant reinforced concrete divided into two sections, one for sand separation and one for oil separation, complete with stainless steel deflectors, coalescence filter, discharge device with floating obstructor with carriageable cover apt for heavy loads complete with inspection manholes."

STANDARD PRODUCTION



PROJECT DATA:

Fallen rain quantity
Surface for each car
Max. mineral oil pollution at the inlet
Depuration efficiency
Max. mineral oil pollution at the outlet

DICHARGE INTO DRAINAGE SYSTEM

$q = 0,015 \text{ l/s} \times \text{sq m}$
 $s = 25 \text{ sq m}$
 $E = 125 \text{ mg/l}$
 $n = 92\%$
 $D = 10 \text{ mg/l}$

DISCHARGE INTO SUPERFICIAL WATER

$q = 0,015 \text{ l/s} \times \text{sq m}$
 $s = 25 \text{ sq m}$
 $E = 125 \text{ mg/l}$
 $n = 97\%$
 $D = 5 \text{ mg/l}$

DESCRIPTION	MEASURE UNIT	MODEL						
		SO/P 5	SO/P 10	SO/P 25	SO/P 50	SO/P 75	SO/P 100	SO/P 125
Nominal flow rate	l/s	1,87	3,75	9,37	18,75	28,12	37,50	46,87
Treated surface	Sq m	130	250	650	1250	1900	2500	3150
Max. car number	N	5	10	25	50	75	100	125
External width B	cm	160	160	220	220	220	250	250
External length A	cm	170	170	220	410	600	600	750
Total height H	cm	170	220	220	220	240	270	270
Inlet/outlet pipe diameter	mm	160	160	160	160	300	300	300
Inlet level	cm	30	30	30	30	50	50	50
Outlet level	cm	40	40	40	40	65	65	65
Total weight	q.l.s	45	55	85	120	180	220	280

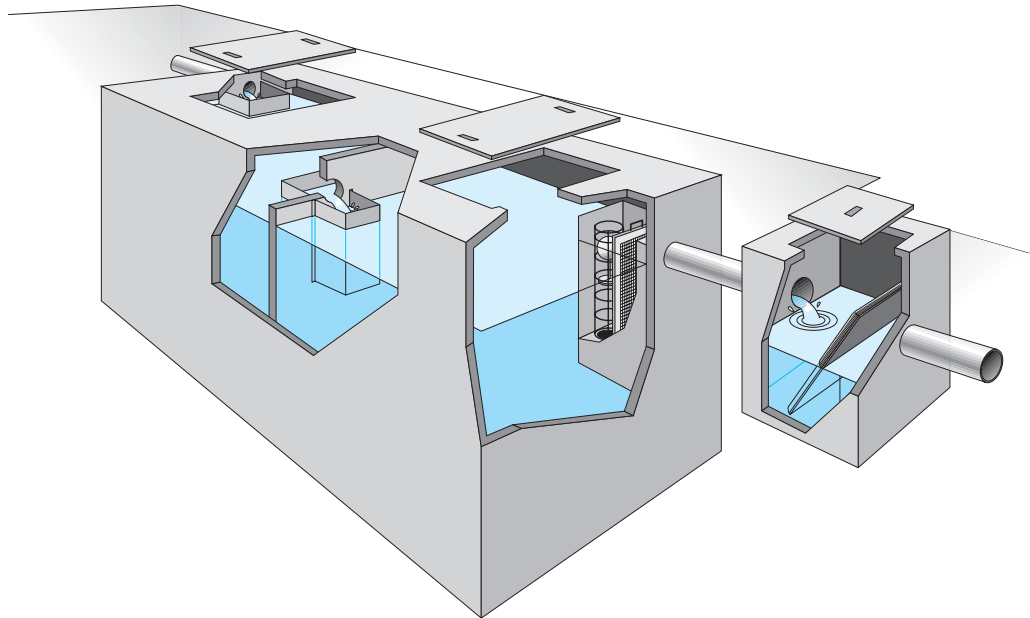
The above written data are given as information. The Society EURO MEC S.r.l. reserves the right to change them in every moment.

The suitable separator is chosen according to the nominal flow rate or alternatively to the meteoric water collection surface or to the parked cars number.

The superficial discharge water (Directive 91/271/CEE) needs the use of a coalescence filter.

MONOBLOC SEPARATORS FOR CAR GARAGES AND CAR WASHES

SO/L series



WHAT MONOBLOC SEPARATORS FOR CAR GARAGES AND CAR WASHES SERIES SO/L ARE

Monobloc prefabricated separators type EURO MEC SO/L series are dimensioned according to the DIN 1999 regulations in compliance with the acceptance parameters of the Directive 91/271/CEE regarding the discharge in public sewers or superficial water of fluctuating substances and sedimentable solids. These separators are used to depurate water coming from the washes of floorings and cars in car stations and car washes, which are mainly polluted by oil, greasy substances and sand.

Monobloc prefabricated separators type EURO MEC SO/L series are composed of a monobloc rectangular tank with flat bottom made of highly resistant reinforced concrete ensuring a total absence of leakages and infiltrations into the ground and therefore can be installed also in presence of ground water into the excavation.

The tank is divided into two sections: the sand separation section and the oil separation section.

The cover is carriageable and complete with concrete manholes.

Monobloc prefabricated separators type EURO MEC SO/L series are completed with a coalescence filter separating also the suspended oil microparticles.

All SO/L models are equipped also with a floating obstructor in order to avoid oil spilling when the collection chamber is completely full.

The supply also comprehends a final filtering section composed of oil absorbing panels intercepting every possible residue before the pre-treated water is discharged.

HOW MONOBLOC SEPARATORS FOR CAR GARAGES AND CAR WASHES SERIES SO/L WORK

Water coming from the car washes is sent into a specific point of the separator for its treatment before being conveyed into the final collector.

As soon as it reaches the separator water starts its treatment into the sand separation section or sludge separation section for an optimal time allowing the separation of the sedimentable substances. This pre-treated water is sent to the oil separation section in which it undergoes a light substances fluctuation process, which conveys such substances into a collection chamber once they reach the surface.

The latter section is equipped with a coalescence filter, a system allowing the oil microparticles adherence to a particular coalescent material (absorption effect) therefore increasing their dimensions (coalescence effect) and favouring their fluctuation to surface.

The separator discharge is automatically shut by a floating obstructor preventing oil spilling when the latter reaches a certain level in the collection chamber.

In order to avoid the abovementioned maximum level we can supply by request a flashing light or an acoustic alarm indicating a maintenance need and an oil removal intervention.

For a total absence of minimal oil residues the installation is completed with a final filtering section composed of oil absorbing panels.

USED MATERIALS

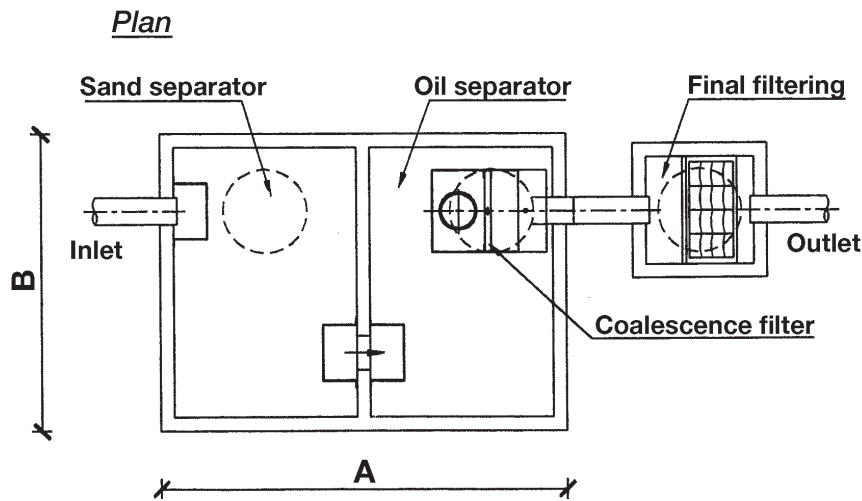
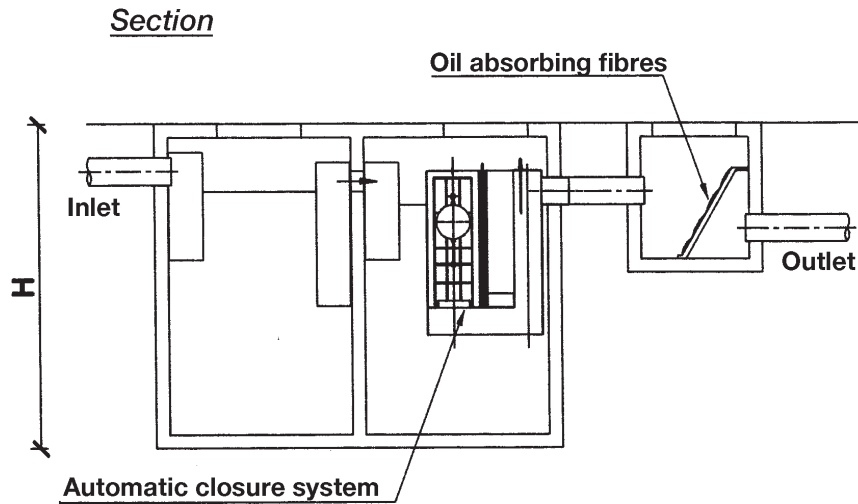
Tanks	:	highly resistant vibrated reinforced concrete
Shafts	:	concrete
By request	:	hot galvanized steel
	:	AISI 304 stainless steel
	:	Cast iron D400
Internal carpentry	:	AISI 304 stainless steel

SPECIFICATION

"Supply of a prefabricated monobloc parallelepiped separator type EURO MEC SO/L series dimensioned according to the DIN 1999 prescriptions, for the treatment of water coming from washes of floorings and cars in car stations and car washes. The installation is made of highly resistant reinforced concrete and divided into two sections: sand separation and oil separation, complete with stainless steel deflectors, coalescence filter, floating obstructor, carriageable cover for heavy loads and inspection manholes.

The supply also comprehends a final filtering section composed of oil absorbing panels intercepting possible oil residues before sending the pre-treated water to the discharge."

STANDARD PRODUCTION



Discharge in public drainage system – Models dimensioned according to the DIN 1999 regulations

MODEL	FLOW RATE l/s	CARS/D	WASHING SYSTEM	SEPARATOR DIMENSIONS cm			SHAFT DIMENSIONS cm	
				B	A	H	SIDE	H
SO/L-1 NG4	4	30	manual	140	170	220	50x50	66
SO/L-2 NG6	6	80	3 brushes	180	200	220	50x50	66
SO/L-3 NG 8	8	160	5 brushes	180	220	220	50x50	66
SO/L-4 NG 10	10	240	tunnel	220	270	220	50x50	66

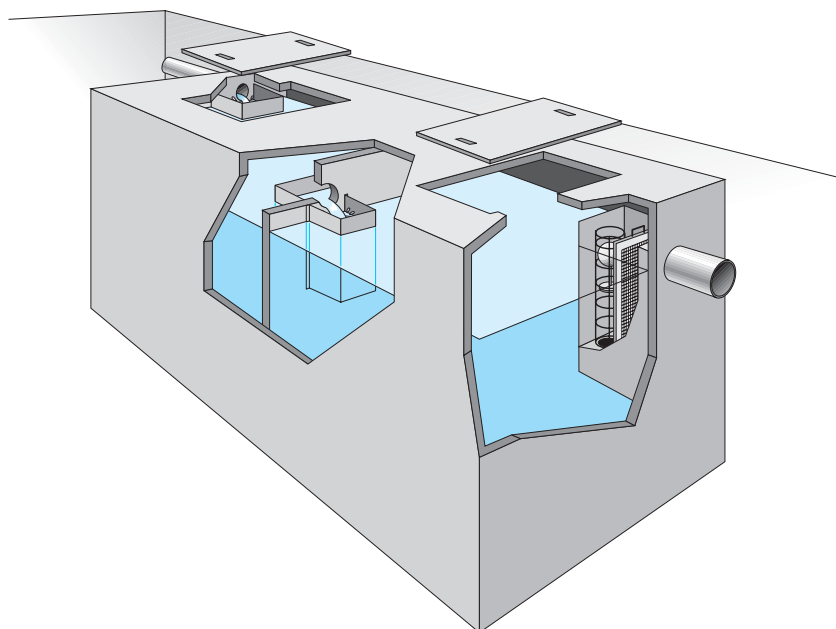
The above written data are given as information. The Society EURO MEC S.r.l. reserves the right to change them in every moment.

The model choice is determined on the basis of the following known data:

- Washing points daily flow rate
- Daily washed cars
- Used washing system

MONOBLOC SEPARATORS FOR INDOOR PARKING GARAGES

SO/C series



WHAT MONOBLOC SEPARATORS FOR INDOOR PARKING GARAGES SO/C SERIES ARE

Monobloc prefabricated separators type EURO MEC SO/C series are dimensioned according to the DIN 1999 regulations in compliance with the Directive 91/271/CEE regarding the discharge in public sewers or superficial water of fluctuating substances and sedimentable solids.

These separators are used for the depuration of water coming from the washes of floorings in indoor parking garages (silos) which are mainly polluted by accidental losses from parked cars containing mineral oils, sand and mud.

Monobloc prefabricated separators type EURO MEC SO/C series are composed of a monobloc highly resistant reinforced concrete rectangular tank with flat bottom guaranteeing a total absence of leakages and infiltrations into the ground and can be installed also in presence of ground water into the excavation.

The tank is divided into two sections: the sand separation section and the oil separation section.

The cover is carriageable and complete with concrete inspection manholes.

Monobloc prefabricated separators type EURO MEC SO/C series used for the treatment of sewage water discharge into surface water are completed with a coalescence filter separating also the suspended oil microparticles.

All SO/C models are equipped also with a floating obstructor in order to avoid oil spilling when the collection chamber is completely full.

HOW MONOBLOC SEPARATORS FOR INDOOR PARKING GARAGES SO/C SERIES WORK

The water coming from the lawful hydrants for the floorings washes is conveyed to a specific zone of the separator for its treatment before being sent to the final collector.

As soon as it comes to the separator the water starts its treatment into the sand separation section or sludge separation section for an optimal time allowing the separation of the sedimentable substances. The pre-treated water is therefore sent through the oil separation section in which it undergoes a light substances fluctuation

process, which conveys such substances into a collection chamber once they reach the surface.

For the discharge water having to comply with the acceptance limits of the Directive 91/271/CEE there is the addition of a coalescence filter, a system allowing the microparticles adherence to a particular coalescent material (absorption effect) therefore increasing their dimensions (coalescence effect) and favouring their fluctuation to surface.

The separator discharge is automatically shut by a floating obstructor preventing oil spilling when the latter reaches a certain level in the collection chamber.

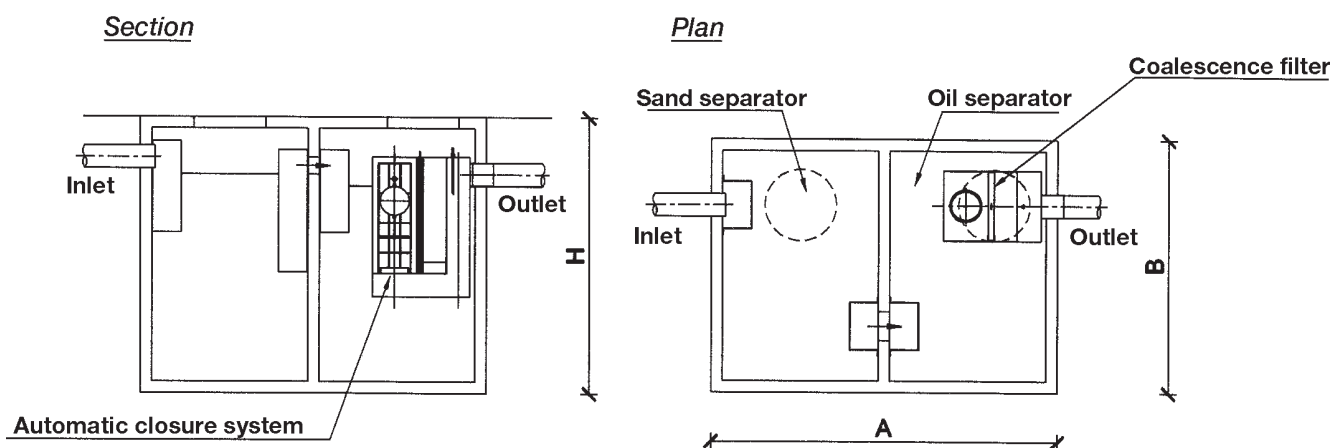
USED MATERIALS

Tanks	:	highly resistant vibrated reinforced concrete
Shafts	:	concrete
By request	:	hot galvanized steel AISI 304 stainless steel Cast iron D400
Internal carpentry	:	AISI 304 stainless steel

SPECIFICATION

"Supply of a separator type EURO MEC SO/C series dimensioned according to the DIN 1999 prescriptions, prefabricated monobloc parallelepiped for the treatment of water coming from the washes of covered parking garages floorings (silos), made of highly resistant reinforced concrete, divided into two sections: sand separation and oil separation, complete with stainless steel deflectors, coalescence filter, floating obstructor, carriageable cover for heavy loads and inspection manholes."

STANDARD PRODUCTION



PROJECT DATA:

Surface for each car
Max. mineral oil pollution at the inlet
Depuration efficiency
Max. mineral oil pollution at the outlet

DICHARGE INTO DRAINAGE SYSTEM

$s = 25 \text{ sq m}$
 $E = 125 \text{ mg/l}$
 $n = 92\%$
 $D = 10 \text{ mg/l}$

DISCHARGE INTO SUPERFICIAL WATER

$s = 25 \text{ sq m}$
 $E = 125 \text{ mg/l}$
 $n = 97\%$
 $D = 5 \text{ mg/l}$

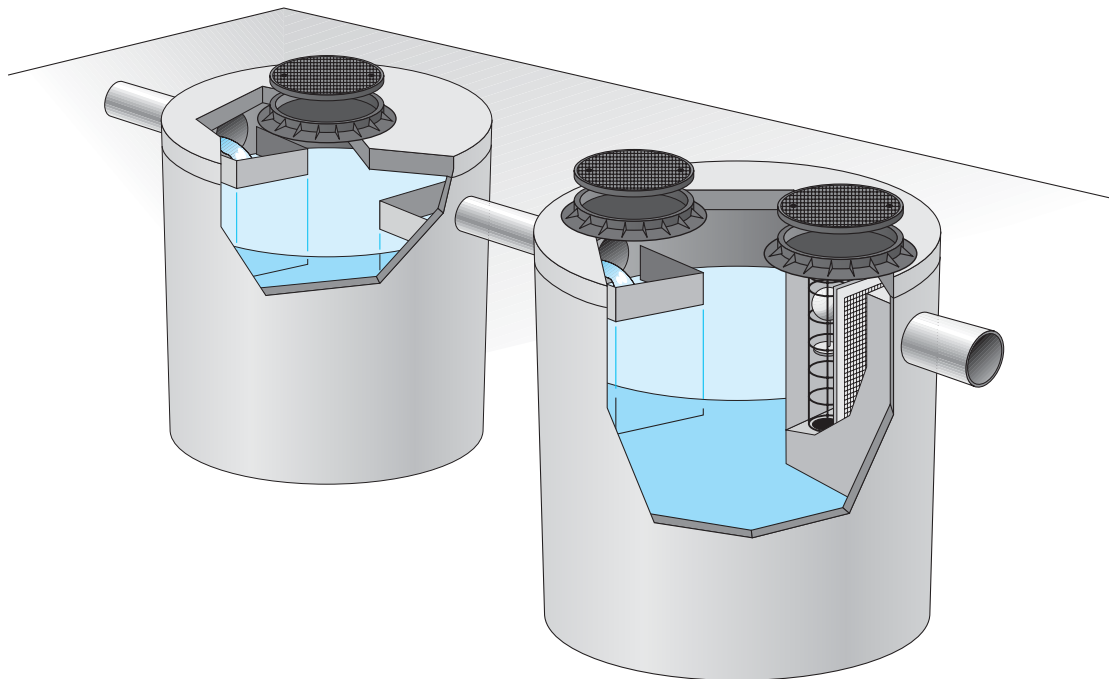
DESCRIPTION	MEASURE UNIT	MODEL								
		SO/C 2	SO/C 4	SO/C 5	SO/C 10	SO/C 15	SO/C 20	SO/C 30	SO/C 40	SO/C 50
Nominal flow rate	l/s	1,2	2,4	3,6	6	9,6	12	18	24	30
Treated surface	Sq m	600	1200	1500	3000	4500	6000	9000	12000	15000
Max car n.	N	20	40	50	100	150	200	300	400	500
External width B	cm	160	160	160	160	220	220	220	220	220
External length A	cm	170	170	170	220	220	260	410	550	600
Total height H	cm	170	170	220	220	220	220	220	220	240
Inlet/outlet piping diameter	mm	160	160	160	160	160	160	160	300	300
Inlet level	cm	30	30	30	30	30	30	30	50	50
Outlet level	cm	38	38	38	38	38	38	38	65	65
Total weight	q.ls	45	45	55	65	82	90	120	160	180

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 suitable separator is determined according to the nominal flow rate or alternatively to the collection surface for the washes water or the number of parked cars.
For the discharge into superficial water (Directive 91/271/CEE) the use of a coalescence filter is necessary.

MINERAL OILS SEPARATORS FOR CAR STATIONS, CAR PARKINGS, CAR DEMOLITION SITES AND INDOOR PARKING GARAGES

SA/P series



WHAT MINERAL OILS SEPARATORS FOR CAR STATIONS, CAR PARKINGS, CAR DEMOLITION SITES AND INDOOR PARKING GARAGES SA/P SERIES ARE

Prefabricated mineral oils separators type EURO MEC SA/P series are dimensioned according to the DIN 1999 regulations in compliance with the acceptance parameters of the Directive 91/271/CEE regarding the discharge in public sewers or superficial water of fluctuating substances and sedimentable solids. They are used to depurate the water coming from car stations, car parkings and/or demolition sites, which are mainly polluted by accidental losses from parked cars with presence of mineral oils, sand and mud.

Prefabricated mineral oils separators type EURO MEC SA/P series are composed of two highly resistant reinforced concrete circular tanks with flat bottom.

The installation has two distinct basins: one for the sand separation and one for the oil separation section.

The cover is carriageable and complete with D400 cast iron inspection manholes.

Prefabricated mineral oils separators type EURO MEC SA/P series used for the treatment of sewage water discharge into surface water (Directive 91/271/CEE) are completed with a coalescence filter separating also the suspended oil microparticles.

Prefabricated mineral oils separators type EURO MEC SA/P series are equipped also with a floating obstructor in order to avoid oil spilling when the collection chamber is completely full.

HOW MINERAL OILS SEPARATORS FOR CAR STATIONS, CAR PARKINGS, CAR DEMOLITION SITES AND INDOOR PARKING GARAGES SA/P SERIES WORK

The parking lots interested by meteoric precipitations have to be predisposed to convey the water into a single point in which the separator will be located.

As it reaches the separator water start its treatment into the sand separation section or the sludge separation section for an optimal time allowing the separation of the sedimentable substances.

The pre-treated water is therefore sent through the oil separation section in which it undergoes a light substances fluctuation process, which conveys such substances into a collection chamber once they reach the surface.

For discharge water having to comply with the acceptance limits of the Directive 91/271/CEE there is the addition of a coalescence filter, a system allowing the microparticles adherence to a particular coalescent material (absorption effect) therefore increasing their dimensions (coalescence effect) and favouring their fluctuation to surface.

The separator discharge is automatically shut by a floating obstructor preventing oil spilling when the latter reaches a certain level in the collection chamber.

USED MATERIALS

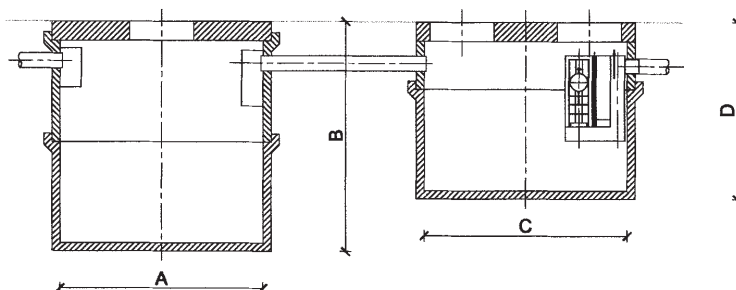
Tanks	:	highly resistant vibrated reinforced concrete
Shafts	:	D400 cast iron
Internal carpentry	:	AISI 304 stainless steel

SPECIFICATION

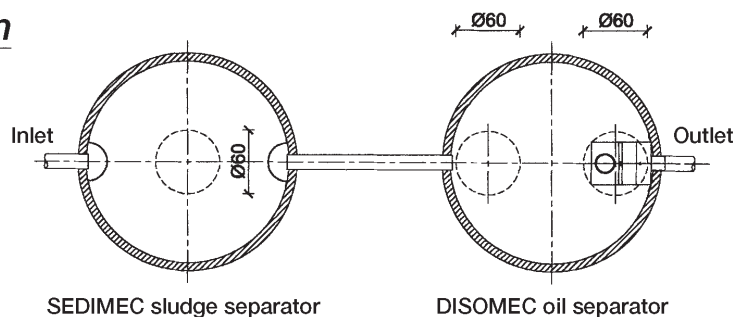
"Supply of a separator type EURO MEC SA/P series dimensioned according to the DIN 1999 prescriptions, prefabricated for the treatment of water coming from car stations, parkings and/or car demolition sites, made of highly resistant reinforced concrete, divided into two sections: sand separation and oil separation, complete with stainless steel deflectors, coalescence filter, floating obstructor, carriageable cover for heavy loads and D400 cast iron inspection manholes."

STANDARD PRODUCTION

Section



Plan



PROJECT DATA:

Fallen rain quantity
Surface for each car
Max. mineral oil pollution at the inlet
Depuration efficiency
Max. mineral oil pollution at the outlet

DICHARGE INTO DRAINAGE SYSTEM

$q = 0,015 \text{ l/s} \times \text{sq m}$
 $s = 25 \text{ sq m}$
 $E = 125 \text{ mg/l}$
 $n = 92\%$
 $D = 10 \text{ mg/l}$

DISCHARGE INTO SUPERFICIAL WATER

$q = 0,015 \text{ l/s} \times \text{sq m}$
 $s = 25 \text{ sq m}$
 $E = 125 \text{ mg/l}$
 $n = 97\%$
 $D = 5 \text{ mg/l}$

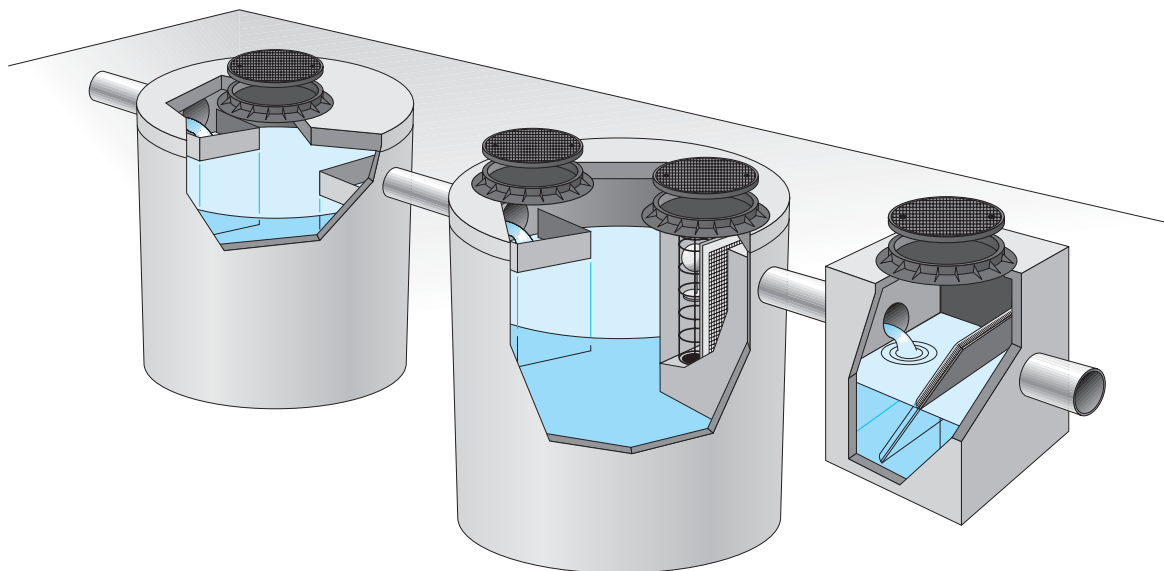
DESCRIPTION	MEASURE UNIT	MODEL								
		SA/P NG 4	SA/P NG 6	SA/P NG 8	SA/P NG 10	SA/P NG 15	SA/P NG 20	SA/P NG 30	SA/P NG 40	SA/P NG 50
Nominal flow rate	l/s	4,00	6,00	8,00	10,00	15,00	20,00	30,00	40,00	50,00
Treated surface, max.	Smq	300	400	500	700	1000	1300	2000	2700	3500
Max. parked car n.	N.	12	16	20	28	40	52	80	108	140
Sand separator volume	l	1300	2100	3000	3000	5400	6500	6500	6500	10000
Oil separator volume	l	990	2280	2280	2280	3700	3700	5300	6600	10000
Oil collection volume	l	150	235	235	235	600	600	750	1300	2000
Sand separator dimensions		(*)								
- diametro A	cm	-	140	150	150	200	200	200	200	250
- altezza B	cm	-	175	218	268	229	229	279	279	285
Dimensioni disoleatore		(*)								
- diametro C	cm	140	140	140	140	200	200	200	200	250
- height D	cm	175	175	175	175	179	179	229	279	285
Inlet/outlet piping diameter	mm	160	160	160	160	200	200	250	300	400
Inlet level	cm	41	39	39	39	50	50	55	60	65
Outlet level	cm	43	43	43	43	54	54	59	64	70
Total weight	q.ls	25	45	48	51	121	129	141	149	220
Heaviest piece weight	q.ls	25	25	25	25	30	30	30	30	90

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

(*) version integrated into a monobloc tank

MINERAL OILS SEPARATORS FOR CAR GARAGES AND CAR WASHES

SA/L series



WHAT MINERAL OILS SEPARATORS FOR CAR GARAGES AND CAR WASHES SA/L SERIES ARE

Prefabricated mineral oils separators type EURO MEC SA/L series are dimensioned according to the DIN 1999 regulations in compliance with the acceptance parameters of the Directive 91/271/CEE for the discharge into public sewers or superficial water regarding the fluctuating substances and sedimentable solids. They are used to depurate water coming from the washes of floorings and cars into car garages and car washes which are mainly polluted by oils, greasy substances and sand.

Prefabricated mineral oils separators type EURO MEC SA/L series are composed of highly resistant reinforced concrete circular tanks with flat bottom.

The installation has two distinct basins: one for the sand separation and one for the oil separation.

The cover is carriageable and complete with D400 cast iron inspection manholes.

Prefabricated mineral oils separators type EURO MEC SA/L series used for the treatment of sewage water discharge into surface water are completed with a coalescence filter separating also the suspended oil microparticles.

Prefabricated mineral oils separators type EURO MEC SA/L series are equipped also with a floating obstructor in order to avoid oil spilling when the collection chamber is completely full.

The installation is completed by a final filtering section with oil absorbing panels intercepting possible oil residues before discharging the pre-treated water.

HOW MINERAL OILS SEPARATORS FOR CAR GARAGES AND CAR WASHES SA/L SERIES WORK

The water coming from different washes is conveyed towards a specific point and introduced into the separator for their treatment before being sent to the final recipient.

As it reaches the separator water starts its treatment into the sand separation section or the sludge separation section for an optimal time allowing the separation of the sedimentable substances.

The pre-treated water is therefore sent through the oil separation section in which it undergoes a light substances fluctuation process, which conveys such substances into a collection chamber once they reach the surface.

The latter section is equipped with a coalescence filter, a device allowing the microparticles adherence to a particular coalescent material (absorption effect) and after joining up they increase their dimensions (coalescence effect) favouring their fluctuation to surface. The separator discharge is automatically shut by a floating obstructor preventing oil spilling when the latter reaches a certain level in the collection chamber.

In order to avoid the abovementioned maximum level we can supply by request a flashing light or an acoustic alarm indicating the need of a maintenance and oil removal intervention.

For a total absence of minimal oil residues the installation is completed with a final filtering section composed of oil absorbing panels.

USED MATERIALS

Tanks	:	highly resistant vibrated reinforced concrete
Shafts	:	D400 cast iron
Internal carpentry	:	AISI 304 stainless steel

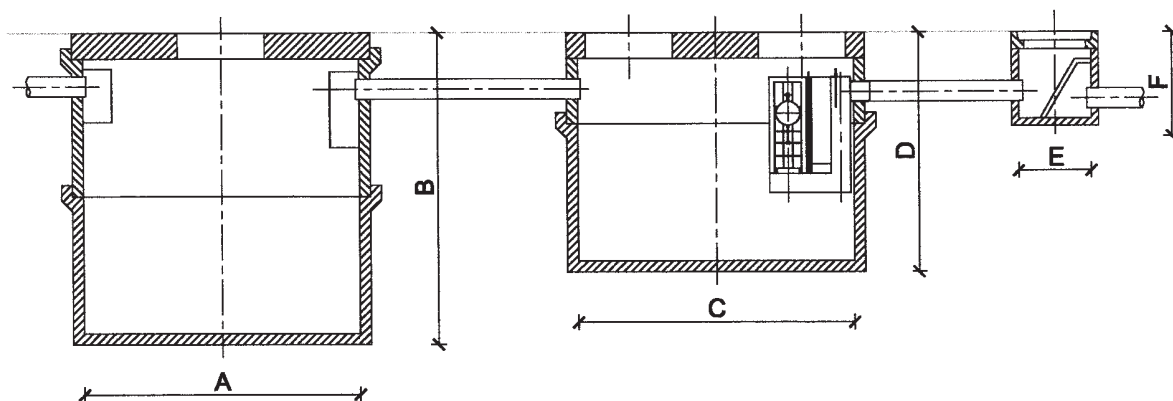
SPECIFICATION

"Supply of a prefabricated separator type EURO MEC SA/L series dimensioned according to the DIN 1999 prescriptions, for the treatment of water coming from washes of floorings and cars in car garages and car washes. The installation is made of highly resistant reinforced concrete and divided into two tanks : sand separation and oil separation, complete with stainless steel deflectors, coalescence filter, floating obstructor, carriageable cover for heavy loads and D400 cast iron inspection manholes.

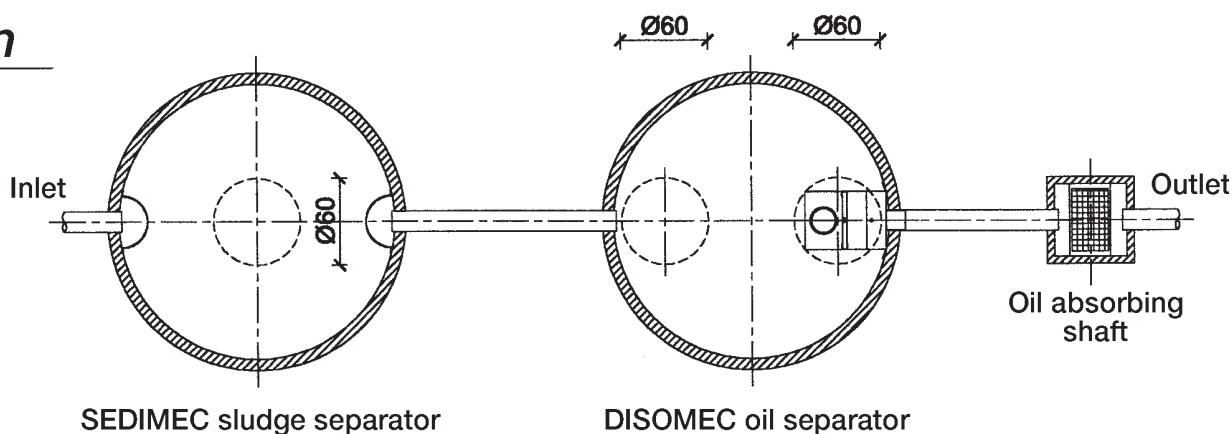
The supply also comprehends a final filtering section composed of oil absorbing panels intercepting possible oil residues before sending the pre-treated water to the discharge."

STANDARD PRODUCTION

Section



Plan



MODEL	NOMINAL FLOW RATE l/s	WASHED CARS N/d	WASHING SYSTEM	SAND SEPARATOR DIM. cm		OIL SEPARATOR DIM. cm		SHAFT WITH OIL ABSORBING FIBRES cm		TOTAL WEIGHT q.ls	HEAVIEST PIECE WEIGHT q.ls
				A	B	C	D	E	F		
SA/L-1 NG 4	4,00	30	hydro cleaner	(*)	(*)	140	175	50	66	25	25
SA/L-2 NG 6	6,00	80	3 brushes door	150	168	140	175	50	66	45	25
SA/L-3 NG 8	8,00	160	5 brushes door	150	218	140	175	50	66	48	25
SA/L-4 NG 10	10,00	240	tunnel	150	268	140	175	50	66	51	25

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

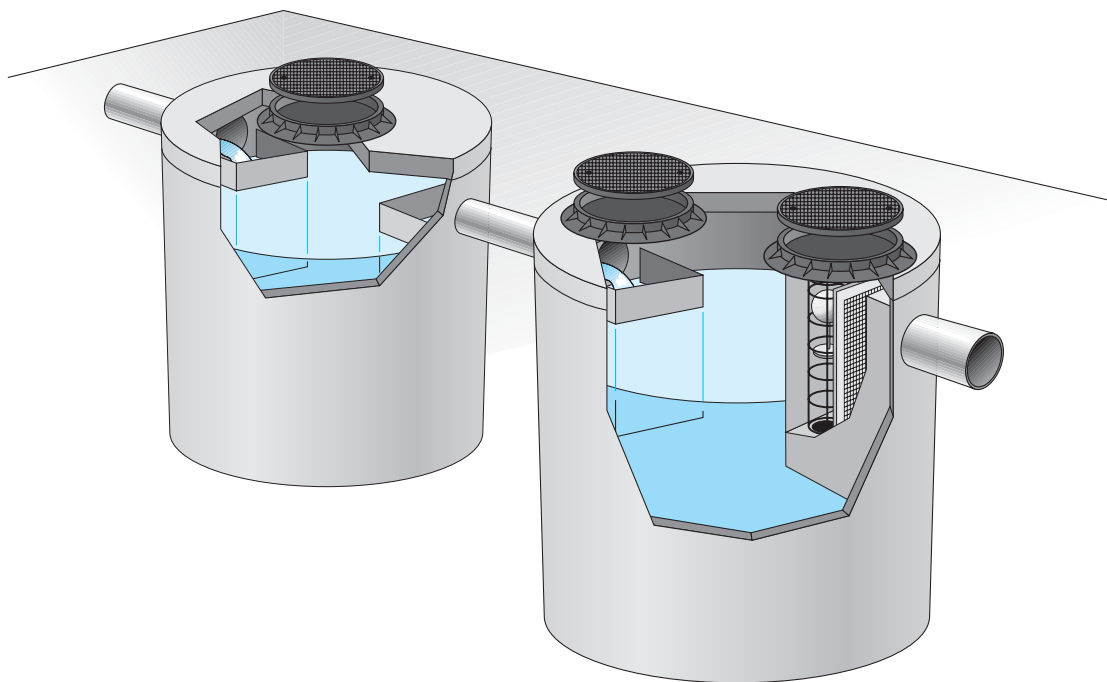
The model choice is determined according to the following known data:

- Washing points instant flow rate
- Daily washed cars
- Used washing system

(*) Version integrated into a monobloc basin.

MINERAL OILS SEPARATORS FOR INDOOR PARKING GARAGES

SA/C series



WHAT MINERAL OILS SEPARATORS FOR INDOOR PARKING GARAGES SA/C SERIES ARE

Prefabricated mineral oils separators type EURO MEC SA/C series are dimensioned according to the DIN 1999 regulations in compliance with the acceptance parameters of the Directive 91/271/CEE for the discharge into public sewers or superficial water regarding the fluctuating substances and sedimentable solids. These separators are used to deplete water coming from the washes of indoor parking garages floorings (silos), which are mainly polluted by accidental losses of mineral oils, sand and mud from the parked cars.

Prefabricated mineral oils separators type EURO MEC SA/C series are composed of highly resistant reinforced concrete circular tanks with flat bottom for the two distinct sections: sand separation and oil separation.

The cover is carriageable and complete with D400 cast iron inspection manholes.

Prefabricated mineral oils separators type EURO MEC SA/C series used for the treatment of sewage water discharge into surface water (in compliance with the Directive 91/271/CEE) are completed with a coalescence filter separating also the suspended oil microparticles.

Prefabricated mineral oils separators type EURO MEC SA/C series are equipped also with a floating obstructor in order to avoid oil spilling when the collection chamber is completely full.

HOW MINERAL OILS SEPARATORS FOR INDOOR PARKING GARAGES SA/C SERIES WORK

The water coming from the lawful hydrants for the floorings washes is conveyed to a specific zone and introduced into the separator for its treatment before being sent to the final collector.

As soon as it comes to the separator water starts its treatment into the sand separation or sludge separation section for an optimal

time allowing the separation of the sedimentable substances. The pre-treated water is therefore sent through the oil separation section in which it undergoes a light substances fluctuation process, which conveys such substances into a collection chamber once they reach the surface.

For the discharge water having to comply with the acceptance limits of the Directive 91/271/CEE, there is the addition of a coalescence filter, a system allowing the microparticles adherence to a particular coalescent material (absorption effect) therefore increasing their dimensions (coalescence effect) and favouring their fluctuation to surface.

The separator discharge is automatically shut by a floating obstructor preventing oil spilling when the latter reaches a certain level in the collection chamber.

USED MATERIALS

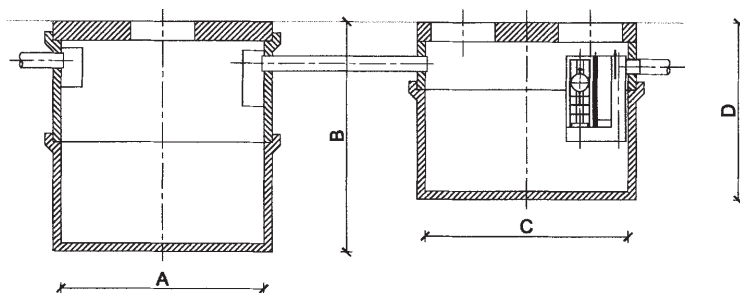
Tanks	:	highly resistant vibrated reinforced concrete
Shafts	:	Cast iron D400
Internal carpentry	:	AISI 304 stainless steel

SPECIFICATION

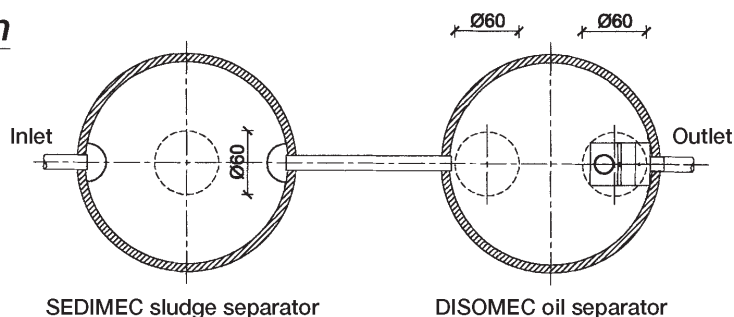
"Supply of a separator type EURO MEC SA/C series dimensioned according to the DIN 1999 prescriptions, prefabricated for the treatment of water coming from the washes of indoor parking garages floorings (silos), made of highly resistant reinforced concrete, divided into two sections: sand separation and oil separation, complete with stainless steel deflectors, coalescence filter, floating obstructor, carriageable cover for heavy loads and D400 cast iron inspection manholes."

STANDARD PRODUCTION

Section



Plan



PROJECT DATA:

Surface for each car
 Max. mineral oil pollution at the inlet
 Depuration efficiency
 Max. mineral oil pollution at the outlet

DICHARGE INTO DRAINAGE SYSTEM

$s = 25 \text{ mq}$
 $E = 125 \text{ mg/l}$
 $n = 92\%$
 $D = 10 \text{ mg/l}$

DISCHARGE INTO SUPERFICIAL WATER

$s = 25 \text{ mq}$
 $E = 125 \text{ mg/l}$
 $n = 97\%$
 $D = 5 \text{ mg/l}$

DESCRIPTION	MEASURE UNIT	MODEL									
		SA/C NG 4	SA/C NG 6	SA/C NG 8	SA/C NG 10	SA/C NG 15	SA/C NG 20	SA/C NG 30	SA/C NG 40	SA/C NG 50	
Nominal flow rate	l/s	4,00	6,00	8,00	10,00	15,00	20,00	30,00	40,00	50,00	
Max. treated surface	mq	2000	3000	4000	5000	7500	10000	15000	20000	25000	
Max car n.	N.	80	120	200	200	300	400	600	800	1000	
Sand separator volume	l	1300	2100	3000	3000	5400	6500	6500	6500	10000	
Oil separator volume	l	990	2280	2280	2280	3700	3700	5300	6600	10000	
Oil collection volume	l	150	235	235	235	600	600	750	1300	2000	
Sand separator dimensions		(*)									
- diameter A	cm	-	140	150	150	200	200	200	200	250	
- height B	cm	-	175	218	268	229	279	279	279	285	
Oil separator dimensions		(*)									
- diameter C	cm	140	140	140	140	200	200	200	200	250	
- height D	cm	175	175	175	175	179	179	229	279	285	
Inlet/outlet piping diameter	mm	160	160	160	160	200	200	250	300	400	
Inlet level	cm	41	39	39	39	50	50	55	60	65	
Outlet level	cm	43	43	43	43	54	54	59	64	70	
Total weight	q.li	25	45	48	51	121	129	141	149	220	
Heaviest piece weight	q.li	25	25	25	25	30	30	30	30	90	

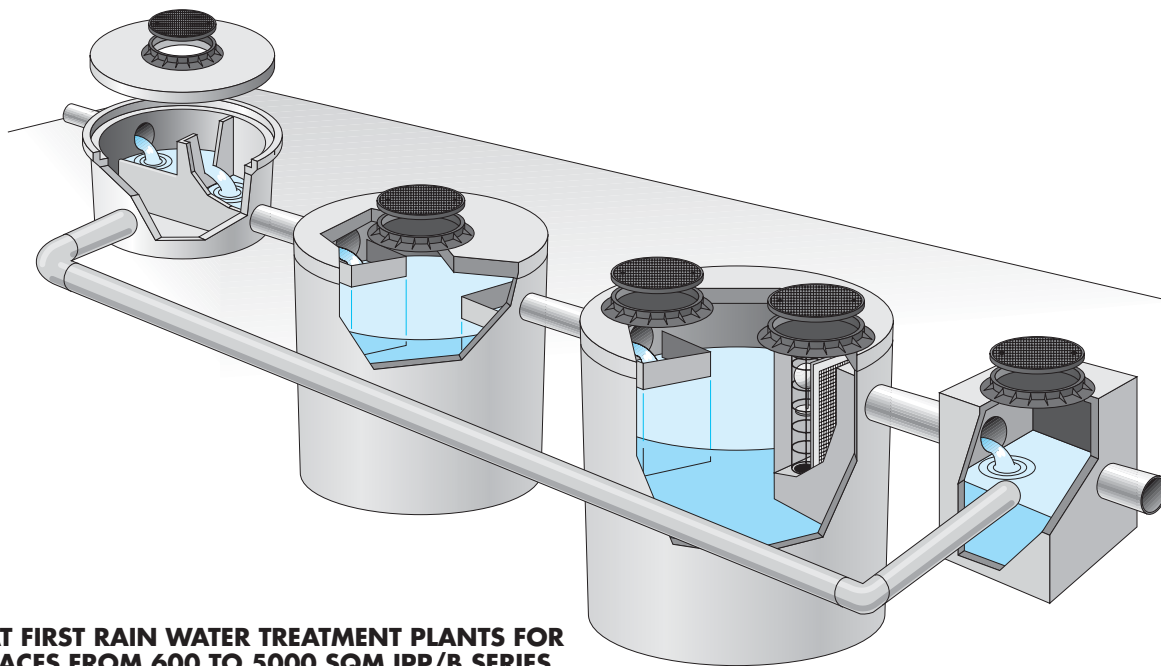
The above written data are given as information. The Society EURO MEC S.r.l. reserves the right to change them in every moment.

(*) Version integrated into a monobloc basin.

FIRST RAIN WATER TREATMENT PLANTS FOR SURFACES FROM 600 TO 5000 SQM

Installations for medium surfaces with first rain water treatment by means of a by-pass installation system

IPP/B series



WHAT FIRST RAIN WATER TREATMENT PLANTS FOR SURFACES FROM 600 TO 5000 SQM IPP/B SERIES ARE

First rain water treatment plants for surfaces from 600 to 5000 sqm type EURO MEC IPP/B series are designed in compliance with the Norms prescriptions in force and therefore allow to reduce the ground water pollution and impoverishment.

These installations control the meteoric water collection into the sewers disposing them on site by separating the first rain water.

First rain water treatment plants for surfaces from 600 to 5000 sqm type EURO MEC IPP/B series are dimensioned according to the DIN 1999 regulations in compliance with the acceptance parameters of the Directive 91/271/CEE for the discharge into public sewers or superficial water regarding the fluctuating substances and sedimentable solids.

They are mainly used for the treatment of water coming from car stations, car parkings and/or car demolition sites, which are mainly polluted by accidental losses of mineral oils, sand and mud from the parked cars.

First rain water treatment plants for surfaces from 600 to 5000 sqm type EURO MEC IPP/B series are composed of highly resistant reinforced concrete circular tanks with flat bottom.

The installation has three distinct sections: a flow rate dividing section, a sand separation section and an oil separation section equipped with a coalescence filter and a floating obstructor preventing oil spilling when the collection chamber is completely full.

The cover is carriageable and complete with D400 cast iron inspection manholes.

HOW FIRST RAIN WATER TREATMENT PLANTS FOR SURFACES FROM 600 TO 5000 SQM IPP/B SERIES WORK

The pollution produced by the meteoric water washing away process is essentially due to the presence of sand, mud and light mineral oils.

Water coming from different sides of the parking is sent to the flow rate dividing shaft in which thresholds (prepared according to the treated surface) separate the "first rain water" from the subsequent

water, with a very diluted polluting charge and therefore apt for being sent to the by-pass treatment.

The parking lots subject to meteoric precipitations have to be suitably predisposed with a single water collection point in which the separator will be located.

The first rain water treatment starts into the sand separation section or sludge separation section for an optimal time allowing the sedimentable substances separation. This pre-treated water is therefore sent to the oil separation section, in which it undergoes a light substances fluctuation.

For the discharge water having to comply with the acceptance limits of the Directive 91/271/CEE there is the addition of a coalescence filter, a system allowing the microparticles adherence to a particular coalescent material (absorption effect) therefore increasing their dimensions (coalescence effect) and favouring their fluctuation to surface.

The separator discharge is automatically shut by a floating obstructor preventing oil spilling, when the latter reaches a certain level in the collection chamber.

USED MATERIALS

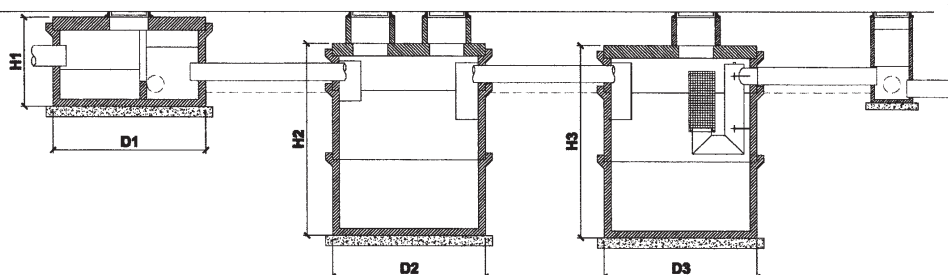
Tanks	:	highly resistant vibrated reinforced concrete
Shafts	:	D400 cast iron
Internal carpentry	:	AISI 304 stainless steel

SPECIFICATION

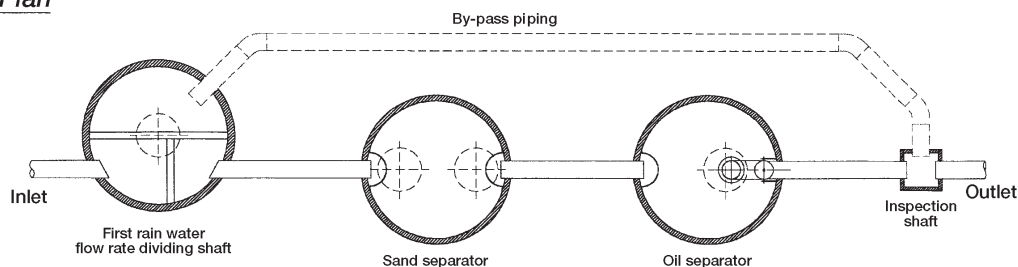
"Supply of a first rain water treatment plant type EURO MEC IPP/B series for the first rain water treatment by means of a by-pass, composed of highly resistant reinforced concrete tanks divided into three sections: a flow rate dividing section, a sand separation section and an oil separation section, complete with stainless steel deflectors, coalescence filter, floating obstructor, carriageable cover for heavy loads and D400 cast iron inspection manholes."

STANDARD PRODUCTION

Section



Plan



PROJECT DATA:

Fallen rain quantity
Max. mineral oil pollution at the inlet
Depuration efficiency
Max. mineral oil pollution at the outlet

DICHARGE INTO DRAINAGE SYSTEM

$q = 0,010 \text{ l/s} \times \text{sq m}$
 $E = 125 \text{ mg/l}$
 $n = 92\%$
 $D = 10 \text{ mg/l}$

DISCHARGE INTO SUPERFICIAL WATER

$q = 0,010 \text{ l/s} \times \text{sq m}$
 $E = 125 \text{ mg/l}$
 $n = 97\%$
 $D = 5 \text{ mg/l}$

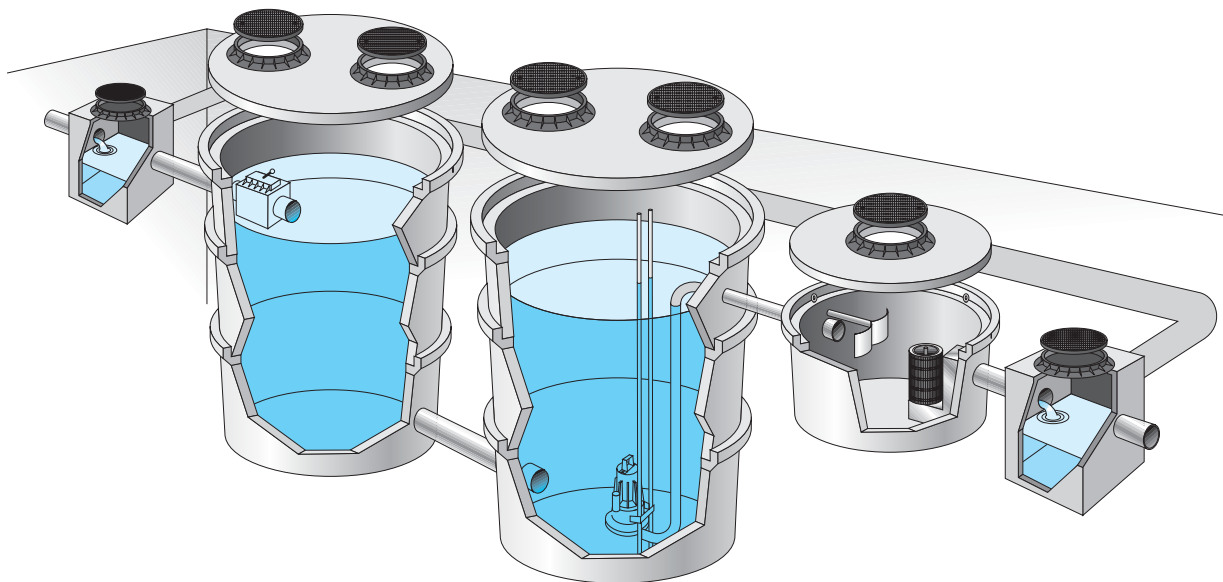
DESCRIPTION	MEASURE UNIT	MODEL							
		IPP/B NG 6	IPP/B NG 10	IPP/B NG 15	IPP/B NG 20	IPP/B NG 30	IPP/B NG 40	IPP/B NG 50	
Nominal flow rate	l/s	6,00	10,00	15,00	20,00	30,00	40,00	50,00	
Max. treated surface	Sm q	600	1000	1500	2000	3000	4000	5000	
Max. parked car n.	N.	16	28	40	52	80	108	135	
Sand separator volume	l	2100	3000	5400	6500	6500	6500	8100	
Oil separator volume	l	2280	2280	3700	3700	5300	6600	8250	
Oil collection volume	l	235	235	600	600	750	1300	1600	
Flow rate dividing shaft dimensions:									
- diameter	D1	m	1,50	1,50	1,50	2,00	2,00	2,00	2,00
- height	H1	m	1,00	1,00	1,00	1,00	1,00	1,00	1,00
Sand separator dimensions:									
- diameter	D2	m	1,50	1,50	2,00	2,00	2,00	2,00	2,50
- height	H2	m	1,75	2,68	2,29	2,79	2,79	2,79	2,85
Oil separator dimensions:									
- diameter	D3	m	1,40	1,40	2,00	2,00	2,00	2,00	2,50
- height	H3	m	1,75	1,75	1,79	1,79	2,29	2,79	2,85
Inlet/outlet piping diameter	mm	160	160	200	200	200	250	300	
Inlet level	cm	54	54	54	78	78	78	80	
Outlet level	cm	90	90	90	102	102	102	104	
Total weight	q. ls	58	64	134	175	187	195	270	
Heaviest piece weight	q. ls	25	25	30	30	30	30	90	

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FIRST RAIN WATER TREATMENT PLANTS FOR SURFACES FROM 4000 TO 10.000 SQM WITH MODULAR RINGS

Installations for large surfaces with first rain water treatment by means of a storage tanks system

IPP/AA series



WHAT FIRST RAIN WATER TREATMENT PLANTS FOR SURFACES FROM 4000 TO 10.000 SQM WITH MODULAR RINGS IPP/AA SERIES ARE

First rain water treatment plants type EURO MEC IPP/AA series are designed in compliance with the Norms prescriptions in force. Their correct use allows the reduction of the ground water pollution and impoverishment, because they convey the meteoric water into the sewers or on site after separating the first rain water, which is collected into suitable storage basins. The stored water is subsequently pumped out of the basin with a constant and limited flow rate during 48 hours, in accordance with the current laws, towards the sewers or the final treatment plant.

Optional oil separators can be located forward the first rain water treatment plant type EURO MEC IPP/AA series. Such separators are dimensioned according to the equalized flow rate and DIN 1999 regulations as well as equipped with a coalescence filter.

First rain water treatment plants type EURO MEC IPP/AA series are composed of highly resistant reinforced concrete modular rings circular tanks.

The cover is carriageable and complete with D400 cast iron inspection manholes.

HOW FIRST RAIN WATER TREATMENT PLANTS FOR SURFACES FROM 4000 TO 10.000 SQM WITH MODULAR RINGS IPP/AA SERIES WORK

The first rain water is conveyed into the installations type EURO MEC IPP/AA series and therefore drained into the controlled flow sewers network.

The first rain water volume evacuation must be carried out according to the current laws, during a minimal time of 48 hours between a meteoric event and another.

An electronic device detects when a precipitation begins and when the tank is subsequently filled up, memorizing this datum and activating the controlled flow rate lifting pump after a given programmable time.

When the basin reaches the maximum level equal to the polluted first rain water discharged volume a particular device stops pouring water into the tank and sends the subsequent diluted water into a water dispersion shaft or a superficial water stream.

The stored sewage is evacuated by means of a lifting pump with electrically controlled constant flow rate.

The sewage water can undergo an oil separation treatment with or without coalescence filters or chemical/physical installation before being sent into the sewers or centralized depuration plant.

USED MATERIALS

Tanks	:	highly resistant reinforced vibrated concrete
Shafts	:	class D400 cast iron
Internal carpentry	:	AISI 304 stainless steel

SPECIFICATION

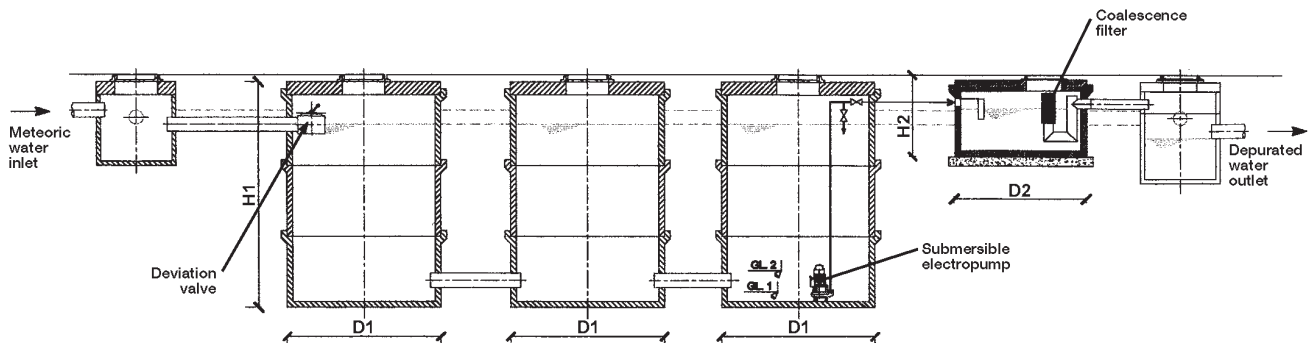
"Supply of a modular rings first rain water treatment plant IPP/AA series for the treatment of first rain water with storage basins, dimensioned according to the Directive 91/271/CEE and composed of prefabricated highly resistant reinforced concrete modular rings tanks, carriageable for heavy traffic.

The installation is also equipped with PVC pipe connections with the tanks bottom, D400 cast iron inspection manholes, AISI 304 non return valves for the first rain water separation, submersible stored water lifting electropump complete with automatic coupling foot to the delivery piping, level control sensor with conductive principle, electrical command panel and electronic logic protection (PLC) programmable from the inside.

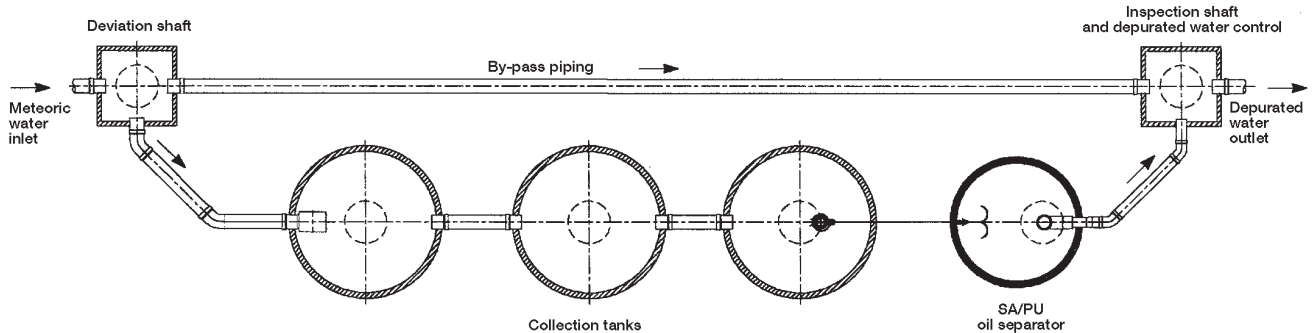
The supply also comprehends a sand separation and oil separation section type EURO MEC SA/PU series with concrete tanks dimensioned according to the DIN 1999 Norms equipped with coalescence filter and floating obstructor with carriageable cover for heavy traffic and D400 cast iron inspection manholes."

STANDARD PRODUCTION

SECTION



PLAN



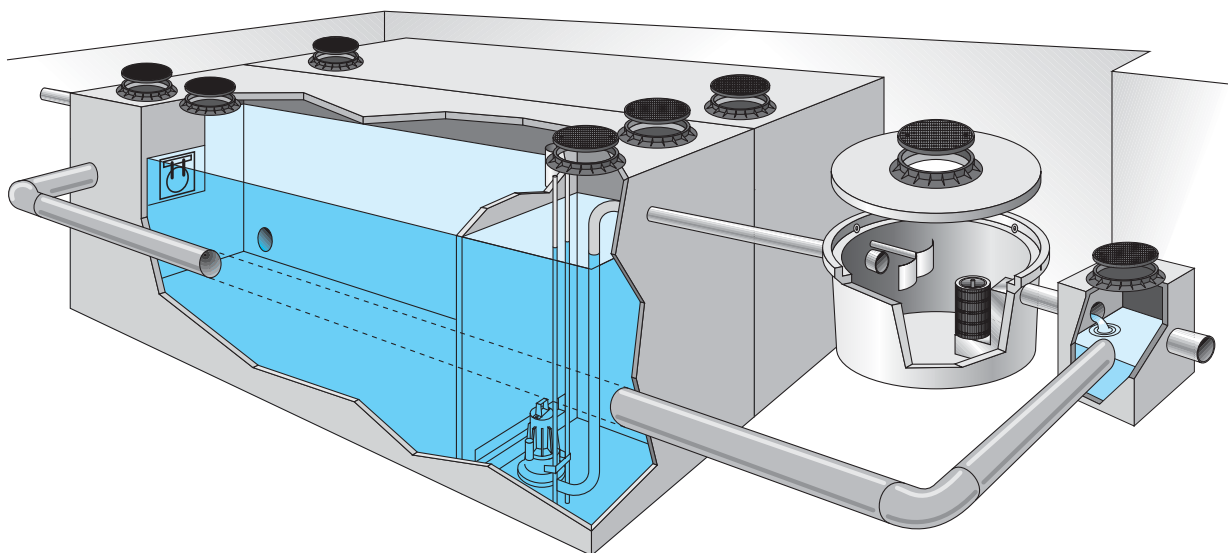
DESCRIPTION	MEASURE UNIT	MODEL							
		IPP/AA 4000	IPP/AA 5000	IPP/AA 6000	IPP/AA 7000	IPP/AA 8000	IPP/AA 9000	IPP/AA 10000	
Parking surface	m ²	4000	5000	6000	7000	8000	9000	10000	
First rain water volume	mc	20	25	30	35	40	45	50	
Instant flow rate	l/s	22,20	27,77	33,33	38,88	44,44	49,99	55,55	
N° of tanks	n.	3	3	3	3	3	3	3	
- diameter	D1	cm	200	200	200	300	300	300	300
- height	H1	cm	279	329	379	260	260	335	335
Required separator	-	SA/PU NG8	SA/PU NG8	SA/PU NG8	SA/PU NG8	SA/PU NG8	SA/PU NG8	SA/PU NG8	
- diameter	D2	cm	200	200	200	200	200	200	200
- height	H2	cm	129	129	129	129	129	129	129
Nominal flow rate	l/s	8	8	8	8	8	8	8	
Installed power	kW	1,2	1,2	1,2	1,2	1,2	1,2	1,2	
Total weight	q. ls	159	185	211	447	447	507	507	
Heaviest part weight	q. ls	30	30	30	26	26	26	26	

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MONOBLOC PARALLELEPIPED FIRST RAIN WATER TREATMENT PLANTS FOR SURFACES FROM 4.000 TO 30.000 SQM

Installations for large surfaces with first rain water treatment by means of a storage tanks system

IPP/AM series



WHAT MONOBLOC PARALLELEPIPED FIRST RAIN WATER TREATMENT PLANTS FOR SURFACES FROM 4000 TO 30.000 SQM IPP/AM SERIES ARE

First rain water treatment plants type EURO MEC IPP/AM series are designed in compliance with the Norms prescriptions in force. Their correct use allows the reduction of the ground water pollution and impoverishment, because they convey the meteoric water into the sewers or on site after separating the first rain water, which is collected into suitable storage basins. The stored water is subsequently pumped out of the basin with a constant and limited flow rate during 48 hours, in accordance with the current laws, towards the sewers or the final treatment plant.

Optional oil separators can be located forward the first rain water treatment plant type EURO MEC IPP/AM series. Such separators are dimensioned according to the equalized flow rate and DIN 1999 Norms as well as equipped with a coalescence filter.

First rain water treatment plants type EURO MEC IPP/AM series are composed of highly resistant reinforced concrete monobloc paralleliped tanks.

The cover is carriageable and complete with D400 cast iron inspection manholes.

HOW MONOBLOC PARALLELEPIPED FIRST RAIN WATER TREATMENT PLANTS FOR SURFACES FROM 4000 TO 30.000 SQM IPP/AM SERIES WORK

The first rain water collected into the EURO MEC plants IPP/AM series are drained into the controlled flow rate sewers network.

The first rain water volume evacuation must be carried out according to the current laws, during a minimal time of 48 hours between a meteoric event and another.

An electronic device detects when a precipitation begins and when the tank is subsequently filled up, memorizing this datum and activating the controlled flow rate lifting pump after a given programmable time.

When the basin reaches the maximum level equal to the polluted first rain water discharged volume a particular device stops pouring

water into the tank and sends the subsequent diluted water into a water dispersion shaft or a superficial water stream.

The stored sewage is evacuated by means of a lifting pump with electrically controlled constant flow rate.

The sewage water can undergo an oil separation treatment with or without coalescence filters or chemical/physical installation before being sent into the sewers or centralized depuration plant.

USED MATERIALS

Tanks	:	highly resistant reinforced vibrated concrete
Shafts	:	D400 cast iron class
Internal carpentry	:	AISI 304 stainless steel

SPECIFICATION

"Supply of a monobloc paralleliped first rain water treatment plant IPP/AM series for the treatment of first rain water with storage basins, dimensioned according to the Norms prescriptions in force.

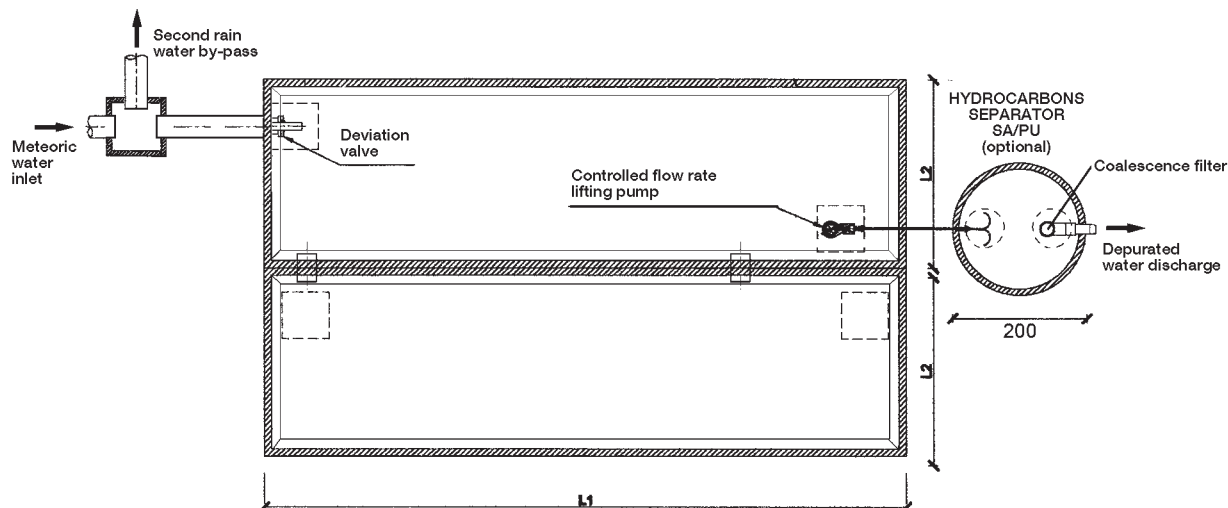
and composed of prefabricated highly resistant reinforced concrete monobloc tanks, carriageable for heavy traffic.

The installation is also equipped with PVC pipe connections with the tanks bottom, D400 cast iron inspection manholes, AISI 304 non return valves for the first rain water separation, submersible stored water lifting electropump complete with automatic coupling foot to the delivery piping, level control sensor with conductive principle, electrical command panel and electronic logic protection (PLC) programmable from the inside.

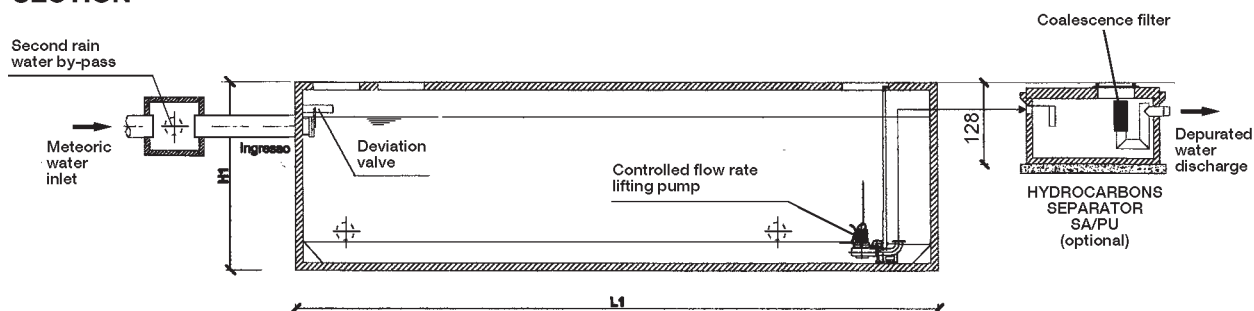
The supply also comprehends a sand separation and oil separation section type EURO MEC SA/PU series with concrete tanks dimensioned according to the DIN 1999 Norms equipped with coalescence filter and floating non return valve with carriageable cover for heavy traffic and D400 cast iron inspection manholes."

STANDARD PRODUCTION

PLAN



SECTION



MODEL	PARKING SURFACE sm q	FIRST RAIN WATER VOL. mc	ISTANT FLOW RATE l/sec	TANKS NUMBER n.	WIDTH m	HEIGHT m	LENGHT m	SEPARATOR* SA/PU TYPE	INSTALLED POWER kW	WEIGHT q.l.s
IPP/AM 4000	4000	20	22,22	1	2,5	2,7	5	NG8	1,2	226
IPP/AM 5000	5000	25	27,78	1	2,5	2,7	6	NG8	1,2	266
IPP/AM 6000	6000	30	33,33	1	2,5	2,7	7	NG8	1,2	311
IPP/AM 7000	7000	35	38,89	1	2,5	2,7	8	NG8	1,2	331
IPP/AM 8000	8000	40	44,44	2	2,5	2,7	4,5	NG8	1,2	346
IPP/AM 9000	9000	45	50,00	2	2,5	2,7	5	NG8	1,2	406
IPP/AM 10000	10000	50	55,56	2	2,5	2,7	5,5	NG8	1,2	486
IPP/AM 12000	12000	60	66,67	2	2,5	2,7	6,5	NG8	1,2	526
IPP/AM 14000	14000	70	77,78	2	2,5	2,7	7,5	NG8	1,2	586
IPP/AM 16000	16000	80	88,89	3	2,5	2,7	6,0	NG8	1,2	626
IPP/AM 18000	18000	90	100,00	3	2,5	2,7	6,5	NG8	1,2	766
IPP/AM 20000	20000	100	111,11	3	2,5	2,7	7	NG8	1,2	826
IPP/AM 22000	22000	110	122,22	3	2,5	2,7	8,0	NG8	1,2	901
IPP/AM 25000	25000	125	138,89	4	2,5	2,7	7	NG8	1,2	1086
IPP/AM 28000	28000	140	155,56	4	2,5	2,7	7,5	NG8	1,2	1126
IPP/AM 30000	30000	150	166,67	4	2,5	2,7	8,0	NG8	1,2	1186

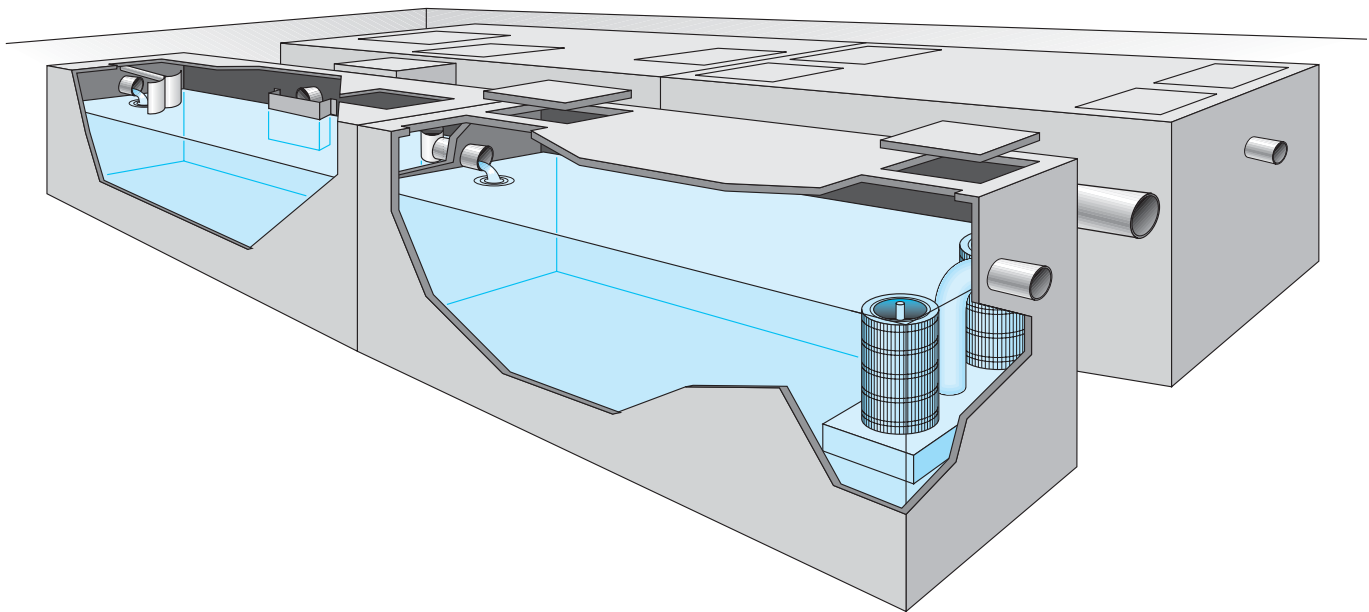
The above written data are given as information. The Society EURO MEC S.r.l. reserves the right to change them in every moment.

* Optional hydrocarbons separator SA/PU type with coalescence filter.

MONOBLOC PARALLELEPIPED FIRST RAIN WATER TREATMENT PLANTS FOR LARGE SURFACE AREAS

Installations for large surface areas with continuous first rain water treatment system

IPP/GS series



MONOBLOC PARALLELEPIPED FIRST RAIN WATER TREATMENT PLANTS FOR LARGE SURFACE AREAS, SERIES IPP/GS

First rain water treatment plants, EURO MEC series IPP/GS, are designed in compliance with all relevant Norms and standards. Their correct use allows the reduction of the ground water pollution and impoverishment as they convey storm water into sewers or on site after separating the first rain water.

The plants are used to purify rain water coming from service areas, parking lots and/or auto wrecking yards where the main pollutants come from oil and other substances leaking or coming off vehicles such as mineral oils, sand and dirt.

Euro Mec's first rain water treatment plants, series IPP/GS, are parallelepiped, monobloc tanks made of highly resistant reinforced concrete.

They have carriageable covers and are complete with D400 cast iron manholes.

HOW MONOBLOC PARALLELEPIPED FIRST RAIN WATER TREATMENT PLANTS FOR LARGE SURFACE AREAS WORK

Rain water coming off large surface areas as described above is usually polluted with sand, soil and mineral oils.

Areas likely to collect rain water need to be designed in a way that directs the total rain water to one point at which a separator will be located. First rain waters start the treatment in the sand separation or mud separation sections for the amount of time necessary to allow the separation of any settleable solids from the water. Following this pre-treatment the water passes on through an oil separation process where any light substances are floated and thus separated from the water.

The first rain waters are directed by a series of thresholds calibrated according to the surface area they are serving and separated from the following, less polluted rain water which goes directly to its next destination via a by-pass.

Any water re-released into the environment must meet specific quality standards according to local and international Norms, for this reason water from this rain water treatment plant passed through a coalescence filter before being discharged into the environment. This system causes oil micro-particles to adhere to a coalescent material (a form of absorbance) and, as the process continues the trapped micro-particles increase and enable the collection of larger particles (coalescence).

Waste from the separator is automatically contained by a floating shutter system which stops the exit of oils when they arrive at a predetermined level in the collection chamber.

MATERIALS USED

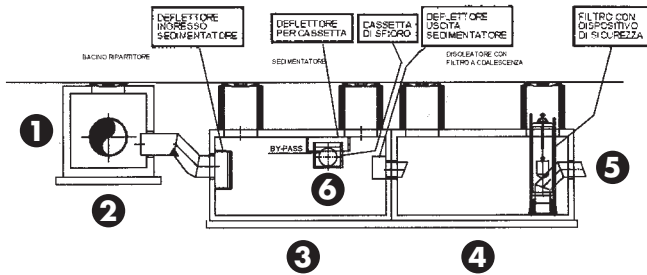
Tanks	:	highly resistant reinforced vibrated concrete
Shafts	:	lass D400 cast iron
Internal carpentry	:	AISI 304 stainless steel

SPECIFICATION

Supply of Euro Mec's monobloc parallelepiped first rain water treatment plant IPP/GS for the continuous treatment of first rain water, realized with prefabricated parallelepiped tanks in high resistance reinforced concrete, subdivided into two basins; one for sand separation and the other for oil separation, complete with stainless steel deflectors, coalescence filter, a waste outlet floating shutter device, heavy duty carriageable cover and D400 cast iron manholes.

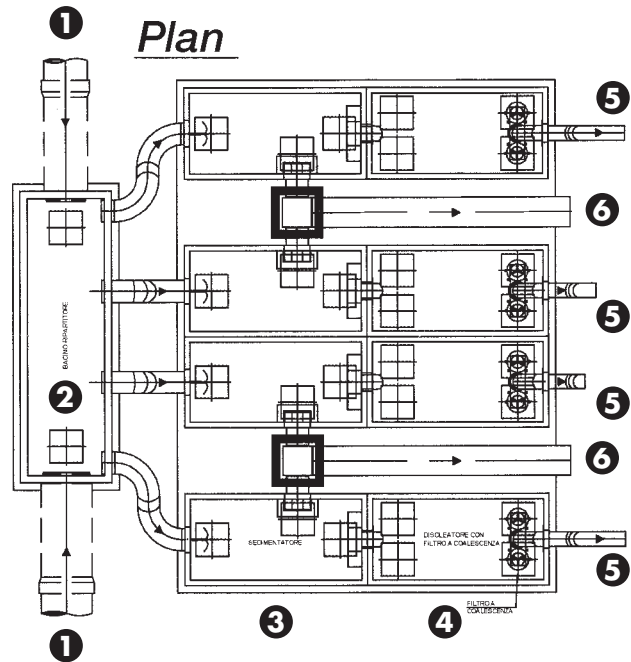
STANDARD PRODUCTION

Section



- 1 - Raw water inlet
- 2 - Flow divider
- 3 - Sand separation basin
- 4 - Oil separation basin
- 5 - Treated water outlet
- 6 - By-pass for second rain water

Plan



DESCRIPTION	MEASURE UNIT	MODEL									
		IPP/GS NG 100	IPP/GS NG 125	IPP/GS NG 150	IPP/GS NG 200	IPP/GS NG 250	IPP/GS NG 300	IPP/GS NG 350	IPP/GS NG 400	IPP/GS NG 500	
Nominal flow rate	l/s	100	125	150	200	250	300	350	400	500	
Total volume	mc	42	56,2	72,0	108,0	150,0	198,0	252,0	312,0	450,0	
Sand separator volume	mc	20	25	30	40	50	60	70	80	100	
Total water surface area	m ²	20	25	30	40	50	60	70	80	100	
Quantity sand separation tanks	n	1	1	1	2	2	2	3	3	4	
Dimensions of each tank											
- length	m	5,00	6,00	7,50	5,00	6,00	7,50	5,50	7,00	6,00	
- width	m	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	
- height	m	2,70	2,70	2,70	2,70	2,70	2,70	2,70	2,70	2,70	
Quantity oil separation tanks	n	1	1	1	2	2	2	3	3	4	
Dimensions of each tank											
- length	m	5,00	6,00	7,50	5,00	6,00	7,50	5,50	7,00	6,00	
- width	m	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	
- height	m	2,70	2,70	2,70	2,70	2,70	2,70	2,70	2,70	2,70	
Weight of each tank	q.l.s	193	225	256	193	225	256	193	250	225	

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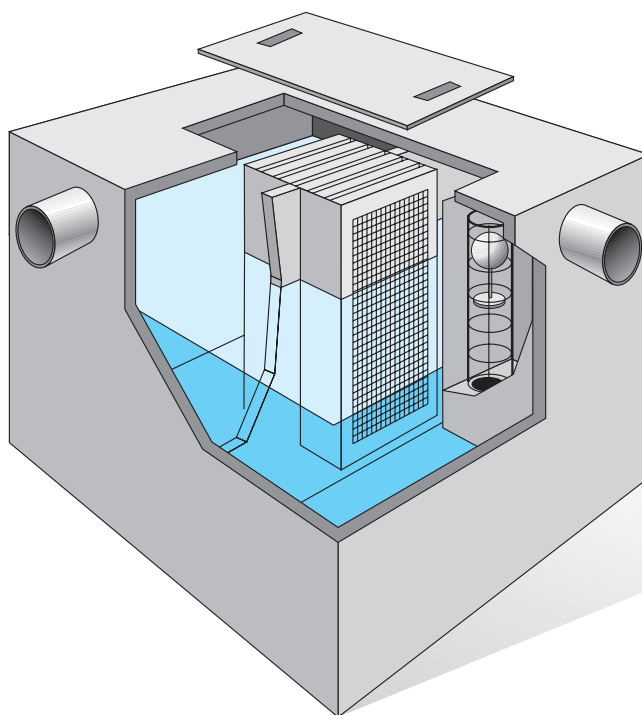
Technical file

www.euromec.net

MINERAL OILS SEPARATORS FOR SMALL SURFACES AND SMALL FLOW RATES

Monobloc oils and hydrocarbons separators max. nominal flow rate 1,5 l/s

DISOPAC series



WHAT MINERAL OILS SEPARATORS FOR SMALL SURFACES AND SMALL FLOW RATES DISOPAC SERIES ARE

Prefabricated separators type EUROMECC DISOPAC series are dimensioned in compliance with the DIN 1999 regulations and ensure the respect of the acceptance parameters stated in the Directive 91/271/CEE regarding the fluctuating substances and the sedimentable solids.

These separators are used to treat water coming from car stations, car parkings, car washes, car garages, indoor parking lots which are mainly polluted by mineral oils, sand and mud.

Prefabricated separators type EURO MEC DISOPAC series are built with highly resistant reinforced concrete monobloc tanks.

The installation is composed of a single tank divided into two inner sections: the first one is for sand separation and a first oil separation, the second is for a fine oil separation and is also complete with a lamellar pack made of synthetic material unaffected by hydrocarbons and a floating obstructor, hot galvanized steel sheet inspection shaft.

HOW MINERAL OILS SEPARATORS FOR SMALL SURFACES AND SMALL FLOW RATES DISOPAC SERIES WORK

The treatment of the water coming to the separator starts in the sand separation section, dimensioned to allow an optimal time for the heavy sludge sedimentation and a first oil separation.

The pre-treated water are sent to the next separation phase, in which the light substances come into surface because of a natural floatation.

A particular synthetic lamellar pack filter is inserted between the two chambers in order to separate the suspended oil particles with a "coalescence" effect.

Thanks to this particular installation it is possible to obtain a discharge water within the Directive 91/271/CEE acceptance limits.

This installation is also equipped with a particular floating obstructor automatically closing the discharge when the oil level in the collection chamber reaches its maximum therefore preventing spilling.

USED MATERIALS

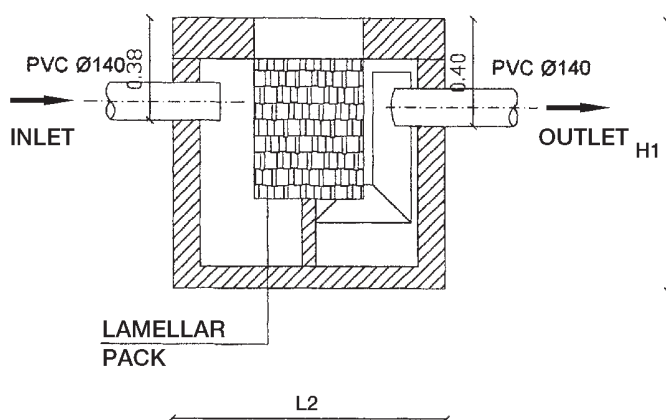
Tanks	:	highly resistant reinforced vibrated concrete
Shafts	:	hot galvanized steel
Internal carpentry	:	AISI 304 stainless steel
Lamellar pack	:	polypropylene

SPECIFICATION

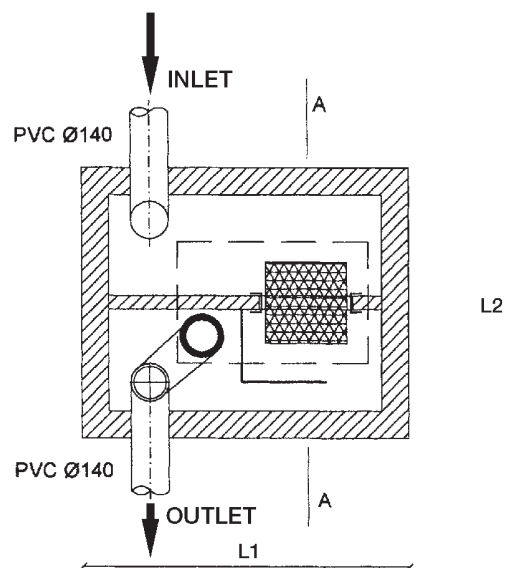
"Supply of a separator type EUROMECC DISOPAC series, dimensioned according to the DIN 1999 Norms, prefabricated monobloc type made of highly resistant concrete apt for the treatment of water coming from car stations, car parkings, indoor parking lots, complete with internal equipment consisting of stainless steel deflector, filtering section with lamellar pack made of synthetic material unaffected by hydrocarbons action, discharge device with floating obstructor and cover slab with hot galvanized sheet inspection shaft."

STANDARD PRODUCTION

SECTION



PLAN



Plant for car stations, parking lots (DISOPAC/P)

NOMINAL FLOW RATE l/s	MAX. TREATED SURFACE sm q	MAX. CAR NUMBER n.	SEPARATOR DIMENSIONS			SEPARATOR WEIGHT
			Length L1 cm	Width L2 cm	Height H1 cm	q.l.s
1,5	200	10	120	100	100	15

Plant for car wash stations and car stations with hydro cleaners (DISOPAC/L)

NOMINAL FLOW RATE l/s	CAR/D	SEPARATOR DIMENSIONS			SEPARATOR WEIGHT
		Length L1 cm	Width L2 cm	Height H1 cm	q.l.s
1,5	15	120	100	100	15

Plant for covered parkings (DISOPAC/C)

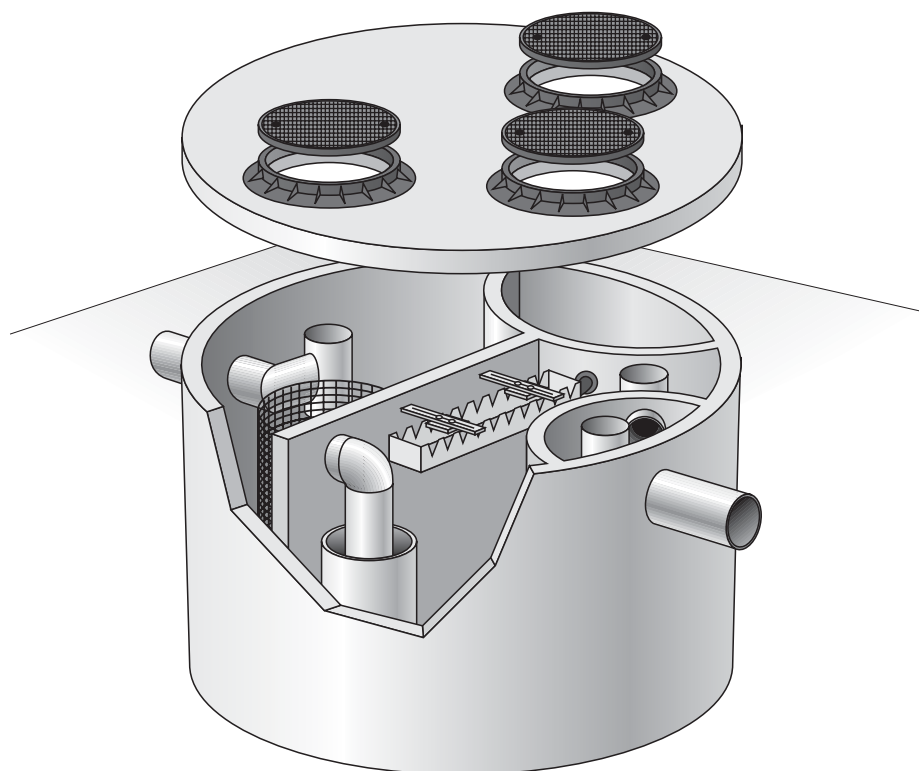
NOMINAL FLOW RATE l/s	MAX. TREATED SURFACE sm q	MAX. CAR NUMBER n.	SEPARATOR DIMENSIONS			SEPARATOR WEIGHT
			Length L1 cm	Width L2 cm	Height H1 cm	q.l.s
1,5	1700	60	120	100	100	15

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

MINERAL OILS SEPARATORS FOR SMALL SURFACES AND SMALL FLOW RATES

Monobloc oils and hydrocarbons separators max. nominal flow rate 3l/s (NG3)

DISOMEK series



WHAT MINERAL OILS SEPARATORS FOR SMALL SURFACES AND SMALL FLOW RATES DISOMEK SERIES ARE

Prefabricated separators type EURO MEC DISOMEK series are dimensioned according to the DIN 1999 regulations and ensure the respect of the acceptability parameters foreseen by the Directive 91/271/CEE regarding the fluctuating substances and the sedimentable solids.

DISOMEK are used to treat the water coming from car stations, car parkings, car washes, indoor parking lots which are therefore polluted mainly by mineral oils, sand and mud.

Prefabricated separators type EURO MEC DISOMEK series are composed of monobloc cylindrical tanks with vertical axis made of highly resistant reinforced concrete.

The installation is composed of a single tank divided into four different sections respectively for: sand separation section, oil separation section, oil collection chamber, deperated water collection chamber. The installation cover is carriageable and is complete with D400 class cast iron inspection shafts.

The separators DISOMEK series are equipped with a coalescence filter to separate also the suspended oil microparticles before their discharge on surface water.

HOW MINERAL OILS SEPARATORS FOR SMALL SURFACES AND SMALL FLOW RATES DISOMEK SERIES WORK

The treatment of water coming to the separator starts in the sand separation section and is dimensioned to obtain an optimal duration time for the heavy sludge sedimentation and a first oil separation.

The resulting pre-treated water is subsequently sent to the separation section, where the light substances reach the surface because of a natural flotation.

Occasionally a suitable valve sends the oils and hydrocarbons in the water to an overflow channel and then to a storage section equipped with an electrical alarm signalling the maximum level. For the discharge water having to comply with the Directive 91/271/CEE there is a coalescence filter. Thanks to this filter the oil microparticles adhere to a particular coalescent material (coalescence effect) and after uniting each other they increase their dimension therefore fluctuating on the surface.

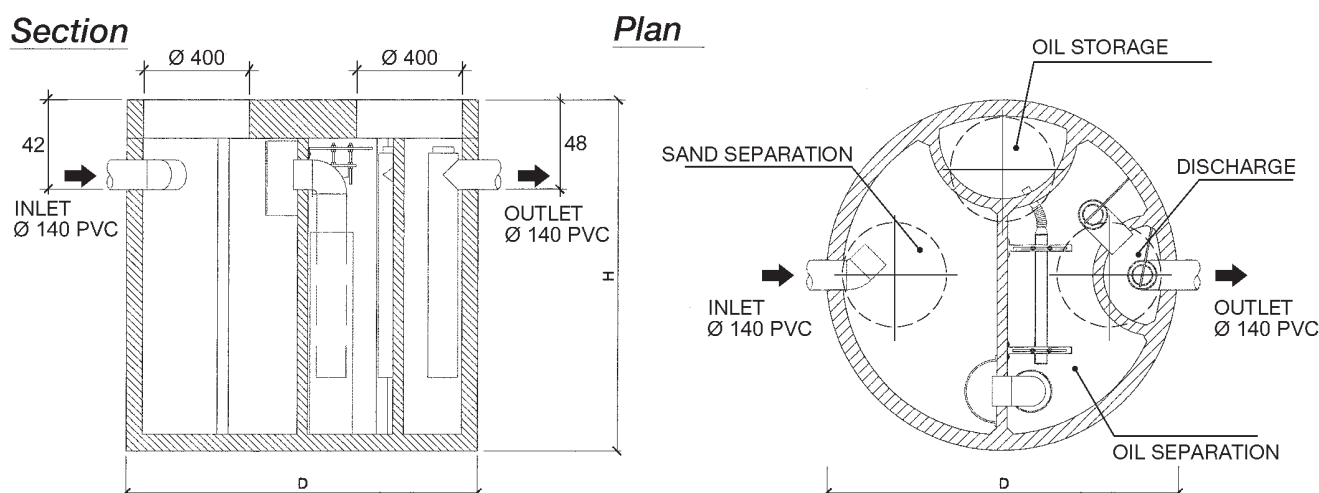
USED MATERIALS

Tanks	:	highly resistant reinforced vibrated concrete
Shafts	:	Class D 400 cast iron hot galvanized steel
Internal carpentry	:	AISI 304 stainless steel

SPECIFICATION

"Supply of a separator type EUROMEK DISOMEK series, nominal dimension NG4, dimensioned according to the DIN 1999 Norms, prefabricated monobloc type made of highly resistant concrete suitable for the treatment of water coming from car stations, car parkings, indoor parking lots, divided into 4 inner sections respectively for sand separation, oil separation, discharge and a fourth for oil storage, complete with internal sects, notched AISI 304 channel, carriageable cover and D400 cast iron inspection shafts, predisposition for alarm signalling the maximum level, oil chamber with floating probe made of a material unaffected by hydrocarbons."

STANDARD PRODUCTION



Plant for car stations, parking lots (DISOMEC/P)

NOMINAL FLOW RATE l/s	MAX. TREATED SURFACE sm q	MAX. CAR NUMBER n	SEPARATOR DIMENSIONS		SHAFT DIMENSIONS (*) COALESCENCE FILTER		SEPARATOR WEIGHT q.l.s
			diam. cm	height cm	side cm	H cm	
3,00	300	12	165	168	80 x 80	96	28

Plant for car wash stations and car stations with hydro cleaners (DISOMEC/L)

NOMINAL FLOW RATE l/s	CAR/D	DIMENSIONS		SHAFT DIMENSIONS COALESCENCE FILTER		SHAFT DIMENSIONS OIL ABSORBING FIBERS		SEPARATOR WEIGHT q.l.s
		diam. cm	height cm	side cm	height cm	side cm	H cm	
3,00	30	165	168	80 x 80	96	50 x 50	60	28

Installation for indoor parking lots (DISOMEC/C)

NOMINAL FLOW RATE l/s	MAX. TREATED SURFACE sm q	MAX. CAR NUMBER n	SEPARATOR DIMENSIONS		SHAFT DIMENSIONS (*) COALESCENCE FILTER		SEPARATOR WEIGHT q.l.s
			diam. cm	height cm	side cm	H cm	
3,00	2000	80	165	168	80 x 80	96	28

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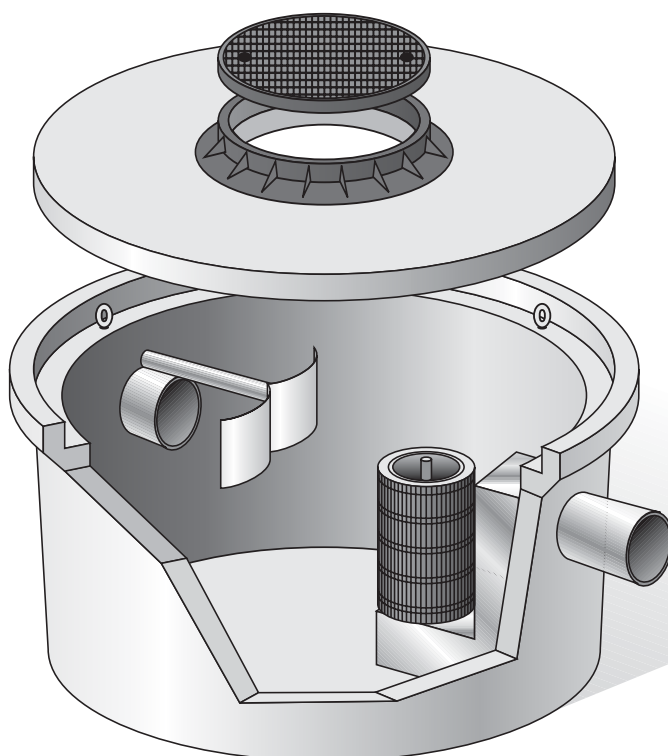
(*) for discharge in a surface water stream

The mineral oil separator DISOMEC series is equipped with maximum oil chamber level sensing probe. There's also the optional supply of an electronic optic and sound alarm station predisposed for remote control.

MINERAL OILS SEPARATORS FOR SURFACES FROM 500 TO 1000 SMQ

Plant for small surfaces with continuous meteoric water treatment

SA/PU series



WHAT MINERAL OILS SEPARATORS FOR WATERPROOFED SURFACES SA/PU SERIES ARE

Prefabricated mineral oils separators type EUROMEC SA/PU series are dimensioned according to the DIN 1999 Norms and ensure the respect of the acceptance parameters stated on the Directive 91/271/CEE for discharge into public sewers or surface water of fluctuating substances and sedimentable solids.

These installations are used for the treatment of water coming from waterproofed surfaces, which are mainly polluted by mineral oils, sand and mud.

Prefabricated mineral oils separators type EURO MEC SA/PU series are composed of monobloc highly resistant reinforced concrete cylindrical tanks with vertical axis.

The installation is composed of a single tank with a deflector for the incoming sewage and non return valve with coalescence filter for the outgoing sewage. The cover is carriageable and complete with inspection shafts made of D400 cast iron.

HOW MINERAL OILS SEPARATORS FOR WATERPROOFED SURFACES SA/PU SERIES WORK

Water coming to the separator, when calm, deposits the heaviest substances on the tank bottom (sand separation treatment) and, at the same time undergoes a fluctuation process of the light substances, which come to surface. The discharge is automatically closed by a floating obstructor in order to avoid oil leakages when it reaches a certain level in the collection chamber.

The installation is also equipped with a coalescence filter (Directive 91/271/CEE to a particular coalescent material (absorption effect) in which they join up increasing their dimension (coalescence effect) and therefore favouring their fluctuation on surface.

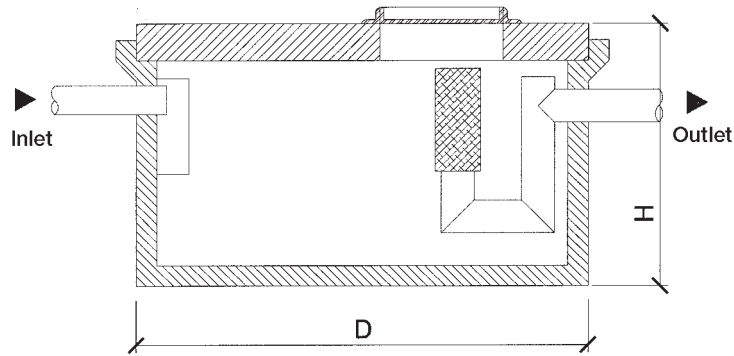
USED MATERIALS

Tanks	:	highly resistant reinforced vibrated concrete
Shafts	:	D400 class cast iron hot galvanized steel
Internal carpentry	:	AISI 304 stainless steel

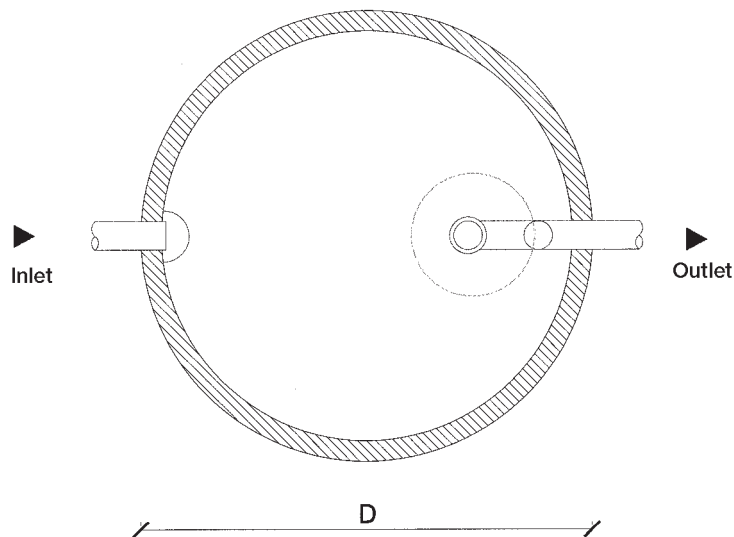
SPECIFICATION

"Supply of a prefabricated separator type EURO MEC SA/PU series dimensioned according to the DIN 1999 Norms, built for the treatment of water coming from waterproofed surfaces, made of highly resistant reinforced concrete complete with inside a deflector made of AISI for the incoming sewage and a non return valve with coalescence filter for the outlet sewage, carriageable cover and inspection manholes made of D400 cast iron."

STANDARD PRODUCTION



Plan



DESCRIPTION	MEASURE UNIT	MODEL			
		SA/PU NG 4	SA/PU NG 8	SA/PU NG 10	SA/PU NG 15
Nominal flow rate	l/s	4	8,00	10,00	15,00
Max. treated surface	Sq m	300	500	700	1000
Max parked cars	N.	12	20	28	40
Oil separator volume	l	1800	2000	3500	5000
Separator dimensions					
- diameter D	m	1,40	2,00	2,00	2,00
- height H	m	1,75	1,28	1,78	2,28
Inlet/outlet piping diameter	mm	160	140	200	200
Total weight	q.ls	22	46	54	66
Heaviest part weight	q.ls	18	30	30	30

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Planning and realization of treatments plants for the production of drinking water and water for industrial and technological uses as well as the desalination of brackish and sea water.

Installed on site or preassembled and mounted on self-supporting skids for transportation.

Medium and large plants with biological, chemical-physical and reverse osmosis technologies.

WATER SOFTENING PLANTS

Water softening plants	Series AD/P	Page 106
Water softening plants	Series AD/M	Page 108

DEMINERALIZATION PLANTS

Demineralization plants	Series DPR	Page 110
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QUARTZITE FILTRATION

Quartzite filtration	Series QAA	Page 112
Quartzite filtration	Series QAV	Page 114

ACTIVE CARBON FILTRATION

Active carbon filtration	Series CAA	Page 116
Active carbon filtration	Series CAV	Page 118

REVERSE OSMOSIS PLANTS

Reverse osmosis plants	Series OI-P	Page 120
Reverse osmosis plants	Series OI-M	Page 122
Reverse osmosis plants	Series OI-G	Page 124
Reverse osmosis plants	Series OI-SW	Page 126



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PRIMARY WATER TREATMENT PLANTS, DRINKING WATER AND DESALINATION PLANTS

PRIMARY WATER TREATMENT PLANTS, DRINKING WATER AND DESALINATION PLANTS

APPLICATION FIELDS

The desalination or demineralization of brackish water, the purifying of sea water, medicine, cooling systems, irrigation, market gardening and floriculture are the traditional fields of application for reverse osmosis technology.

More specifically, reverse osmosis can be used for:

- DRINKING WATER FOR COMMUNITIES, HOTELS, MOTELS, CAMP SITES AND OTHER ACCOMMODATION FACILITIES.
- FEED WATER FOR BOILERS AND TREATMENT OF CONCENTRATES (TOGETHER WITH ION EXCHANGE PLANTS)
- COOLING AND PROCESS WATER (SUCH AS USED IN REFINERIES)
- HIGHLY PURIFIED WATER FOR SPECIAL APPLICATIONS IN THE PHARMACEUTICAL, CHEMICAL, PHOTOGRAPHIC AND ELECTRONICS FIELDS.
- DRINKING AND PROCESS WATER FOR INDUSTRIES.
- WATER FOR PLANT NURSERIES AND GREENHOUSES IN COASTAL AREAS
- DEMINERALISED WATER FOR MEDICINAL USE IN HOSPITALS AND LABORATORIES.
- TREATMENT OF INDUSTRIAL WASTE IN ORDER TO RECOVER PRECIOUS MATTER.
- RECYCLING OF PROCESS WATER.



Above:
Pretreatment line for sea water.
Left:
Remineralization and
pressurization network.
Below:
Group of reverse osmosis lines





Above left: Sand-carbon filter group
Above right: Detail of pressurization group and osmosis membranes



EURO MEC's plants are supplied preassembled on stainless steel skids for ease of relocation and transport including in sea containers. They come with anti-encrusting dosing stations, conditioning products and a complete group of chemicals for membrane washing.

The systems are equipped with a pre-treatment line of sand or carbon filtration and are complete with an electronic control system commanded from an electrical control cabinet. The dimensioning of the plant depends on a series of variables which must be defined carefully in order to obtain the correct function characteristics.





PRIMARY WATER TREATMENT PLANTS, DRINKING WATER AND DESALINATION PLANTS

www.euromec.net

Drinking water filtration



Drinking water filtration





Dissolved air floatation system



Closed circuit water filtration



Drinking water purifier



Sea water wells

SOFTENING PLANTS

AD/P series



WHAT SOFTENING PLANTS AD/M SERIES ARE

Natural water contains calcium salts, magnesium salts, strontium salts and barium salts and the sum of the first two kinds of salt indicates its hardness.

Such hardness forms incrustations into the domestic and industrial plants, particularly into heating devices, steam boilers and heat exchangers, provoking obstructions and yield losses of these devices. Water hardness is also undesired during various industrial processes such as washes, dyeing, etc.

HOW SOFTENING PLANTS AD/M SERIES WORK

Ionic exchange softeners in sodium cycle work effectively changing calcium and magnesium ions with sodium ions, therefore preventing hardness related to incrustations.

They are composed of a cylinder containing ionic exchange resins in which the water to be treated passes through. Such resins are periodically regenerated with the use of sodium chloride stored into a proper container.

The resin regeneration is automatically managed according to a preset time or volume by an electronic programmer and suitably dimensioned valves made of anti acid material.

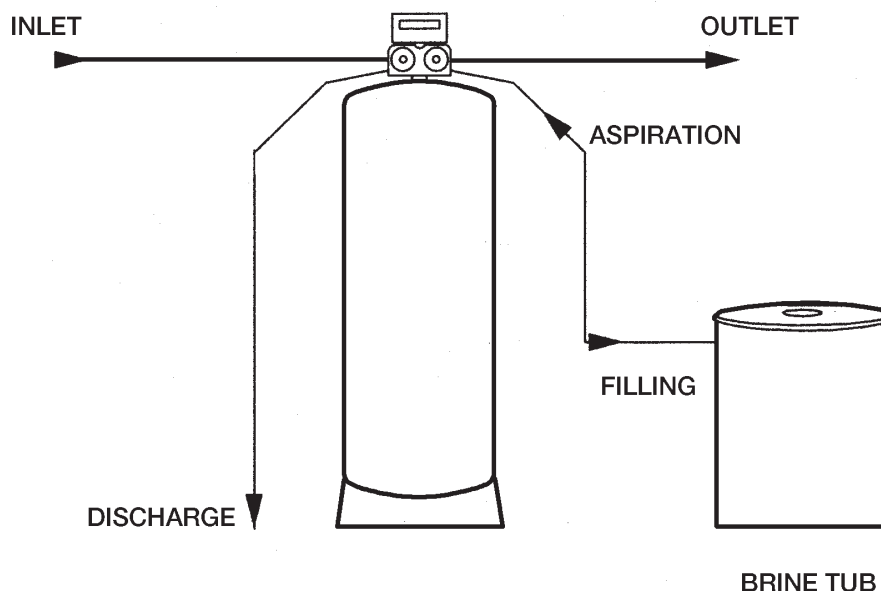
In case of softeners for domestic use the resins will be also disinfected during every regeneration process and the softeners will be equipped with a by-pass, non return valve and mixer in compliance with the D.P.R. n. 443/91.

Performances

PLANT MODEL	MEASURE UNIT	AD 15	AD 20	AD 30	AD 40	AD 50	AD 70	AD 100	AD 150	AD 200
Nominal flow rate	Cubic m/h	0,3	0,4	0,6	0,8	1,0	1,4	2,0	3,0	4,0
Max. flow rate	Cubic m/h	0,6	0,8	1,2	1,6	2,0	2,8	4,0	6,0	8,0
Cyclic capacity	Cubic m/°F	90	120	180	240	300	420	600	900	1200
Salt consumption/cycle	kg	2,4	3,2	4,8	6,4	8,0	11,2	16,0	24,0	32,0
INLET/OUTLET connections	DN	1"	1"	1"	1"	1"	1"	1"	1"1/4	1"1/4
Brine tub volume	lt	100	100	100	100	100	200	300	300	500



STANDARD PRODUCTION



Technical specifications

Feeding water pressure	Min 2 - max 6 bar
Feeding water temperature	Min 2 - max 40 °C
Cylinder	PRFV
Filling material	Cationic resins with sodium cycle
Internal diffusion	PP diffusers
Piping	PVC PN 10
Valve	PVC multi-way
Outlet non return valve	Membrane PVC (duplex model)
Valves command	Electropneumatic command electronic programmer
Brine preparation	PE tub and automatic valve
Feeding	220 V / 50 Hz

Optional features

Cartridge filter	10", 50 micron
Cartridge filter	20", 50 micron
Self-cleaning filter	Manual or automatic
Outlet non return valve	PVC Membrane
Flowmeters	With various areas
Support skid	Carbon steel with polyurethane cycle varnishing

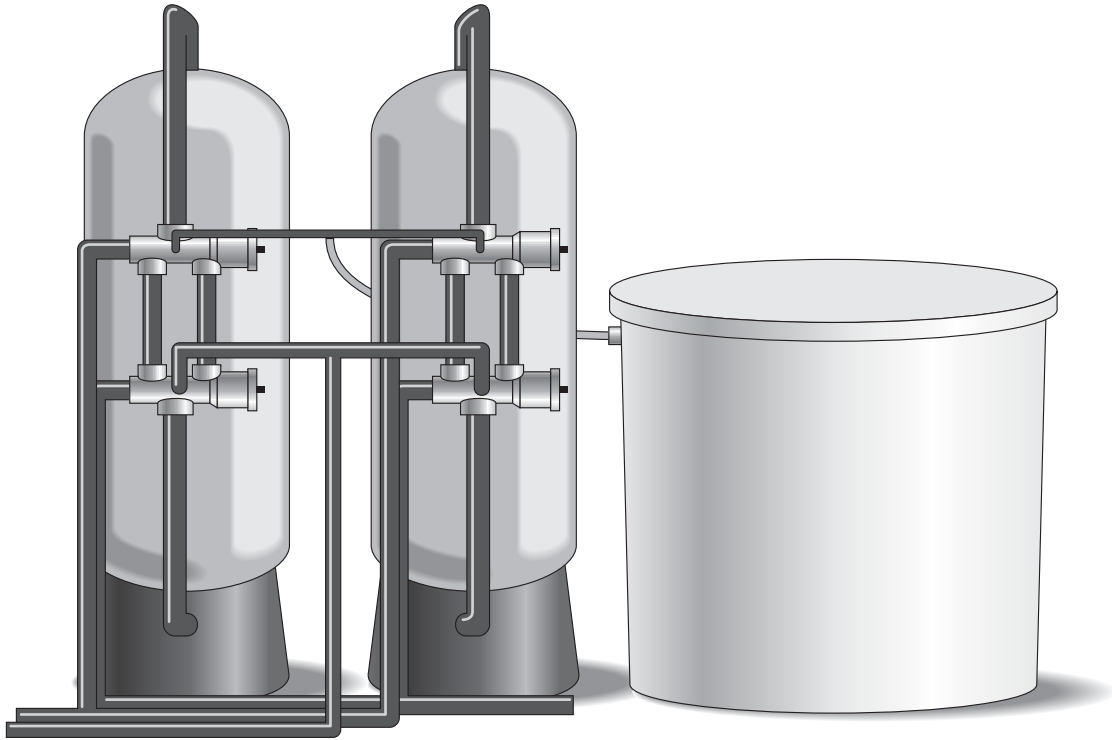
Dimensions

PLANT MODEL		AD 15	AD 20	AD 30	AD 40	AD 50	AD 70	AD 100	AD 150	AD 200
Cylinder diameter	mm	200	220	260	260	260	340	360	470	510
Cylinder height	mm	1100	1100	1100	1450	1750	1600	1850	1900	1800
Tub diameter	mm	620	620	620	620	670	730	730	730	940
Tub height	mm	700	700	700	700	1000	1200	1200	1200	1150

The reported values are for information only. EURO MEC keeps the right to change them any moment.
By request particular solutions can be dimensioned.

SOFTENING PLANTS

AD/M series



WHAT SOFTENING PLANTS AD/M SERIES ARE

Natural water contains calcium salts, magnesium salts, strontium salts and barium salts and the sum of the first two kinds of salt indicates its hardness.

Such hardness forms incrustations into the domestic and industrial plants, particularly into heating devices, steam boilers and heat exchangers, provoking obstructions and yield losses for these devices. Water hardness is also undesired during various industrial processes such as washes, dyeing, etc.

HOW SOFTENING PLANTS AD/M SERIES WORK

The ionic exchange in sodium cycle softeners work effectively changing calcium and magnesium ions with sodium ions therefore preventing hardness related incrustations.

They are composed of a cylinder containing ionic exchange resins in which the water to be treated passes through. Such resins are periodically regenerated with the use of sodium chloride stored into a proper container.

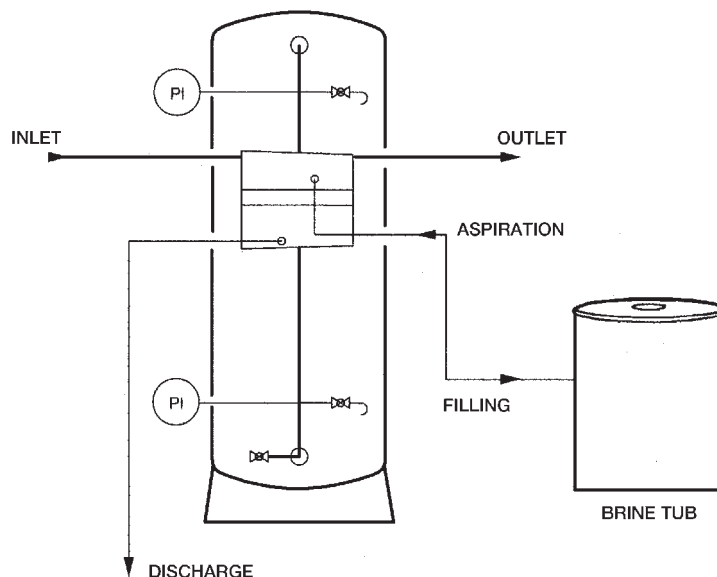
The resin regeneration is automatically managed according to a preset time or volume by an electronic programmer and suitably dimensioned valves made of anti acid material.

In case of softeners for domestic use the resins will be also disinfected during every regeneration process and the softeners will be equipped with a bypass, non return valve and mixer in compliance with the D.P.R. n. 443/91.

Performances

PLANT MODEL	MEASURE UNIT	AD 350	AD 500	AD 750	AD 1000
Nominal flow rate	Cubic m/h	7,0	10,0	15,0	20,0
Max. flow rate	Cubic m/h	14,0	20,0	30,0	40,0
Cyclic capacity	Cubic m/°F	2100	3000	4500	6000
Salt consumption/cycle	kg	56,0	80,0	120,0	160,0
INLET/OUTLET connections	DN	2"	2"	2"1/2	2"1/2
Brine tub volume	lt	600	1000	1300	2100

STANDARD PRODUCTION



Technical specifications

Feeding water pressure	Min 2 - max 6 bar
Feeding water temperature	Min 2 - max 40 °C
Cylinder	PRFV
Filling material	Cationic resins with sodium cycle
Internal diffusion	PP diffusers
Piping	PVC PN 10
Valve	PVC multi-way
Outlet non return valve	Membrane PVC (duplex model)
Valves command	Electro pneumatic command electronic programmer
Brine preparation	PE tub and automatic valve
Feeding	220 V / 50 Hz

Optional features

Cartridge filter	40", 50 micron
Cartridge filter	40", 50 micron, high flow
Self-cleaning filter	Manual or automatic
Outlet non return valve	Membrane PVC
Flowmeters	With various areas
Flowmeters	Electronic, 4-20 mA
Support skid	Carbon steel with polyurethane cycle varnishing

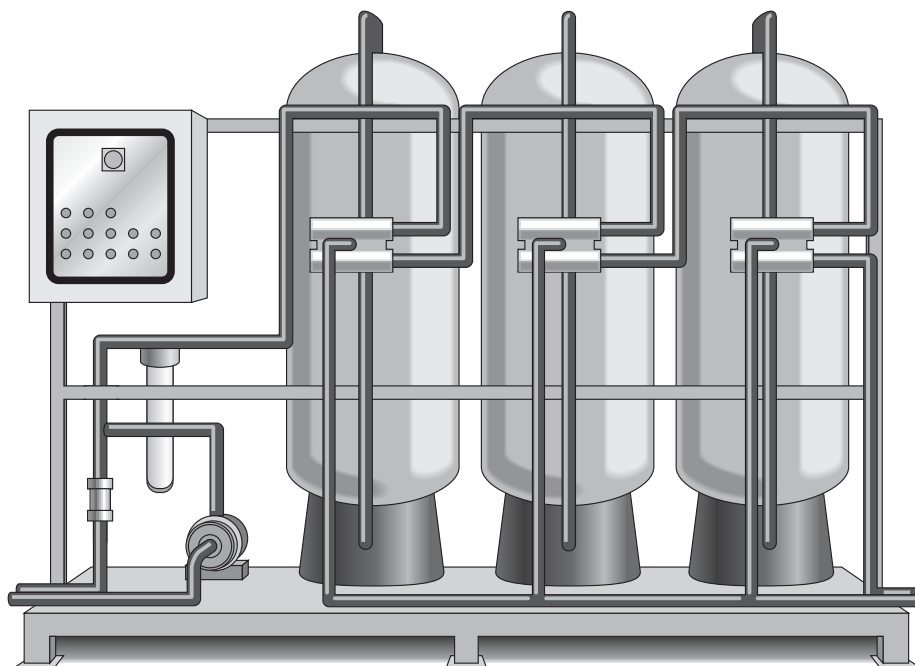
Dimensions

PLANT MODEL		AD 350	AD 500	AD 750	AD 1000
Cylinder diameter	mm	620	790	950	1060
Cylinder height	mm	2100	2200	2200	2300
Tub diameter	mm	970	1040	1100	1300
Tub height	mm	1200	1400	1400	1600

The reported values are for information only. EURO MEC keeps the right to change them any moment.
By request particular solutions can be dimensioned.

DEMINERALISATION PLANTS

DPR series



WHAT DEMINERALISATION PLANTS DPR SERIES ARE

The ionic exchange resin demineralisation plants allow to eliminate the salts dissolved into the water to be treated, specifically salts that can cause inconveniences during the various industrial processes or incrustations into the steam generators.

Their feeding can happen by means of network water for installations producing demineralised water or by means of washing process for water recycling installations.

HOW DEMINERALISATION PLANTS DPR SERIES WORK

These plants are mainly composed of a cylinder containing cationic resins, which has to be regenerated with hydrochloric acid; another cylinder contains anionic resins, which have to be regenerated

with caustic soda. The inlet water passes first through the exchanging cationic resins and then through the anionic resins and once they are saturated they have to be regenerated in order to allow a new demineralisation process.

The resins exercise and regeneration is automatically performed thanks to an electrical command panel and suitably dimensioned valves made of anti acid material.

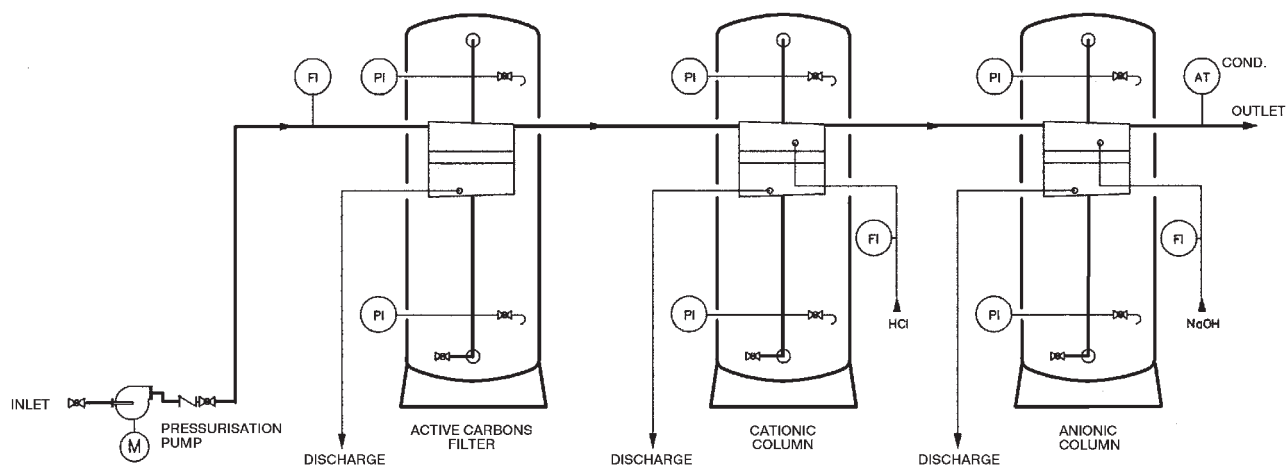
The demineralisation plants can be preceded by another cylinder containing active carbons in case of plants for the washes water recycle or followed by another cylinder containing cationic and anionic resins to obtain a highly pure water.

These installations can be used to feed thermal power stations or food/chemical/pharmaceutical/galvanic factories etc.

Performances

PLANT MODEL	MEASURE UNIT	DPR 100	DPR 150	DPR 200	DPR 300	DPR 500	DPR 750
Feeding salinity	mg/l	< 1000					
Approx. outlet salinity	%	1					
Standard capacity	mc/h	2	3	4	6	10	15
Cyclic capacity	kg CaCO ₃	10	15	20	30	50	75
Granular active carbon quantity	litres	100	150	200	300	500	750
Strong cationic resins quantity	litres	100	150	200	300	500	750
Strong anionic resins quantity	litres	100	150	200	300	500	750
Feeding pump power	kW	0,75	0,9	1,1	1,1	1,85	3
INLET/OUTLET connections	DN	25	25	32	32	50	50

STANDARD PRODUCTION



Technical specifications

Working pressure	Min 1,5 - max 6 bar
Cylinders	PRFV
Filling material	Granular active carbon, cationic resins and anionic resins
Internal diffusion	PP diffusers
Piping	PVC PN 10
Valves	PVC multi-way
Valves commands	Hydropneumatic
Feeding flow meters	With various areas
Reagents flow meters	With various areas
Conductivity meter	Digital display, cell made of AISI 316
Control system	Microprocessor
Electrical command cable	In compliance with the current laws
Controls and samplings	Manometers and inlet/outlet valves
Frame and support	Sanded carbon steel with polyurethane cycle varnishing
Feeding tension	380 V 7 50 Hz

Optional features

Cartridge filter	40", 50 micron
Cartridge filter	40", 50 micron, high flow rate
Self-cleaning filter	Manual or automatic
Quartzite filter	Automatic, equal to an active carbon filter
Support skid	AISI 304 with transparent varnishing
Reagent storage	PE tanks

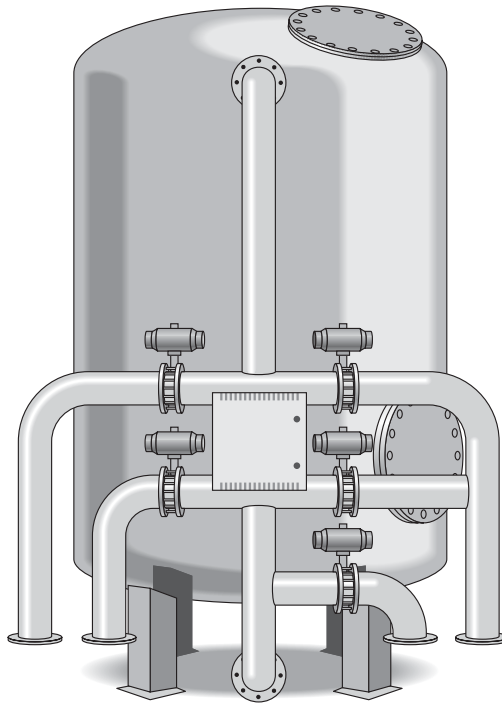
Dimensions and weights

PLANT MODEL	DPR 100	DPR 150	DPR 200	DPR 300	DPR 500	DPR 750
Cylinder dimensions	14 x 65"	18 x 65"	20 x 62"	24 x 71"	30 x 72"	36 x 72"
Dimensions (LxWxH) m	2,5 x 1 x 2	2,5 x 1 x 2	2,5 x 1 x 2	3 x 1,5 x 2,2	3 x 1,5 x 2,3	3 x 1,5 x 2,3
Approximate weight kg	500	650	800	1200	1800	2500

The reported values are for information only. EURO MEC keeps the right to change them any moment.
By request particular solutions can be dimensioned.

QUARTZITE FILTERING

QAA series



WHAT QUARTZITE FILTERING PLANTS QAA SERIES ARE

The water destined for human consumption or industrial uses may contain suspended solids, colloids or turbidity, which have to be eliminated.

The quartzite filters perform a mechanical action while the water passes through the bed removing also small particles. Because of their effectiveness quartzite filters are also used in the discharge water treatment for the removal of suspended solids and their related COD.

HOW QUARTZITE FILTERING PLANTS QAA SERIES WORK

The quartzite filters are made of varying gradation filtering material with the thickest grading located on the top of the bed.

A top anthracite layer may be inserted for a further increase of the filtering capacity.

During the filtering process the particles stopped on the bed keep on gathering and therefore increase the filter charge losses. When they reach a given quantity the bed will be washed with water flowing opposite the filtering direction.

The filters are composed of cylinders containing quartzite and a valve group allowing the normal exercise procedure and the backwashing procedures, possibly using air for filters with considerable diameters.

The quartzite working and backwashing are automatically controlled by a command panel and suitably dimensioned valves; the filters may be manual and in such cases these operations have to be manual.

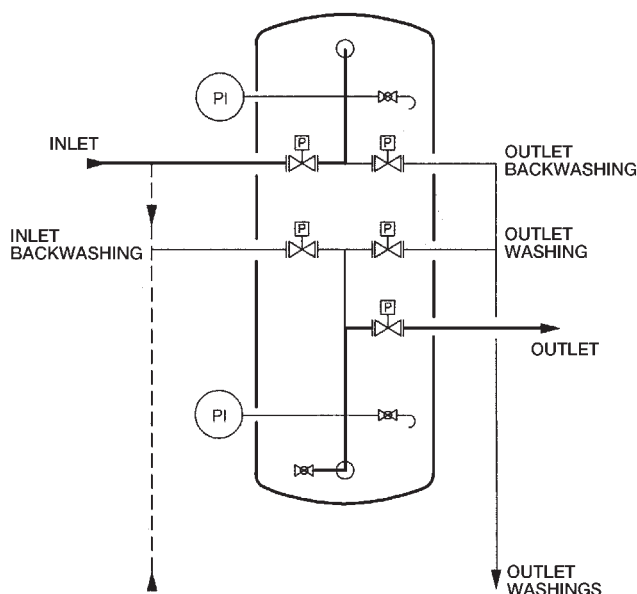
Performances

MODEL	AREA smq	CAPACITY mc/h				VALVES DIAMETER DN	BED HEIGHT mm	CYLINDER HEIGHT mm
		Vf = 10 m/h	Vf = 15 m/h	Vf = 20 m/h	Vf = 30 m/h			
QAA 600	0,28	3	4	6	8	40	1400	2000
QAA 700	0,38	4	6	8	12	40	1400	2000
QAA 800	0,50	5	8	10	15	50	1400	2000
QAA 900	0,64	6	10	13	19	50	1400	2000
QAA 1000	0,79	8	12	16	24	65	1400	2000
QAA 1100	0,95	9	14	19	28	65	1400	2000
QAA 1200	1,13	11	17	23	34	80	1400	2000
QAA 1300	1,33	13	20	27	40	80	1400	2000
QAA 1400	1,54	15	23	31	46	80	1400	2000
QAA 1500	1,77	18	26	35	53	100	1400	2000
QAA 1600	2,01	20	30	40	60	100	1400	2000
QAA 1800	2,54	25	38	51	76	100	1400	2000
QAA 2000	3,14	31	47	63	94	125	1800	2500
QAA 2200	3,80	38	57	76	114	125	1800	2500
QAA 2500	4,91	49	74	98	147	150	1800	2500

STANDARD PRODUCTION

Technical specifications

Working pressure	Min 1,5 – max 16 bar
Cylinder	Electrically welded carbon steel
Varnishing	Internal: eposydic cycle, external: polyurethane cycle
Manholes	Top side and bottom (with bottom plate)
Filling material	Varying gradation quartzite
Internal diffusion	PP diffusers, bottom plate mod. QAA 1500 – 2500
Piping	Galvanized carbon steel
Valves	Butterfly valves made of cast iron and EPDM with pneumatic actuator
Valves command	Electropneumatic panel on board
Controls and samplings	Manometers and inlet/outlet valves
Mixed air/water washing	Models QAA 1800 – 2500



Optional features

Additional filling	Anthracite
Backwashing compressor	With lobes, for mixed air/water washing
Flowmeters	With various areas
Flowmeters	Electronic, 4-20 mA
Electrical command panel	In compliance with the current laws
Command group	Made of PVC piping and valves
Support frame	Carbon steel with polyurethane cycle varnishing

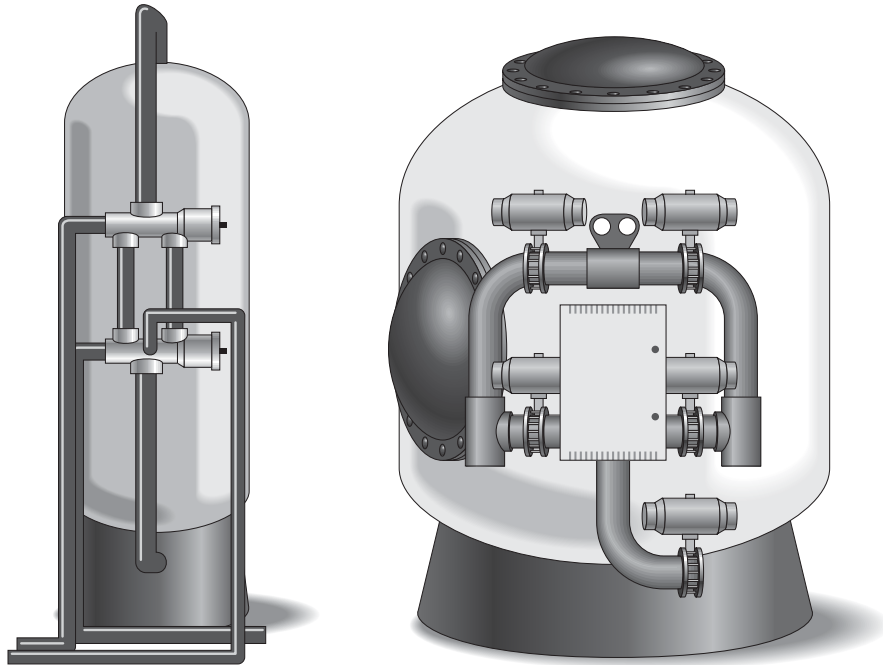
Dimensions and weights

MODEL	FILTER DIAMETER MM	FILTER HEIGHT MM	FILTER WEIGHT KG	TOT. FILTER WEIGHT KG
QAA 600	600	2800	390	980
QAA 700	700	2800	410	1250
QAA 800	800	2900	450	1600
QAA 900	900	2900	550	2000
QAA 1000	1000	3000	620	2300
QAA 1100	1100	3000	670	2700
QAA 1200	1200	3100	740	3200
QAA 1300	1300	3100	810	3700
QAA 1400	1400	3200	940	4400
QAA 1500	1500	3200	1400	5100
QAA 1600	1600	3300	1500	5700
QAA 1800	1800	3400	1950	7200
QAA 2000	2000	4000	2500	10800
QAA 2200	2200	4100	3200	13400
QAA 2500	2500	4200	3800	16800

The reported values are for information only. EURO MEC keeps the right to change them any moment. By request particular solutions can be dimensioned.

QUARTZITE FILTERING

QAV series



WHAT QUARTZITE FILTERING PLANTS QAV SERIES ARE

The water destined for human consumption or industrial uses may contain suspended solids, colloids or turbidity, which have to be eliminated.

The quartzite filters perform a mechanical action while the water passes through the bed removing also small particles. Because of their effectiveness, quartzite filters are also used in the discharge water treatment for the removal of suspended solids and their related COD.

HOW QUARTZITE FILTERING PLANTS QAV SERIES WORK

The quartzite filters are made of varying gradation filtering material with the thickest grading located on the top of the bed.

A top anthracite layer may be inserted for a further increase of the filtering capacity.

During the filtering process the particles stopped on the bed keep on gathering and therefore increase the filter charge losses. When they reach a given quantity the bed will be washed with water flowing opposite the filtering direction.

The filters are composed of cylinders containing quartzite and a valve group allowing the normal exercise procedure and the backwashing procedures, possibly using air for filters with considerable diameters.

The quartzite working and backwashing are automatically controlled by a command panel and suitably dimensioned valves; the filters may be manual and in such cases these operations have to be manual.

Performance

MODEL	AREA mq	CAPACITY mc/h				VALVE DIAMETER DN	BED HEIGHT mm
		Vf = 10 m/h	Vf = 15 m/h	Vf = 20 m/h	Vf = 30 m/h		
QAV 300	0,07	0,7	1,1	1,4	2,1	25	1000
QAV 400	0,13	1,3	1,9	2,5	3,8	25	1200
QAV 500	0,20	2,0	2,9	3,9	5,9	40	1200
QAV 600	0,28	2,8	4,2	5,7	8,5	4,0	1200
QAV 750	0,44	4,4	6,6	8,8	13	50	1200
QAV 900	0,64	6,4	9,5	13	19	50	1200
QAV 1050	0,87	8,7	13	17	26	65	1200
QAV 1200	1,13	11	17	23	34	65	1200
QAV 1400	1,54	15	23	31	46	80	1200
QAV 1600	2,01	20	30	40	60	100	1200
QAV 1800	2,54	25	38	51	76	100	1200
QAV 2000	3,14	31	47	63	94	125	1200
QAV 2350	4,34	43	65	87	130	125	1200

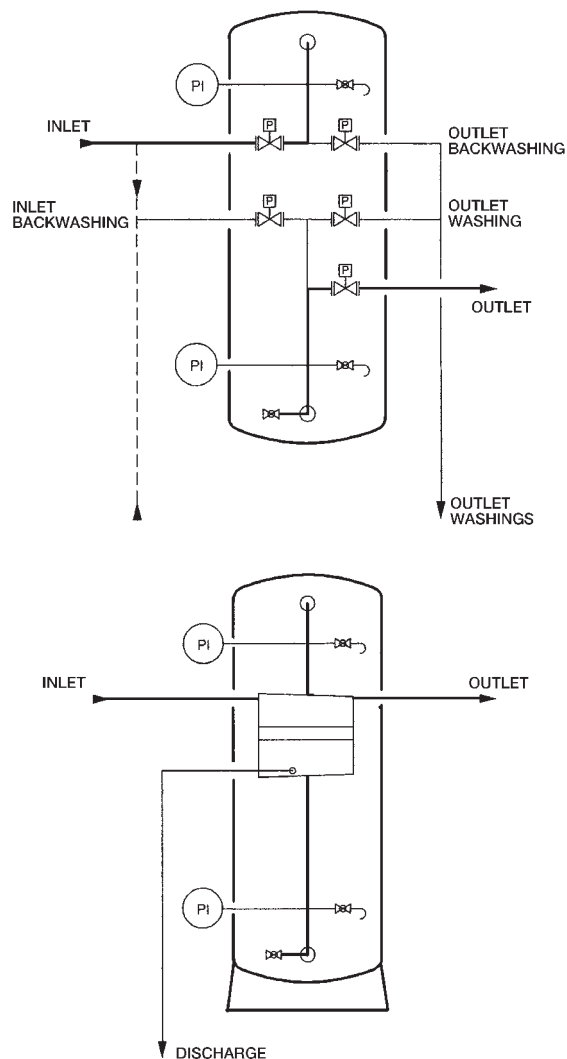
STANDARD PRODUCTION

Technical specifications

Working pressure	Min 1,5 – max 6 bar (4 bar QAV 1050 - 2350)
Cylinder	PRFV
Manhole	Top and side
Filling material	Varying gradation quartzite
Internal diffusion	PP diffusers
Piping	PVC
Valves < DN 50	PVC multi-way
Valves > DN 50	Butterfly valves made of cast iron and EPDM with pneumatic actuator
Valves command	Electro pneumatic panel on board
Electronic programmer	Models QAV 300 – 900
Controls and samplings	Manometers and inlet/outlet valves

Optional features

Additional filling	Anthracite
Mixed air/water washing	Models QAV 1800 – 2350
Backwashing compressor	With lobes, for mixed air/water washing
Flowmeters	With various areas
Flowmeters	Electronic, 4-20 mA
Electrical command panel	In compliance with the current laws
Support frame	Carbon steel with polyurethane cycle varnishing



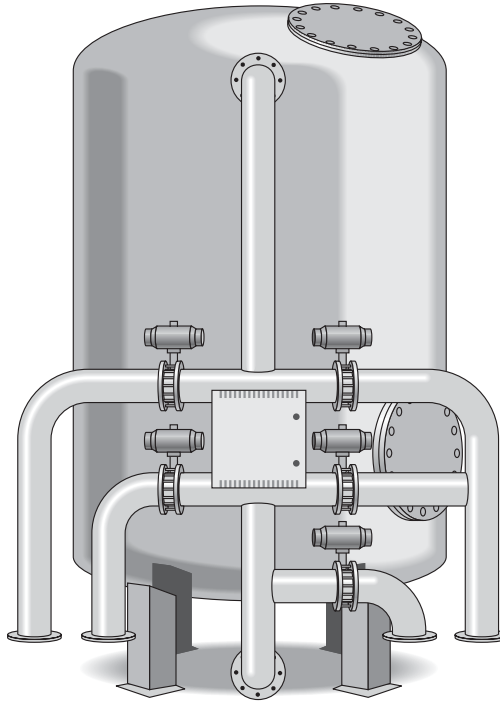
Dimensions and weights

MODEL	FILTER DIAMETER mm	FILTER HEIGHT mm	FILTER WEIGHT kg	TOT. FILTER WEIGHT kg
QAV 300	320	1550	15	120
QAV 400	410	1750	25	240
QAV 500	510	1800	40	390
QAV 600	620	2100	50	550
QAV 750	780	2200	100	870
QAV 900	940	2200	120	1250
QAV 1050	1050	2100	270	1800
QAV 1200	1200	2100	300	2300
QAV 1400	1400	2200	380	3100
QAV 1600	1600	2300	440	4000
QAV 1800	1800	2300	500	5000
QAV 2000	2000	2450	600	6100
QAV 2350	2350	2700	750	8400

The reported values are for information only. EURO MEC keeps the right to change them any moment. By request particular solutions can be dimensioned.

ACTIVE CARBONS FILTERING

CAA series



WHAT ARE ACTIVE CARBONS FILTERING PLANTS CAA SERIES

Water destined for human consumption, or for industrial uses, can contain unwelcome chemical elements, like excess chlorine, chloroamine, solvents, oils, pesticides, substances which provoke bad odours and tastes, etc.

Active carbon filters act like chemical-physical absorption towards treated elements and for its characteristics are used even in discharge water for the reduction of COD, colour, etc.

HOW ACTIVE CARBONS FILTERING PLANTS CAA SERIES WORK

Active carbons can be of vegetal and mineral nature and are granular shaped, contained inside a cylinder, where water to treat passes.

Their absorbing capacity depends on the treated substances and when exhausted they have to be substituted, but now and then a layer backwashing to avoid the formation of lumps, that can be invalidate the correct filter functioning.

Filters are essentially made of cylinders containing active carbons and of a valve group, which permit the normal working and the backwashing operations.

The working and the active carbon backwashing is managed automatically by a command panel and by valves suitably dimensioned; in some cases filters can be manual and these operations must be manually done.

Performances

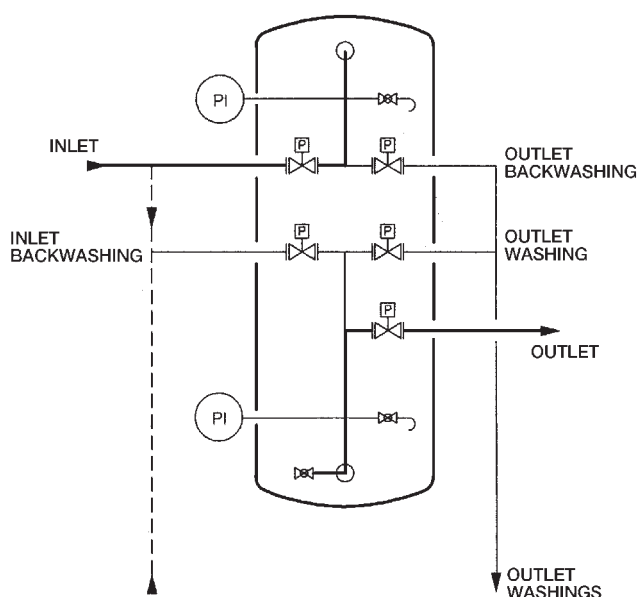
MODEL	CAG mc	CAPACITY mc/h				VALVE DIAMETER DN	CARBON BED H	CYLINDER HEIGHT mm
		Tc = 3'	Tc = 10'	Tc = 20'	Tc = 40'			
CAA 600	0,42	8	2,5	1,3	0,6	40	1500	2500
CAA 700	0,58	12	3,5	1,7	0,9	40	1500	2500
CAA 800	0,75	15	4,5	2,3	1,1	50	1500	2500
CAA 900	0,95	19	5,7	2,9	1,4	50	1500	2500
CAA 1000	1,18	24	7,1	3,5	1,8	65	1500	2500
CAA 1100	1,42	28	8,5	4,3	2,1	65	1500	2500
CAA 1200	1,70	34	10	5,1	2,5	80	1500	2500
CAA 1300	1,99	40	12	6,0	3,0	80	1500	2500
CAA 1400	2,31	46	14	6,9	3,5	80	1500	2500
CAA 1500	2,65	53	16	7,9	4,0	100	1500	2500
CAA 1600	4,02	80	24	12	6,0	100	2000	3000
CAA 1800	5,09	102	31	15	7,6	100	2000	3000
CAA 2000	6,28	126	38	19	9,4	125	2000	3000
CAA 2200	7,60	152	46	23	11	125	2000	3000
CAA 2500	9,81	196	59	29	15	150	2000	3000



STANDARD PRODUCTION

Technical specifications

Working pressure	Min. 1,5 – max 6 bar
Cylinder	Electrowelded carbon steel
Paint	Epoxide internal cycle, polyurethane external cycle
Manholes	Superior, side and inferior (with inferior slab)
Filling material	Granular active carbon and quartzite substratum
Internal diffusion	Blowers made of PP, inferior slab model CAA 1500 - 2500
Piping	Galvanised carbon steel
Valves with pneumatic actuator	Butterfly valve made of cast iron/EPDM,
Valve command	Electropneumatic panel on board
Controls and sampling	Manometers and inlet and outlet valves
Carbon extraction	Side manual valve



Optional

Flowmeters	Changeable air
Flowmeters	Electronic, 4-20mA
Command electric panel	Executed according to the norms in force
Command group of PVC	Executed with piping and valves made of PVC
Support frame	Carbon steel polyurethane cycle painted

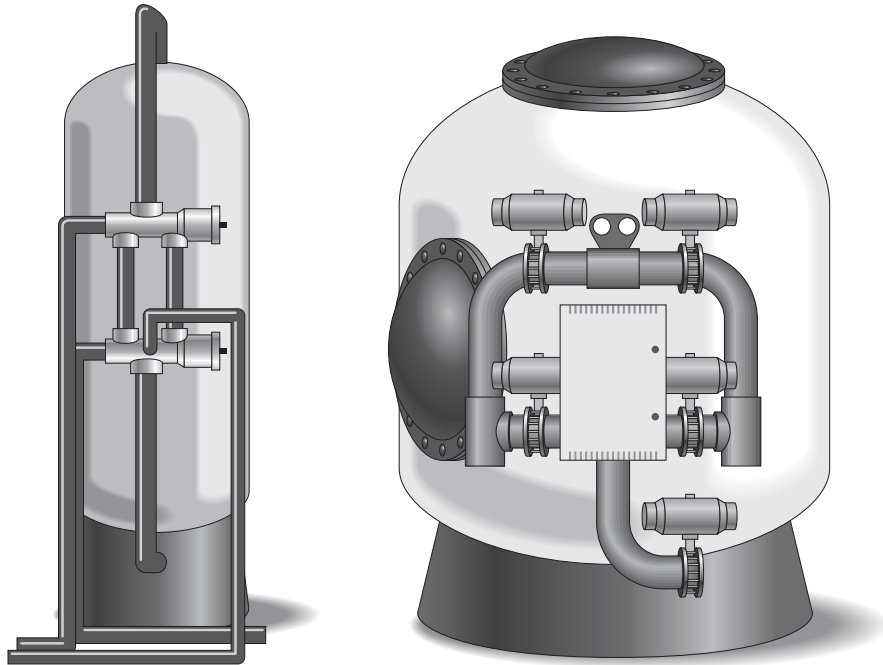
Dimensions and weights

MODEL	FILTER DIAMETER mm	FILTER HEIGHT mm	FILTER WEIGHT kg	TOTAL WEIGHT kg
CAA 600	600	3300	410	700
CAA 700	700	3300	440	800
CAA 800	800	3400	480	1000
CAA 900	900	3400	600	1300
CAA 1000	1000	3500	670	1500
CAA 1100	1100	3500	720	1700
CAA 1200	1200	3600	800	2100
CAA 1300	1300	3600	870	2400
CAA 1400	1400	3700	1050	2800
CAA 1500	1500	3700	1500	3200
CAA 1600	1600	4300	1650	4100
CAA 1800	1800	4400	2100	5100
CAA 2000	2000	4500	2500	6200
CAA 2200	2200	4600	3400	7900
CAA 2500	2500	4700	4000	9800

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ACTIVE CARBONS FILTERING

CAV series



WHAT ARE ACTIVE CARBONS FILTERING PLANTS CAV SERIES

Water destined to human consumption, or for industrial uses, can contain unwelcome chemical elements, like excess chlorine, chloramine, solvents, oils, pesticides, substances which provoke bad odours and tastes, etc.

Active carbon filters act like chemical-physical absorption towards treated elements and for its characteristics are used even in discharge water for the reduction of COD, colour, etc.

HOW ACTIVE CARBONS FILTERING PLANTS CAV SERIES WORK

Active carbons can be of vegetal and mineral nature and are granular shaped, contained inside a cylinder, where water to treat passes.

Their absorbing capacity depends on the treated substances and when exhausted they have to be substituted, but now and then a layer backwashing to avoid the formation of lumps, that can be invalidate the correct filter functioning.

Filters are essentially made of cylinders containing active carbons and of a valve group, which permit the normal working and the backwashing operations.

The working and the active carbon backwashing is managed automatically by a command panel and by valves suitably dimensioned; in some cases filters can be manual and these operations must be manually done.

Performances

MODEL	CAG mc	CAPACITY mc/h				VALVE DIAMETER DN	CARBON BED H
		Tc = 3'	Tc = 10'	Tc = 20'	Tc = 40'		
CAV 300	0,06	1,3	0,4	0,2	0,1	25	900
CAV 400	0,14	2,8	0,8	0,4	0,2	25	1100
CAV 500	0,22	4,3	1,3	0,6	0,3	40	1100
CAV 600	0,31	6,2	1,9	0,9	0,5	40	1100
CAV 750	0,49	10	2,9	1,5	0,7	50	1100
CAV 900	0,70	14	4,2	2,1	1,0	50	1100
CAV 1050	0,95	19	5,7	2,9	1,4	65	1100
CAV 1200	1,24	25	7,5	3,7	1,9	65	1100
CAV 1400	1,69	34	10	5,1	2,5	80	1100
CAV 1600	2,21	44	13	6,6	3,3	100	1100
CAV 1800	2,80	56	17	8,4	4,2	100	1100
CAV 2000	3,45	69	21	10	5,2	125	1100
CAV 2350	4,77	95	29	14	7,2	125	1100

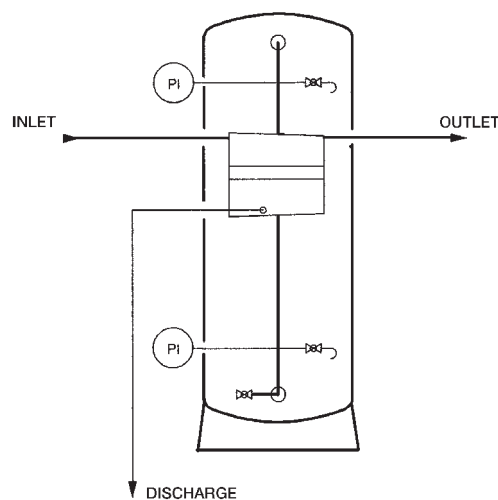
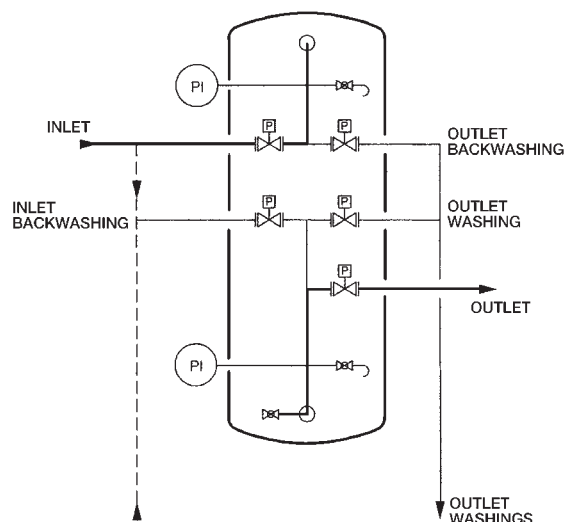
STANDARD PRODUCTION

Technical specifications

Working pressure	Min 1,5 - max 6 bar (4 bar CAV 1050 - 2350)
Cylinder	PRFV
Manholes	Superior and side
Filling material	Granular active carbon and quartzite substratum
Internal diffusion	Blowers made of PP
Piping	PVC PN 10
Valves < DN 50	Multiway made of PVC
Valves > DN 50 with pneumatic actuator	Butterfly valve made of cast iron/EPDM,
Valve command	Hydropneumatic and electropneumatic panel on board
Electronic programmer	Models CAV 300 - 900
Controls and sampling	Manometers and inlet and outlet valves

Optional

Flowmeters	Changeable air
Flowmeters	Electronic, 4-20mA
Command electric panel	Executed according to the norms in force
Support frame	Carbon steel polyurethane cycle painted



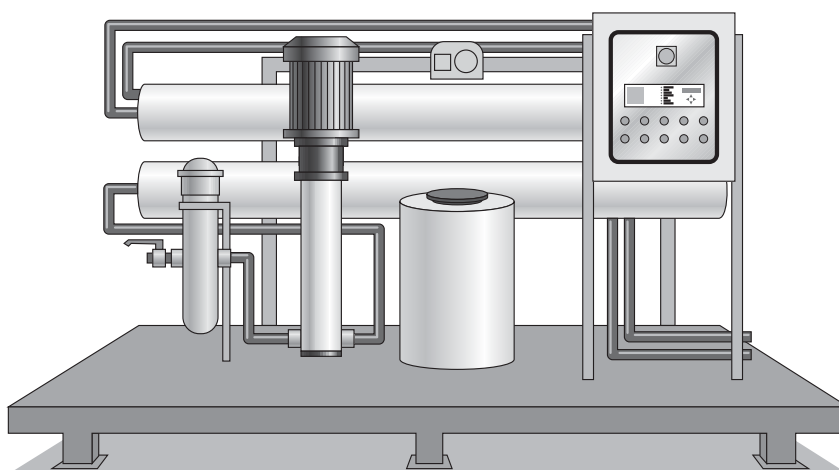
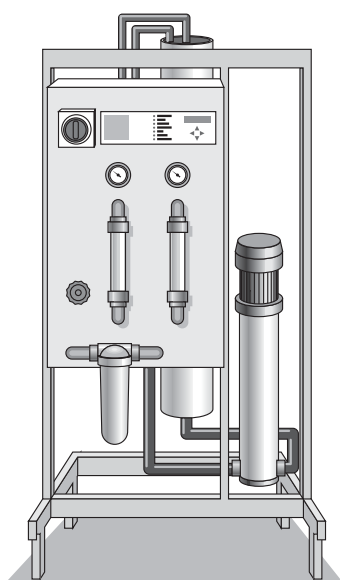
Dimensions and weights

MODEL	FILTER DIAMETER mm	FILTER HEIGHT mm	FILTER WEIGHT kg	TOT. FILTER WEIGHT kg
CAV 300	320	1550	15	65
CAV 400	410	1750	25	125
CAV 500	510	1800	40	190
CAV 600	620	2100	50	300
CAV 750	780	2200	100	480
CAV 900	940	2200	120	650
CAV 1050	1050	2100	270	1050
CAV 1200	1200	2100	300	1350
CAV 1400	1400	2200	380	1800
CAV 1600	1600	2300	440	2000
CAV 1800	1800	2300	500	2500
CAV 2000	2000	2450	600	3000
CAV 2350	2350	2700	750	4100

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By specific request EURO MEC S.r.l. dimensions particular solutions.

REVERSE OSMOSIS PLANTS

OI-P series



WHAT ARE REVERSE OSMOSIS PLANTS OI-P SERIES

Osmosis is a natural process for which a more diluted solution passes spontaneously to a more concentrated solution by means of a semipermeable membrane.

The concept of reverse osmosis is simple, as it suffices to apply a pressure to a concentrated solution superior to the osmotic pressure in order to provoke an inverse flow in respect to the natural one, extracting the dissolved salts from concentrated solution, that creates a discharge flow; on the opposite part of the membrane we have a low salinity solution.

HOW REVERSE OSMOSIS PLANTS OI-P SERIES WORK

The reverse osmosis system is composed of a pressurization pump and of a changeable number of osmotic membranes depending

on the flow rates and on the characteristics to obtain; for this reason it is a reliable plant and it can function in continuous without regenerations or washings.

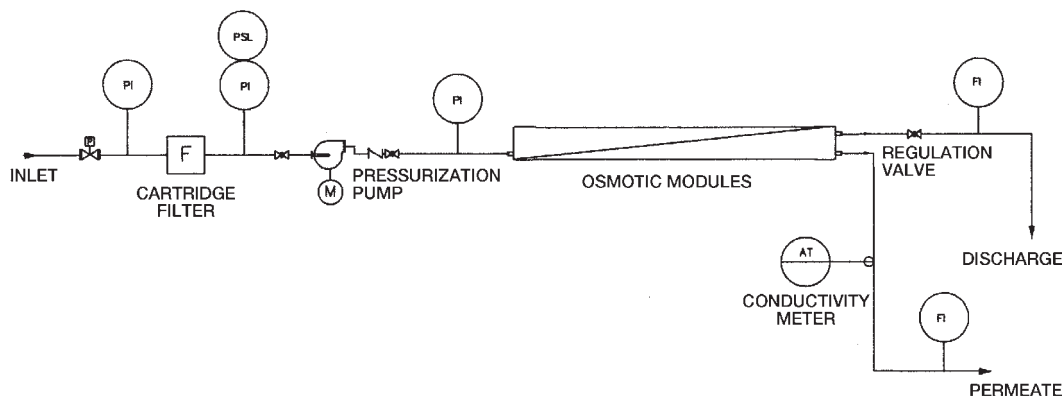
The plant working is managed automatically by a command panel and sometimes it is preceded by an automatic pre-treatment.

Reverse osmosis plants are destined to several applications, from sea water desalting, brackish or well water for drinking or industrial use of various type, to desalting of water addressed to the feeding of resins demineralisation, to the feeding of thermal power station, food, chemical, electronic, pharmaceutical plating industries, etc. The reverse osmosis technology also permits, with suitable pre-treatments, the recovery of some types of discharge water.

Performance

PLANT MODEL	MEASURE UNIT	OI-P 015	OI-P 03	OI-P 05	OI-P 1	OI-P 15	OI-P 2	OI-P 3
Feeding salinity	mg/l	< 2000						
Temperature	°C	25						
Approx. permeated water salinity	%	1						
Standard capacity	mc/h	0,15	0,3	0,5	1	1,5	2	3
Max. recovery	%	35-50	52-70	35-50	52-70	62-76	68-76	76
Vessel quantity	n.	2	4	2	4	2	3	5
Membrane quantity	n.	2	4	2	4	6	9	15
High pressure pump power	kW	0,6	0,8	1,5	2,2	2,2	3,0	4,0
Inlet, concentrate, permeate connections	DN	15, 15, 15	15, 15, 15	25, 15, 15	25, 15, 15	32, 25, 25	32, 25, 25	32, 25, 25

STANDARD PRODUCTION



Technical specifications

Feeding water pressure	Min. 2 – max 6 bar
Feeding water temperature	Min. 5 – max 35°C
Feeding water security filter	Cartridge filter of 5 micron
Minimum pressure alarm	Pressure switch with adjustable threshold
Feeding interception valve	Electrovalve
Antiscalant dosage	Electromagnetic dosing pump with changeable flow rate (OIP 15 - 3)
Pressurisation pump	Vertical multi-impeller (blades OIP 015 and 03) made of AISI 304
Vessel for membranes	PRVF, 300 PSI
Membranes	Spiral wrapped up in polyamide, diameter 2,5" or 4", length 40"
Manometer	AISI 316
Flow meters	Changeable area
Permeated conductivity meter	Electronic, digital display, cell made of AISI 316
Washing circuit	Arrangement for external devices
High pressure piping	AISI 316
Low pressure piping	PE (OIP 015 – 03), PVC PN 10
Electric command panel	Executed according to the norms in force
Support frame	Carbon steel, blasted and painted polyurethane cycle
Feeding voltage	220 V or 380 V / 50 Hz

Optional

Pre-treatment unit	Dual-media filters, active carbon filters, self-polishing filters
Antiscalant dosage unit	PE tank and dosing pump
Concentrated recycle circuit	Regulation and check valve, and flowmeter
Pressurisation pump	AISI 316
Thermometer	Electronic, digital display, outlet 4-20 mA
Pressure transmitters	AISI 316, 4-20 mA
Flowmeters	Electronic, digital display, outlet 4-20 mA
Permeated discharge valve	Pneumatic, controlled by a conductivity meter
Fluxing and washing circuit	PE tank, AISI 316 pump, cartridge filter
Support frame	AISI 304, blasted and transparent painted

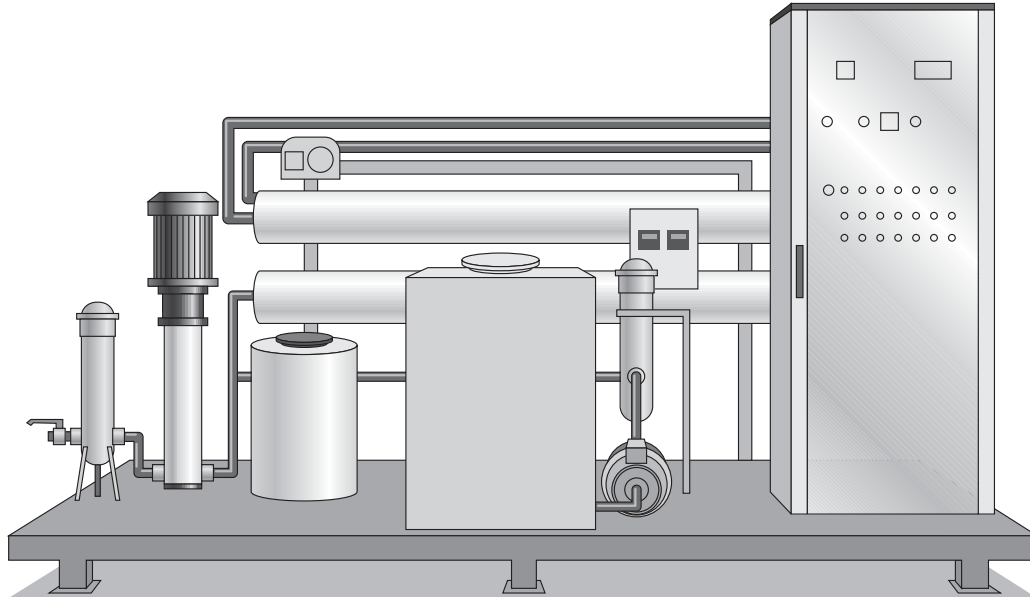
Dimensions and weights

PLANT MODEL	OI-P 015	OI-P 03	OI-P 05	OI-P 1	OI-P 15	OI-P 2	OI-P 3
Dimensions (LxVxH) m	0,8x0,8x1,5	0,8x0,8x1,5	0,8x0,8x1,5	0,8x0,8x1,5	3,5x1x1,5	3,5x1x1,5	3,5x1x1,5
Rough weight kg	80	100	150	180	300	350	400

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REVERSE OSMOSIS PLANTS

OI-M series



WHAT ARE REVERSE OSMOSIS PLANTS OI-P SERIES

Osmosis is a natural process for which a more diluted solution passes spontaneously to a more concentrated solution by means of a semipermeable membrane.

The concept of reverse osmosis is simple, as it suffices to apply a pressure to a concentrated solution superior to the osmotic pressure in order to provoke an inverse flow in respect to the natural one, extracting the dissolved salts from concentrated solution, that creates a discharge flow; on the opposite part of the membrane we have a low salinity solution.

HOW REVERSE OSMOSIS PLANTS OI-P SERIES WORK

The reverse osmosis system is composed of a pressurization pump and of a changeable number of osmotic membranes depending

on the flow rates and on the characteristics to obtain; for this reason it is a reliable plant and it can function in continuous without regenerations or washings.

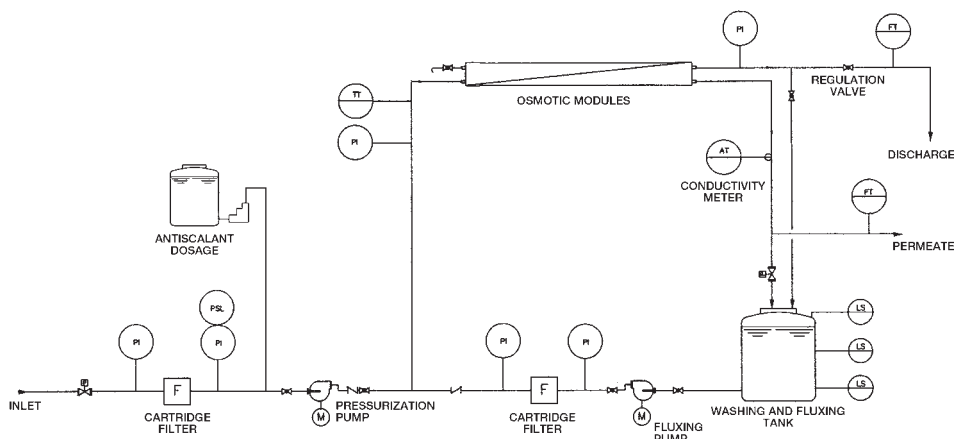
The plant working is managed automatically by a command panel and sometimes it is preceded by an automatic pre-treatment.

Reverse osmosis plants are destined to several applications, from sea water desalting, brackish or well water for drinking or industrial use of various type, to desalting of water addressed to the feeding of resins demineralisation, to the feeding of thermal power station, food, chemical, electronic, pharmaceutical plating industries, etc. The reverse osmosis technology also permits, with suitable pre-treatments, the recovery of some types of discharge water.

Performances

PLANT MODEL	MEASURE UNIT	OI-M 4	OI-M 6	OI-M 8	OI-M 10	OI-M 12	OI-M 16	OI-M 20
Feeding salinity	mg/l	< 2000						
Temperature	°C	25						
Approx. permeated water salinity	%	1						
Standard capacity	mc/h	4	6	8	10	12	16	20
Max. recovery	%	52-68	62-76	68-80	73	76	80	80
Vessel quantity	n.	2	2	2	3	3	4	5
Membrane quantity	n.	4	6	8	9	12	16	20
High pressure pump power	kW	5,5	7,5	11	15	15	18,5	18,5
Inlet, concentrate, permeate connections	DN	40, 32, 32	40, 32, 32	50, 32, 40	50, 32, 40	80, 32, 50	80, 32, 50	80, 32, 65

STANDARD PRODUCTION



Technical specifications

Feeding water pressure	Min. 2 – max 6 bar
Feeding water temperature	Min. 5 – max 35°C
Feeding water security filter	High flow rate cartridge filter of 5 micron
Minimum pressure alarm	Pressure switch with adjustable threshold
Feeding interception valve	Pneumatic
Antiscalant dosage	Electromagnetic dosing pump with changeable flow rate
Pressurisation pump	Vertical multi-impeller made of AISI 304, with soft-start
Vessel for membranes	PRVF, 300 PSI
Membranes	Spiral wrapped up in polyamide, diameter 8", length 40"
Manometer	AISI 316 in glycerine bath
Thermometer	Electronic, digital display, outlet 4-20 mA
Flowmeter	Electronic, digital display, outlet 4-20 mA
Permeated conductivity meter	Electronic, digital display, outlet 4-20 mA, cell made of AISI 316
Fluxing and washing circuit	Tank made of AISI 304, pump made of AISI 316, cartridge filter
High pressure piping	AISI 316
Low pressure piping	PVC PN 10
Electric command panel	Executed according to the norms in force, with PLC
Support frame	Carbon steel, blasted and painted polyurethane cycle
Feeding voltage	380 V / 50 Hz

Optional

Pre-treatment unit	Self-polishing filters, dual-media filters, active carbon filters,
Metabisulphite dosage unit	PE tank and dosing pump
Concentrated recycle circuit	Regulation and check valve, and flowmeter
Pressurisation pump	AISI 316
Pressure transmitters	AISI 316, 4-20 mA
Permeated discharge valve	Pneumatic, controlled by a conductivity meter
Support frame	AISI 304, blasted and transparent painted

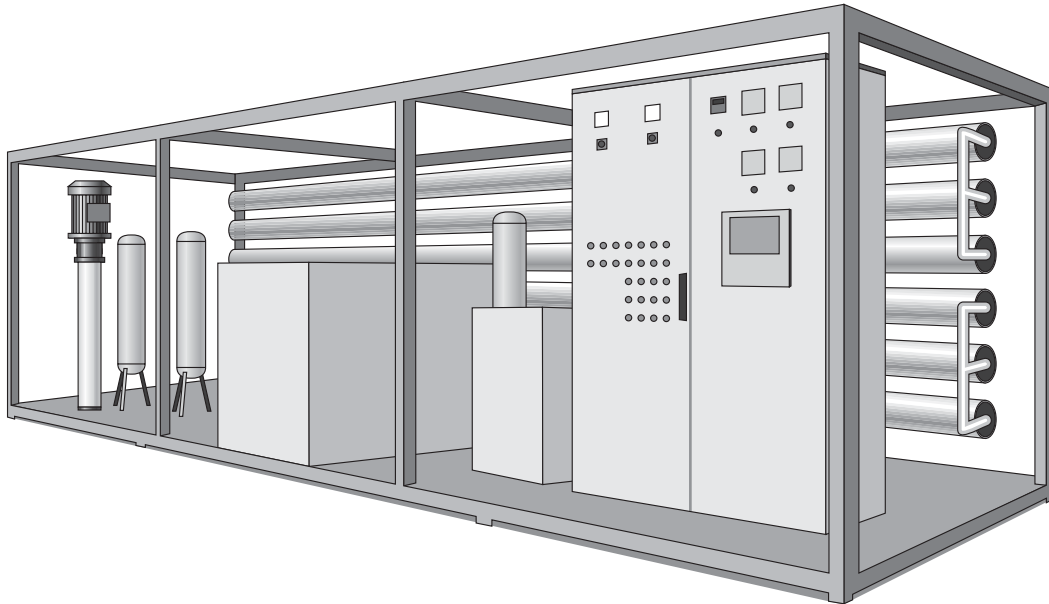
Dimensions and weights

PLANT MODEL	OI-M 4	OI-M 6	OI-M 8	OI-M 10	OI-M 12	OI-M 16	OI-M 20
Dimensions (LxVxH) m	4x1,8x2	4x1,8x2	5x2x2	5x2x2	5x2x2	5x2x2	5x2x2
Rough weight kg	1000	1100	1300	1400	1500	1600	1800

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By specific request EURO MEC S.r.l. dimensions particular solutions.

REVERSE OSMOSIS PLANTS

OI-G series



WHAT ARE REVERSE OSMOSIS PLANTS OI-G SERIES

Osmosis is a natural process for which a more diluted solution passes spontaneously to a more concentrated solution by means of a semipermeable membrane.

The concept of reverse osmosis is simple, as it suffices to apply a pressure to a concentrated solution superior to the osmotic pressure in order to provoke an inverse flow in respect to the natural one, extracting the dissolved salts from concentrated solution, that creates a discharge flow; on the opposite part of the membrane we have a low salinity solution.

HOW REVERSE OSMOSIS PLANTS OI-G SERIES WORK

The reverse osmosis system is composed of a pressurization pump and of a changeable number of osmotic membranes depending

on the flow rates and on the characteristics to obtain; for this reason it is a reliable plant and it can function in continuous without regenerations or washings.

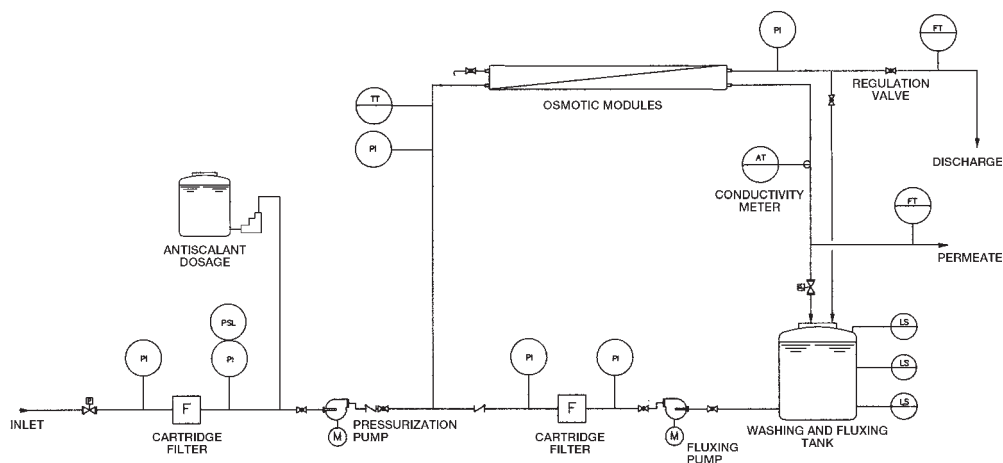
The plant working is managed automatically by a command panel and sometimes it is preceded by an automatic pre-treatment.

Reverse osmosis plants are destined to several applications, from sea water desalting, brackish or well water for drinking or industrial use of various type, to desalting of water addressed to the feeding of resins demineralisation, to the feeding of thermal power station, food, chemical, electronic, pharmaceutical plating industries, etc. The reverse osmosis technology also permits, with suitable pre-treatments, the recovery of some types of discharge water.

Performances

PLANT MODEL	MEASURE UNIT	OI-G 24	OI-G 30	OI-G 36	OI-G 48	OI-G 60	OI-G 72
Feeding salinity	mg/l	< 2000					
Temperature	°C	25					
Approx. permeated water salinity	%	1					
Standard capacity	mc/h	24	30	36	48	60	72
Max. recovery	%	75	80	80	75	80	80
Vessel quantity	n.	4	5	6	8	10	12
Membrane quantity	n.	24	30	36	48	60	72
Pressurization power	kW	22	30	30	37	45	60
Inlet, concentrate, permeate connections	DN	100, 40, 65	100, 40, 80	100, 50, 80	150, 50, 100	150, 50, 100	150, 65, 125

STANDARD PRODUCTION



Technical specifications

Feeding water pressure	Min. 2 – max 6 bar
Feeding water temperature	Min. 5 – max 35°C
Feeding water security filter	High flow rate cartridge filter of 5 micron
Minimum pressure alarm	Pressure switch with adjustable threshold
Feeding interception valve	Pneumatic
Antiscalant dosage	Electromagnetic dosing pump with changeable flow rate
Pressurisation pump	Vertical multi-impeller made of AISI 304, with soft-start
Vessel for membranes	PRVF, 300 PSI
Membranes	Winded up spiral made of polyamide, diameter 8", length 40"
Manometers	AISI 316 in glycerine bath
Thermometer	Electronic, digital display, outlet 4-20 mA
Flowmeters	Electronic, digital display, outlet 4-20 mA
Permeated conductivity meter	Electronic, digital display, outlet 4-20 mA, cell made of AISI 316
Fluxing and washing circuit	Tank made of AISI 304, pump made of AISI 316, cartridge filter
High pressure piping	AISI 316
Low pressure piping	PVC PN 10
Electric command panel	Executed according to the norms in force, with PLC
Support frame	Carbon steel, blasted and painted polyurethane cycle
Feeding voltage	380 V / 50 Hz

Optional

Pre-treatment unit	Self-polishing filters, dual-media filters, active carbon filters,
Metabisulphite dosage unit	PE tank and dosing pump
Pressurisation pump	AISI 316
Pressure transmitters	AISI 316, 4-20 mA
Permeated discharge valve	Pneumatic, controlled by a conductivity meter
Support frame	AISI 304, blasted and transparent painted

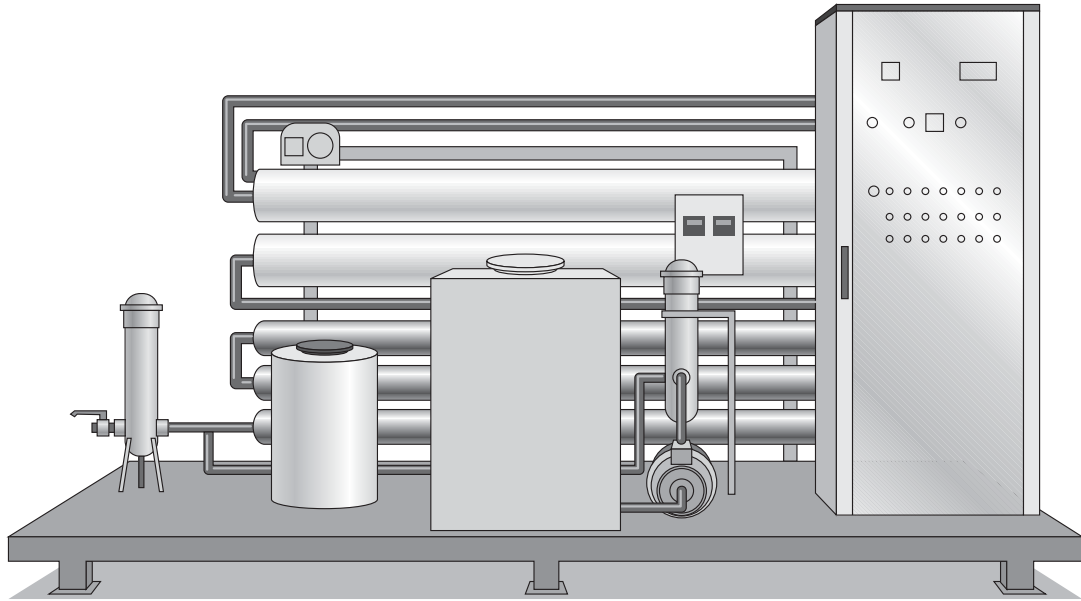
Dimensions and weights

PLANT MODEL	OI-G 24	OI-G 30	OI-G 36	OI-G 48	OI-G 60	OI-G 72
Dimensions (LxVxH) m	7,5x2,4x2,4	7,5x2,4x2,4	7,5x2,4x2,4	7,5x2,4x2,4	7,5x2,4x2,4	7,5x2,4x2,4
Rough weight kg	2000	2200	2400	2700	3000	3300

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

REVERSE OSMOSIS PLANTS

OI-SW series



WHAT ARE REVERSE OSMOSIS PLANTS OI-SW SERIES

Osmosis is a natural process for which a more diluted solution passes spontaneously to a more concentrated solution by means of a semipermeable membrane.

The concept of reverse osmosis is simple, as it suffices to apply a pressure to a concentrated solution superior to the osmotic pressure in order to provoke an inverse flow in respect to the natural one, extracting the dissolved salts from concentrated solution, that creates a discharge flow; on the opposite part of the membrane we have a low salinity solution.

HOW REVERSE OSMOSIS PLANTS OI-SW SERIES WORK

The reverse osmosis system is composed of a pressurization pump and of a changeable number of osmotic membranes depending

on the flow rates and on the characteristics to obtain; for this reason it is a reliable plant and it can function in continuous without regenerations or washings.

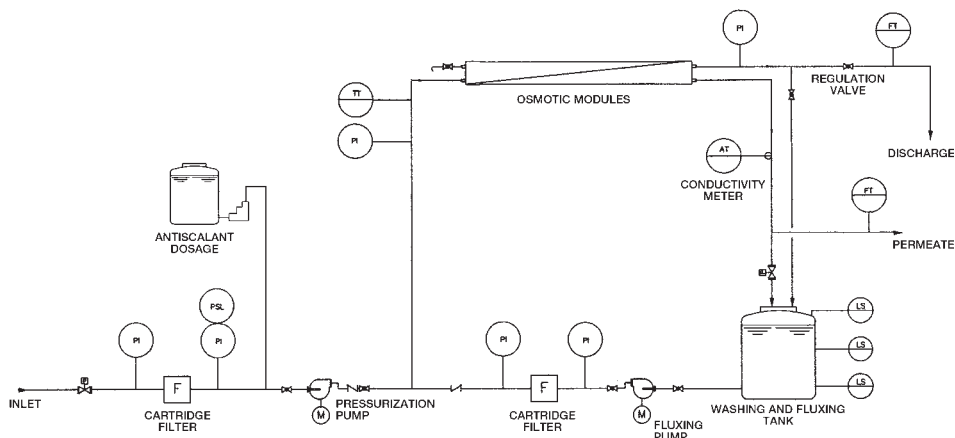
The plant working is managed automatically by a command panel and sometimes it is preceded by an automatic pre-treatment.

Reverse osmosis plants are destined to several applications, from sea water desalting, brackish or well water for drinking or industrial use of various type, to desalting of water addressed to the feeding of resins demineralisation, to the feeding of thermal power station, food, chemical, electronic, pharmaceutical plating industries, etc. The reverse osmosis technology also permits, with suitable pre-treatments, the recovery of some types of discharge water.

Performances

PLANT MODEL	MEASURE UNIT	OI-SW 05	OI-SW 1	OI-SW 2	OI-SW 4	OI-SW 6	OI-SW 8	OI-SW 10	OI-SW 13	OI-SW 17	OI-SW 21	
Feeding salinity	mg/l	35.000										
Temperature	°C	25										
Feeding salinity	%	<2				<1						
Standard capacity	mc/day	12	24	48	96	144	192	240	312	400	500	
Standard capacity	mc/h	0,5	1	2	4	6	8	10	13	17	21	
Recovery	%	35	35	35	35	35	35	35	35	35	35	
Vessel quantity	n.	2	4	2	2	3	3	4	4	5	6	
Membrane quantity	n.	4	8	4	6	9	12	16	24	30	36	
Pressurization power	kW	6	8	16,5	37	45	75	75	90	110	132	
Inlet, concentrate, permeate connections	DN	32, 25, 25	32, 25, 25	40, 32, 25	50, 40, 32	60, 50, 32	80, 50, 40	80, 65, 40	100, 65, 50	100, 80, 50	100, 80, 65	

STANDARD PRODUCTION



Technical specifications

Feeding water pressure	Min. 2 – max 6 bar
Feeding water temperature	Min. 5 – max 35°C
Feeding water security filter	High flow rate cartridge filter of 5 micron
Minimum pressure alarm	Pressure switch with adjustable threshold
Feeding interception valve	Pneumatic
Antiscalant dosage	Electromagnetic dosing pump with changeable flow rate
Pressurisation pumps	Multi-impeller made of AISI 904, sequential starts or with soft-start
Vessel for membranes	PRFV, 1000 PSI
Membranes	Spiral wrapped up in polyamide, diameter 4 or 8", length 40"
Manometers	AISI 316 in glycerine bath
Thermometer	Electronic, digital display, outlet 4-20 mA
Flowmeters	Electronic, digital display, outlet 4-20 mA
Permeated conductivity meter	Electronic, digital display, outlet 4-20 mA, cell made of AISI 316
Fluxing and washing circuit	Tank made of AISI 304, pump made of AISI 316, cartridge filter
High pressure piping	Duplex steel 1.4462
Low pressure piping	PVC PN 10
Electric command panel	Executed according to the norms in force, with PLC
Support frame	Carbon steel, blasted and painted polyurethane cycle
Feeding voltage	380 V / 50 Hz

Optional

Energy recuperator	Turbine made of AISI 904
Pre-treatment unit	Self-polishing filters, dual-media filters, active carbon filters,
Metabisulphite dosage unit	PE tank, mixer and dosing pump
Pressure transmitters	AISI 316, 4-20 mA
Permeated discharge valve	Pneumatic, controlled by a conductivity meter
Support frame	AISI 304, blasted and transparent painted

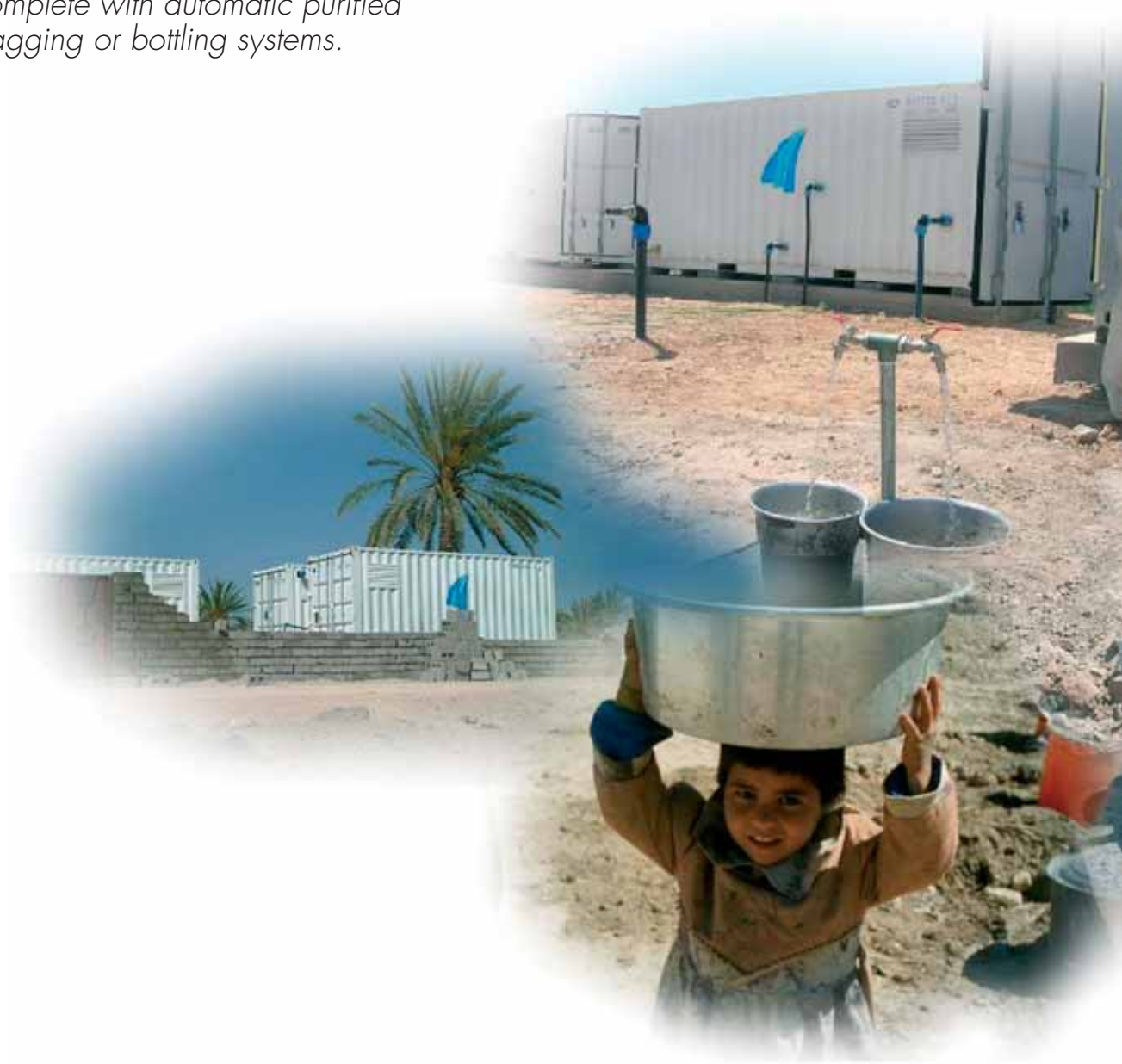
Dimensions and weights

PLANT MODEL	OI-SW 05	OI-SW 1	OI-SW 2	OI-SW 4	OI-SW 6	OI-SW 8	OI-SW 10	OI-SW 13	OI-SW 17	OI-SW 21
Dimensions (LxVxH) m	3x1,5x2	3x1,5x2	4x2x2	4x2x2	4x2x2	5x2x2	5x2x2	7x2x2	7x2x2	7x2x2
Rough weight kg	600	700	900	1000	1100	1300	1500	2400	2800	3200

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



Planning and realization of modular and mobile drinking water plants. Systems particularly adapted to water emergencies created by man or nature. Plants complete with automatic purified water bagging or bottling systems.



Combi Pick-up

Page 138

Combi Trailer

Page 140

Combi Shelter

Page 142

Filtro Trailer

Page 144



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MOBILE DRINKING WATER UNITS

MOBILE DRINKING WATER UNITS

Mobile primary water treatment units are designed for producing drinking water according to many different demands and consumption requirements.

The units are mobile and must provide a complete purification treatment even in cases where the quality of the water source is unknown.

The units are mounted, according to their size, on rubber in carts, pick-ups or in shelters and are designed to be easily towed and completely self managed thanks to their internal generator. They can be supplied with a water storage tank or with a bag-packing system.

Interior of a Combi Shelter



Installing Combi Shelters



Drinking water distribution boxes





Combi Trailer mobile drinking water unit



Loading shelters for shipping

MOBILE DRINKING WATER UNITS

www.euromec.net



COMBI unit

WHERE MOBILE DRINKING WATER UNITS ARE USED

Mobile primary water treatment units are designed to satisfy all the drinking water production needs in zones where the only one water source is available such as a river, well or lake.

A range of possible equipment combinations allows for the units to meet drinking water needs in a wide variety of situations including; emergencies such as floods or droughts, refugee camps, as equipment for temporary or ever moving projects or as permanent water supply plants for communities like villages and missions.

The complete line of mobile water treatment products and their associated technology guarantees the highest standards of the treatment of medium salinity water. Units are user friendly and only a few chemicals are required for their operation.

Development, manufacturing and servicing of the equipment are all certified in accordance with the quality control system ISO 9001:2000, registration number 1000429.





Purification capacity

	NO REDUCTION	EXCELLENT REDUCTION
SUSPENDED MATTER	[Full bar]	
FINE PARTICLES	[Full bar]	
CHLORINE	[Full bar]	
SOLVENTS	[Partial bar]	
COLOUR	[Partial bar]	
BACTERIA	[Full bar]	
PESTICIDES	[Partial bar]	
ASBESTOS	[Full bar]	
SALTS (e.g. MARINE SALT)	[Full bar]	
NITRATES	[Full bar]	
HEAVY METALS	[Full bar]	
OILS	[Partial bar]	
EMULSIONS	[Partial bar]	
SURFACE-ACTIVE AGENTS	[Full bar]	
RADIOACTIVE CONTAMINATION	[Partial bar]	

MOBILE DRINKING WATER UNITS

www.euromec.net



Set of Combi accessories



Floatation system



Combi connections





Solid chlorine distribution and disinfection system



Flotation system in operation



MOBILE DRINKING WATER UNITS

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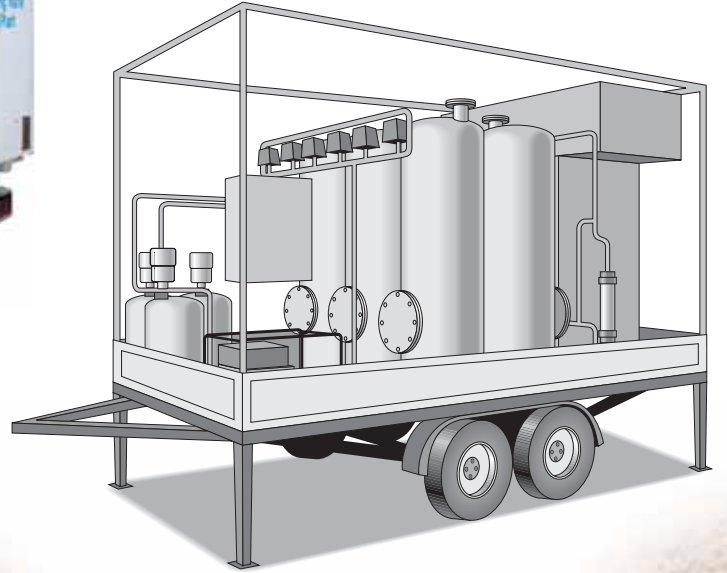
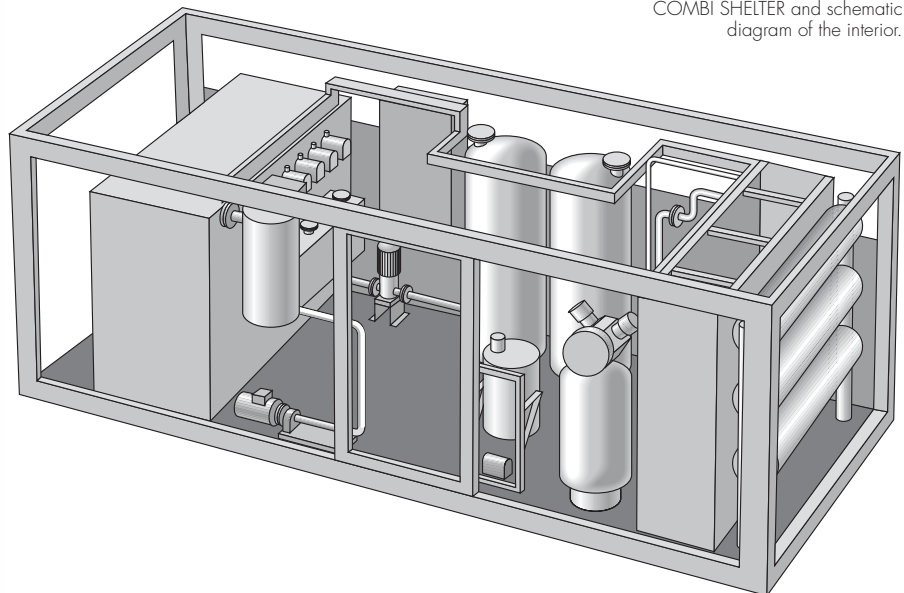


Photo of the exterior of the COMBI TRAILER and schematic diagram of the interior.

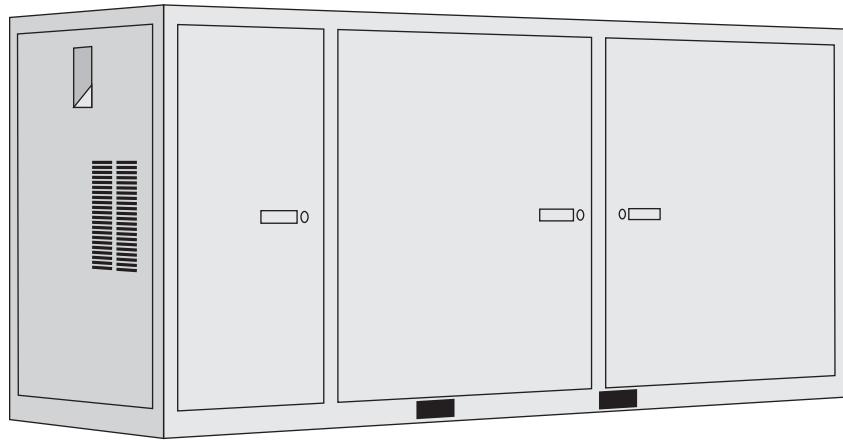




Photo of the exterior of the COMBI SHELTER and schematic diagram of the interior.



COMBI PICK-UP



FEED WATER

The system is designed to treat bacteriologically and organoleptically polluted water, with an average salinity of 1.500 – 2.000 TDS. Low pressure reverse osmosis system membranes are able to filter all bacteria and to remove about 75/85% of salinity. Low output membranes are used as they do not require specific chemical products for pre-treatment, such as antiscalants which are not often easily found in areas with few commercial outlets. Sea water feed IS EXCLUDED.

ADDUCTION PUMP

Submersible, independent adduction pump, to be connected to the entrance filler by a flexible pipe. The pump has a particular type of impeller which allows small solid bodies to pass, it is totally stainless steel and has a water level gauge which stops the functioning in case of lack of water. 220V feed.

PRETREATMENT

The COMBI PICK UP is equipped with a TRIPLE FILTRATION SYSTEM, and every stage is dimensioned for a flow rate double that required for actual functioning. Thus guaranteeing a long smooth working life. The process is structured as follows:
PRE-FILTRATION
SAND FILTRATION
CARTRIDGE FILTRATION

PRESSURE PUMP

This pump is a standard multistage vertical axis centrifuge pump with stainless steel body and impellers and 380 V, 50 Hz engine. Double shaft support guarantees a long working life.

MEMBRANES

High standard membranes, 4"x40" "low energy" type, with a low obstruction surface. These membranes DO NOT NEED ADDITIONAL CHEMICAL PRODUCTS.

VESSELS

Made of fibreglass, using the "filament winding" technique, specific for drinking water applications and approved by F&DA, these vessels have a high mechanical resistance and a working pressure of maximum 40 bar (notice that units work with a 5 bar pressure).

RECIRCULATION

In case of medium salinity water, extract recirculation (50% maximum) can be implemented manually allowing for an increase in the quantity of treated water produced.

DRINKING WATER STERILIZATION

The best solution for this service is, initially, a UV RAY DEBACTERIZATION PROCESS, chosen because it works by using electric current only (no chemical products).

If an accumulation tank for the produced water is required then a solid chlorine slow discharge dispenser is available as an optional item. The system is IP55 made and CE certified.

DRINKING WATER TANK

The COMBI PICK UP has its own stainless steel drinking water accumulation tank.

MATERIALS

All the equipment is stainless steel except for vessels and sand filters which are made of fibreglass. All materials are corrosion resistant.



STANDARD PRODUCTION

INSTRUMENTATION

We consider ease of use to be very important when designing systems – we intentionally use instruments that, in the event of accidents or breakages, can be easily found even in non industrial areas.

POWER GENERATOR

Generator with diesel motor (optional)

ELECTRICAL CONTROL PANEL

Electromechanical automation of controls

CHEMICAL CLEANING

The chemical cleaning during brief non working periods is automatic, while for long periods it is manual. One chemical wash per year is necessary.

SPARE PARTS AND CONSUMABLES

According to specific requirements, the units have extra quantities of consumable products for periods of 1, 2 or 3 years

RUN-TESTS

Granted that a COMBI PICK UP is available and not being used for emergency intervention, we can organize run tests for:

- Working capacity demonstrations
- Training courses for local technical staff supported by audio-visual material and operating manuals in Italian and English (other languages optional)

Technical specifications

Raw water capacity	From 1 mc/h to 1.5 mc/h MAX (depending on salinity)
Drinking water capacity	From 0.3 mc/h to 0.5 mc/h MAX (depending on salinity)
Drinking water production	From 7 to 12 mc/day (depending on salinity)
Ambient working temperature	From +5 to +50 °a 1C
Raw water temperature	From +5 to +50°a 1C
Plant required power	1,5 kw – 380 V 50 Hz
Overall size	Base 1300 x 1400 mm, high 1200 mm.
Total weight	Kg. 525

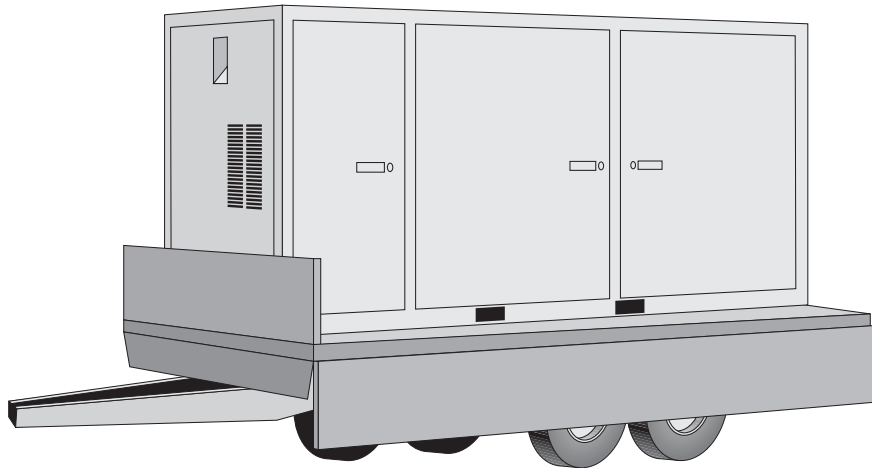
Spare parts kit

Filter cartridges	6 set/year recommended
Stainless steel fittings	On request
Stock of instrumental components	Stainless steel manometer Manostat Water meter Water level gauge
Annual chemical cleaning/maintenance products	1 year's supply recommended
Cleaning products and Consumables	1 year / 2 years / 3 years
Operation manual	Italian/English

Optionals

Chemical products pre- treatments	NOT NECESSARY
Remineralization process	NOT NECESSARY
Rubber ring float for pump	OPTIONAL
Solid chlorine batcher	OPTIONAL
Run test	OPTIONAL
Audio-visual support	OPTIONAL
Personnel training at destination country	OPTIONAL
Personnel training in our factory	OPTIONAL
Operation manual in language(s) other than English and Italian	OPTIONAL
Generator	OPTIONAL

COMBI TRAILER



FEED WATER

The system is designed to treat bacteriologically and organoleptically polluted water, with an average salinity of 1.500 – 2.000 TDS

Low pressure reverse osmosis system membranes are able to filter all bacteria and to remove about 75/85% of salinity. Low output membranes are used as they do not require specific chemical products for pre-treatment, such as antiscalants which are not often easily found in areas with few commercial outlets. Sea water feed IS EXCLUDED.

ADDUCTION PUMP

Submersible, independent adduction pump, to be connected to the inlet by a flexible pipe. The pump has a particular type of impeller which allows small solid bodies to pass, it is totally stainless steel and has a water level gauge which stops the functioning in case of lack of water.
380V feed.

PRETREATMENT

The COMBI TRAILER is equipped with a TRIPLE FILTRATION SYSTEM, and every stage is dimensioned for a flow rate double that required for actual functioning. Thus guaranteeing a long smooth working life. The process is structured as follows:

PRE-FILTRATION
SAND FILTRATION
CARTRIDGE FILTRATION

PRESSURE PUMP

This pump is a standard multistage vertical axis centrifuge pump with stainless steel body and impellers and a 1.5 to 380 V, 50 Hz engine. Double shaft support guarantees a long working life.

MEMBRANES

High standard membranes, 4"x40" "low energy" type, with a low obstruction surface. These membranes DO NOT NEED ADDITIONAL CHEMICAL PRODUCTS.

VESSELS

Made of fibreglass, using the "filament winding" technique, specific for drinking water applications and approved by F&DA, these vessels have a high mechanical resistance and a working pressure of maximum 40 bar (notice that units work with a 5 bar pressure).

RECIRCULATION

In case of medium salinity water, extract recirculation (50% maximum) can be implemented manually allowing for an increase in the quantity of treated water produced.

DRINKING WATER STERILIZATION

The best solution for this service is, initially, a UV RAY DEBACTERIZATION PROCESS, chosen because it works by using electric current only (no chemical products).

If an accumulation tank for the produced water is required then a solid chlorine slow discharge dispenser is available as an optional item. The system is IP55 made and CE certified.



STANDARD PRODUCTION

All the equipment is stainless steel except for vessels and sand filters which are made of fibreglass. All materials are corrosion resistant.

INSTRUMENTATION

We consider ease of use to be very important when designing systems – we intentionally use instruments that, in the event of accidents or breakages, can be easily found even in non industrial areas.

POWER GENERATOR

Generator with diesel motor (over-dimensioned)

ELECTRICAL CONTROL PANEL

Electromechanical automation of controls

CHEMICAL CLEANING

The chemical cleaning during brief non working periods (max 7 days) is automatic, while for long periods it is manual. One chemical wash per year is necessary.

SPARE PARTS AND CONSUMABLES

According to specific requirements, the units have extra quantities of consumable products for periods of 1, 2 or 3 years

RUN-TESTS

Granted that a COMBI TRAILER is available and not being used for emergency intervention, we can organize run tests for:

- Working capacity demonstrations
- Training courses for local technical staff supported by audio-visual material and operating manuals in Italian and English (other languages optional).

Technical specifications

Raw water capacity	From 2 mc/h to 3.5 mc/h MAX (depending on salinity)
Drinking water capacity	From 0.7 mc/h to 1.1 mc/h MAX (depending on salinity)
Drinking water production	From 17 to 26 mc/day (depending on salinity)
Ambient working temperature	From +5 to +50 °a1C
Raw water temperature	From +5 to +50°a1C
Generator yeild	5.5 kw – 380 V 50 Hz
Plant required power	3.0 kw – 380 V 50 Hz
Available power	2.5 kw – 220 V 50 Hz
Generator	Diesel
Overall size	Base 1140 x 2850 mm, high 1400 mm.
Total weight	Kg. 800 (generator included)

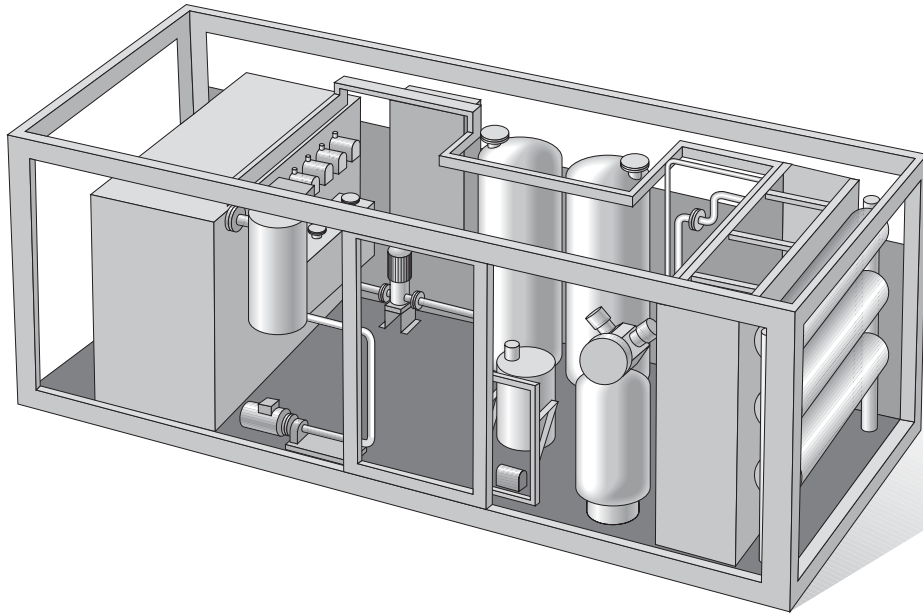
Spare parts kit

Filter cartridges	6 set/year recommended
Stainless steel fittings	On request
Stock of instrumental components	Stainless steel manometer Manostat Water meter Water level gauge
Annual chemical cleaning/maintenance products	1 year's supply recommended
Cleaning products and Consumables	1 year / 2 years / 3 years
Operation manual	Italian/English

Optionals

Pre-treatment chemical products	NOT NECESSARY
Remineralization process	NOT NECESSARY
Rubber ring float for pump	OPTIONAL
Solid chlorine batcher	OPTIONAL
Run test	OPTIONAL
Audio-visual support	OPTIONAL
Personnel training at destination country	OPTIONAL
Personnel training in our factory	OPTIONAL
Operation manual in language(s) other than English and Italian	OPTIONAL
Trailer	OPTIONAL

COMBI SHELTER



FEED WATER

The system is designed to treat bacteriologically and organoleptically polluted water, with an average salinity of 1.500 – 2.000 TDS. Low pressure reverse osmosis system membranes able to filter all bacteria and to remove about 75/85% of salinity. Low output membranes are used as they do not require specific chemical products for pre-treatment, such as antiscalants which are not often easily found in areas with few commercial outlets. Given that this plant is projected to treat medium salinity water, except BRACKISH WATER, we intentionally chose a low pressure process, which DOES NOT REQUIRE any REMINERALIZATION process, because of its capacity to reject high levels of salts. Sea water feed IS EXCLUDED.

ADDUCTION PUMP

Submersible, independent adduction pump, to be connected to the inlet by a flexible pipe. The pump has a particular type of impeller which allows small solid bodies to pass, it is totally stainless steel and has a water level gauge which stops the functioning in case of lack of water.
380V feed.

PRETREATMENT

The COMBI SHELTER is equipped with a TRIPLE FILTRATION SYSTEM, and every stage is dimensioned for a flow rate double that required for actual functioning. Thus guaranteeing a long smooth working life. The process is structured as follows:
PRE-FILTRATION
SAND FILTRATION
CARTRIDGE FILTRATION

PRESSURE PUMP

This pump is a standard multistage vertical axis centrifuge pump with stainless steel body and impellers and a 380 V, 50 Hz engine. Double shaft support guarantees a long working life.

MEMBRANES

High standard membranes, 4"x40" "low energy" type, with a low obstruction surface. These membranes DO NOT NEED ADDITIONAL CHEMICAL PRODUCTS.

VESSELS

Made of fibreglass, using the "filament winding" technique, specific for drinking water applications and approved by F&DA, these vessels have a high mechanical resistance and a working pressure of maximum 40 bar (notice that units work with a 5 bar pressure).

RICIRCULATION

In case of medium salinity water, extract recirculation (50% maximum) can be implemented manually allowing for an increase in the quantity of treated water produced.

DRINKING WATER STERILIZATION

The best solution for this service is, initially, a UV RAY DEBACTERIZATION PROCESS, chosen because it works by using electric current only (no chemical products).

If an accumulation tank for the produced water is required then a solid chlorine slow discharge dispenser is available as an optional item.

DRINKING WATER TANK

The COMBI SHELTER has its own stainless steel drinking water accumulation tank.



STANDARD PRODUCTION

MATERIALS

All the equipment is stainless steel except for vessels and sand filters which are made of fibreglass. All materials are corrosion resistant.

INSTRUMENTATION

We consider ease of use to be very important when designing systems – we intentionally use instruments that, in the event of accidents or breakages, can be easily found even in non industrial areas.

POWER GENERATOR

Generator with diesel motor.

ELECTRICAL CONTROL PANEL

Electromechanical automation of controls

CHEMICAL CLEANING

The chemical cleaning during brief non working periods (max 7 days) is automatic, while for long periods it is manual. One chemical wash per year is necessary.

SPARE PARTS AND CONSUMABLES

According to specific requirements, the units have extra quantities of consumable products for periods of 1, 2 or 3 years

RUN-TESTS

Granted that a COMBI SHELTER is available and not being used in emergency intervention, we can organize run tests for:

- Working capacity demonstrations
- Training courses for local technical staff supported by audio-visual material and operating manuals in Italian and English (other languages optional).

Technical specifications

Raw water capacity	From 3.5 mc/h to 20 mc/h MAX (depending on salinity)
Drinking water capacity	From 2.5 mc/h to 15 mc/h MAX (depending on salinity)
Drinking water production	From 50 to 200 mc/ DAY (depending on salinity)
Ambient working temperature	From +5 to +50 °a 1C
Raw water temperature	From +5 to +50°a 1C
Plant required power	From 4.5 to 12 Kw
Available power	380V 50Hz or as required
Overall size	Base 6100 x 2400 mm, height 2500mm
Total weight	Kg. 6000

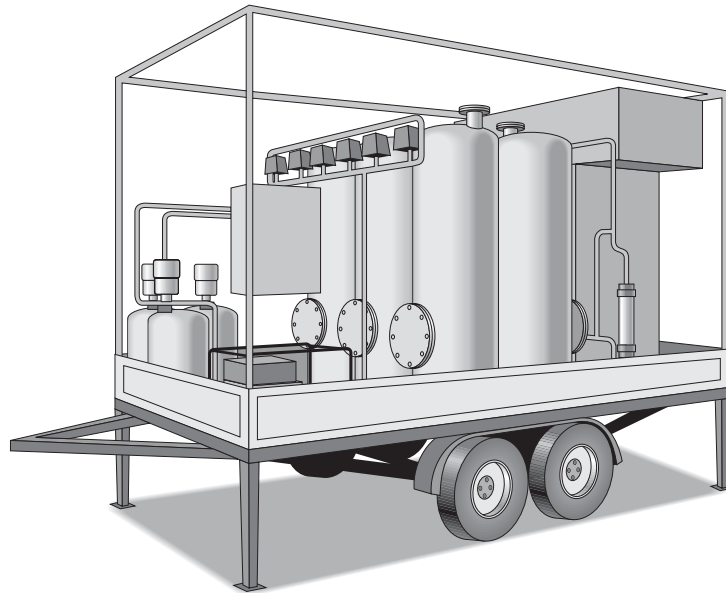
Spare parts kit

Filter cartridges	6 set/year recommended
Stock of instrumental components	Stainless steel manometer Manostat Water meter Water level gauge
Annual chemical cleaning/maintenance products	1 year's supply recommended
Cleaning products and Consumables	1 year / 2 years / 3 years
Operation manual	Italian/English

Optionals

Pre-treatment chemical products	OPTIONAL
Remineralization process	NOT NECESSARY
Generator	OPTIONAL
Run test	OPTIONAL
Audio-visual support	OPTIONAL
Personnel training at destination country	OPTIONAL
Personnel training in our factory	OPTIONAL
Operation manual in language(s) other than English and Italian	OPTIONAL

FILTRO TRAILER



FEED WATER

The system is designed to treat bacteriologically and organoleptically polluted water, with a low salinity. Ground water is pumped into the system by a submersed or superficial electrical pump. The plant consists of active carbon filters in fibreglass or metal complete with all valves necessary for the regulation of the flow rate and pressure, and coming after the sand and/or cartridge filters. Sea water feed IS EXCLUDED.

ADDUCTION PUMP

Submersible, independent adduction pump, to be connected to the inlet by a flexible pipe. Pump has a particular type of impeller which allows small solid bodies to pass, it is totally stainless steel and has a water level gauge which stops the functioning in case of lack of water. 380V feed.

PRETREATMENT

Cartridge filtration pre-treatment removes all foreign particles and substances that may be present in the raw water. Every filter consists of 8 filter cartridges and is equipped with inlet and outlet valves, a minimum manostat with an ON-OFF alarm in case of low pressure, 2 manometers (in-out), and one safety valve.

ACTIVE CARBON FILTRATION

Active carbon filtration is designed to eliminate organic and inorganic pollutants present both in primary water for technological use and in waste water coming from pre-treatment systems. Water passes through a granular active carbon (GAC) mass, where any residual pollutants such as hydrocarbons and solvents are adsorbed. Back-washing of the filter material is carried out occasionally by operating sluice valves (possible both with stream and pipe water).

MATERIALS

The submersible pump and its accessories are made of stainless steel; the filter columns are however made of FRP (fibreglass). All materials are corrosion resistant.

ELECTRICAL CONTROL PANEL

Electromechanical automation of controls in accordance with the quality CEE control system, 380 V 50 Hz (neutral ground) feed, all housed in a steel sheet cabinet.

SPARE PARTS AND CONSUMABLES

According to specific requirements, the units have extra quantities of consumable products for periods of 1, 2 or 3 years

RUN-TESTS

Granted that a FILTRO TRAILER is available and not being used for emergency intervention, we can organize run tests for:

- Working capacity demonstrations
- Training courses for local technical staff supported by audio-visual material and operating manuals in Italian and English (other languages optional).



STANDARD PRODUCTION

Technical specifications

Raw water capacity	From 1 mc/h to 30 mc/h MAX
Drinking water capacity	From 1 mc/h to 30 mc/h MAX
Operating pressure	From 1.5 bar to 6 bar
Ambient working temperature	From +5 to +50 °a1C
Raw water temperature	From +5 to +50°a1C
Plant required power	From 0.37 Kw to 7.5 Kw – 380 V
Overall size	Diameter from 320 to 2350 mm- height from 1550 to 2700 mm
Total weight	From 65 Kg to 4100 kg / each column

Spare parts kit

Filter cartridges	Depending on capacity and pollutant concentration
Stainless steel fittings	On request
Stock of instrumental components	Stainless steel manometer Manostat Water level gauge
Replacement of low carbon with virgin carbon	Depending on capacity and pollutant concentration
Operation manual	Italian/English

Optionals

Pre-treatment chemical products	NOT NECESSARY
Remineralization process	NOT NECESSARY
Rubber ring float for pump	NOT NECESSARY
Automatic back-wash	OPTIONAL
Run test	OPTIONAL
Audio-visual support	OPTIONAL
Personnel training at destination country	OPTIONAL
Personnel training in our factory	OPTIONAL
Operation manual in language(s) other than English and Italian	OPTIONAL
Trailer	OPTIONAL



*Planning and realization of primary water
and industrial wastewater treatment plants.
Purified water recycling systems.
Special works and environmental recovery.*



INDUSTRIAL PLANTS AND SPECIAL WORKS

INDUSTRIAL PLANTS AND SPECIAL WORKS

Thanks to EURO MEC's extensive experience, the company is able to design, plan and realize industrial water treatment plants both primary and production wastewater treatment plants, with particular regard to the systems that allow for the recycling of purified water in order to optimise operations and reduce costs and, in general, to diminish environmental impact.

Other noteworthy experience has been acquired in the field of agricultural wastewater treatment with the development of "closed circuit systems".

The principle processes adopted use the latest technology with the highest standards of automation:

- Chemical-physical treatment and dissolved air floatation system
- Self-cleaning rapid pressure filtration and gravity filtration processes
- Ion treatment and exchange
- Reverse osmosis plants and ultrafiltration plants
- Traditional biological oxidation plants
- SBR (Sequencing Batch Reactors) biological oxidation plants
- MBR (Membrane Bio Reactors) biological oxidation plants
- MBBR (Moving Bed Biofilm Reactors) biological oxidation plants



Closed circuit for foundry water



Installing pipework HDPE



Demineralization plant for a refinery



Installing a sedimentation tank



Refinery wastewater treatment plant



Interior of refinery wastewater treatment plant



Lifting station



Reoxygenation of eutrophic water

Through the work of a team of experts in hydraulic construction and water purification, EURO MEC has completed important environmental projects:

- Agriculture:
- Abattoir wastewater treatment plant
 - Dairy wastewater treatment plant
 - Winery wastewater treatment plant

- Industry:
- Closed circuit plant for foundry and rolling mill
 - Petroleum refinery wastewater treatment plant
 - Textile and print works wastewater treatment plant
 - Tannery wastewater treatment plant

- Civil:
- Public wastewater treatment plants
 - Tourist villages
 - Shopping centres

- Special Works:
- Plant restructuring and automation
 - Hydraulic distribution networks
 - Turnkey plants

- Environmental Recovery:
- Reoxygenation of eutrophic waters
 - Installation of piezometric wells and monitoring of ground water
 - Environmental rehabilitation and sanitation



Environmental monitoring

INDUSTRIAL PLANTS AND SPECIAL WORKS

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Closed circuit water filtration



Dem mineralization plant for a refinery



Buffer tank



Closed circuit cooling water recycling system



Closed piping circuit



Deodorization piping for a refinery wastewater treatment plant



Excavating trenches for water piping



Water distribution piping being layed



Piping being layed HDPE



Drinking water distribution box



Pumping river water



Installing drinking water Combi Shelters

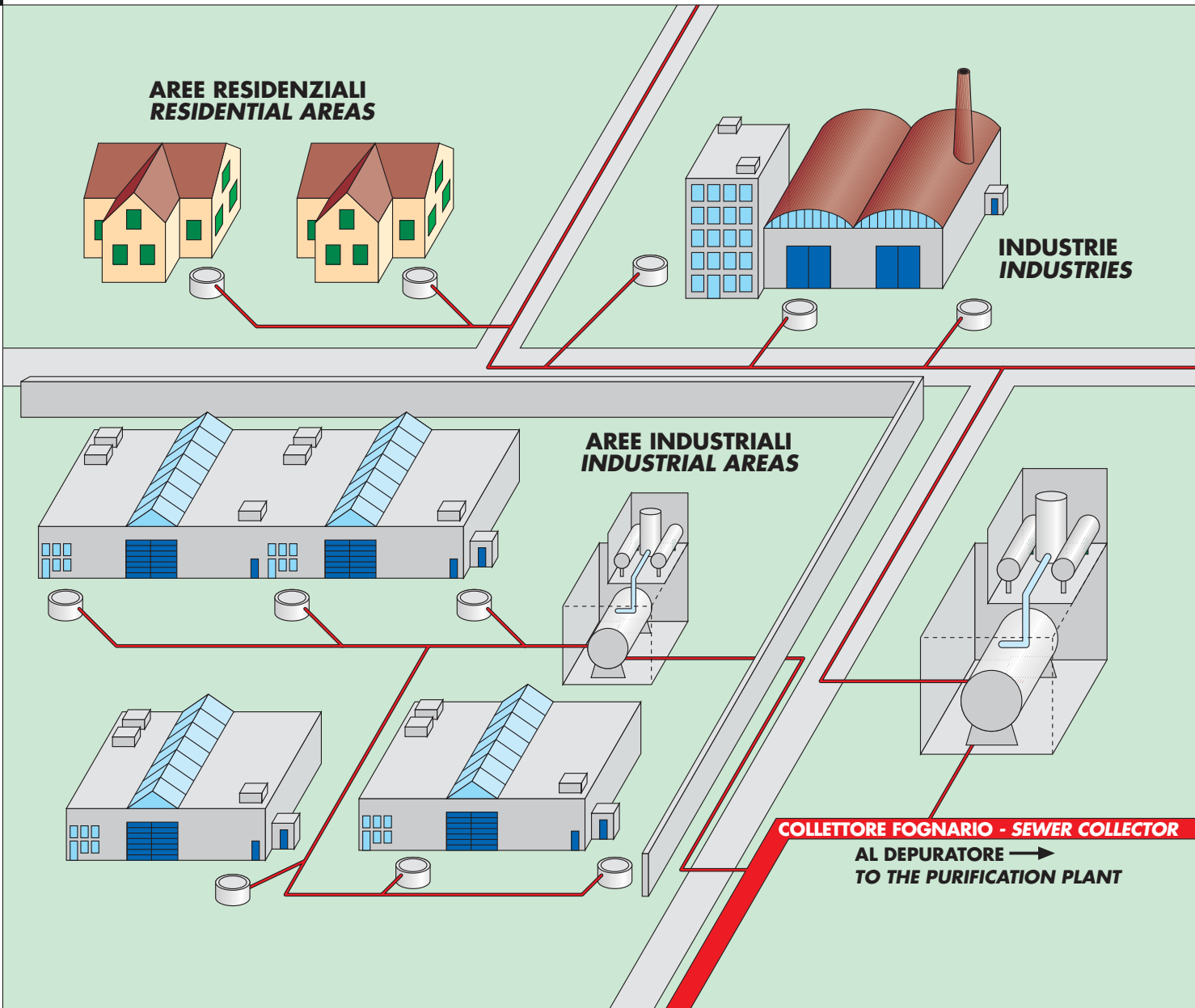


Design and construction of vacuum sewage systems which offer cost effective alternatives to traditional sewage systems for the transport of civil and industrial wastewater.



VACUUM SEWAGE SYSTEM

VACUUM SEWAGE SYSTEM



CENTRALIZED VACUUM SEWAGE PLANT

The Vacuum sewage system (otherwise defined vacuum-sealed) uses the vacuum created inside a network of pipelines for the collection of sewage water and for their carriage to a final station. The system uses the vacuum technology as a method of waste

water transport; its great flexibility permits to exploit the advantages in those applications where the traditional methods are too expensive or unsuitable. The vacuum sewage plant represents a solution for a centralized collection system at reasonable costs.

APPLICATION OF THE SYSTEM

- ✓ CONSTRUCTION OF A NEW SEWAGE NETWORK
- ✓ COMPLETION OF EXISTING SEWAGE NETWORK
- ✓ EXTENSION OF THE SEWAGE NET AT ISOLATED INHABITED UNITS
- ✓ SUBSTITUTION OF OBSOLETE AND INADEQUATE NETWORK
- ✓ SEPARATION OF WASTE WATER COLLECTION NETWORKS
- ✓ HISTORICAL CENTERS WITH PARTICULAR CHARACTERISTICS
- ✓ WASTES COLLECTION IN INDUSTRIAL AREAS
- ✓ HOSPITAL CENTERS
- ✓ TOURIST PORTS
- ✓ EQUIPPED SERVICE AREAS
- ✓ EXHIBITION CENTERS
- ✓ COMMERCIAL CENTERS
- ✓ RECREATIONAL CENTERS
- ✓ TOURIST VILLAGES
- ✓ COASTAL URBANIZATION
- ✓ CAMPINGS



ADVANTAGES OF THE SYSTEM

The characteristics and the performances guaranteed by the vacuum sewage plants permit to resolve a series of surmountable problems

otherwise solvable only with higher costs; the choice of an alternative system involves a series of direct and additional advantages.

- ✓ USE OF SMALL DIAMETER, LIGHT, RESISTANT, LASTING AND EASY-LAYING PIPES
- ✓ REDUCED DIMENSION OF THE EXCAVATIONS, BOTH IN WIDTH AND IN DEPTH
- ✓ MINIMIZATION OF THE ENVIRONMENTAL IMPACT CAUSED BY THE LAYING WORKS OF THE PIPES
- ✓ IN CASE OF EXCAVATION WITH GROUND WATER, REDUCTION OR ELIMINATION OF THE COSTS FOR WELL-POINT
- ✓ ABSOLUTE ABSENCE OF INFILTRATIONS AND LEAKAGES ALONG THE LINES
- ✓ CONNECTION AT THE CONSUMPTIONS SIMPLY WITH SHORT GRAVITY COLLECTOR
- ✓ ELIMINATION OF THE INSPECTION SHAFTS
- ✓ POSSIBILITY TO OVERCOME COUNTERSLOPES
- ✓ POSSIBILITY TO AVOID OR OVERCOME KNOWN OR UNEXPECTED OBSTACLES ALONG THE COURSE OF THE PIPE
- ✓ ELECTRICAL CONNECTIONS LIMITED ONLY TO THE VACUUM CENTRAL
- ✓ INSTALLED GLOBAL POWER REDUCTION
- ✓ ELIMINATION OF BLOCKS AND SEDIMENTATIONS: THE SYSTEM IS SELF-CLEANING
- ✓ FLEXIBILITY OF THE PLANT INSTALLATION WHICH CAN BE EASILY AND ECONOMICALLY ENLARGED AND DEVELOPED
- ✓ EASE OF INTEGRATION WITH THE TRADITIONAL SEWER SYSTEM EXISTING
- ✓ REALIZATION OF A SEPARATE SEWERAGE SYSTEM WITH MINIMUM INSTALLATION AND EXERCISE COSTS



VACUUM SEWAGE SYSTEM

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COMPONENTS OF THE PLANT

CONNECTION WELL

The connection wells are constituted by a structure usually made of glassfibre, HDPE or concrete connected with the gravity domestic sewerage. The wells are equipped with an automatic valve (interface valve) which, when the sewage in the well reaches a preset level, it opens putting in communication the same well with the vacuum collector.

The valve remains open for enough time to guarantee the suction of all the sewage and of a certain quantity of air. The air introduction of the vacuum system is essential to guarantee the transport of the sewage.

The sewage aspirated by different connection wells is transferred to the final collecting station through a network permanently kept in vacuum through a vacuum generation system located in the forward extremity of the same network. The aspirated sewage is introduced in the collector as liquid buffer (or plug), which is kept in motion by the vacuum.

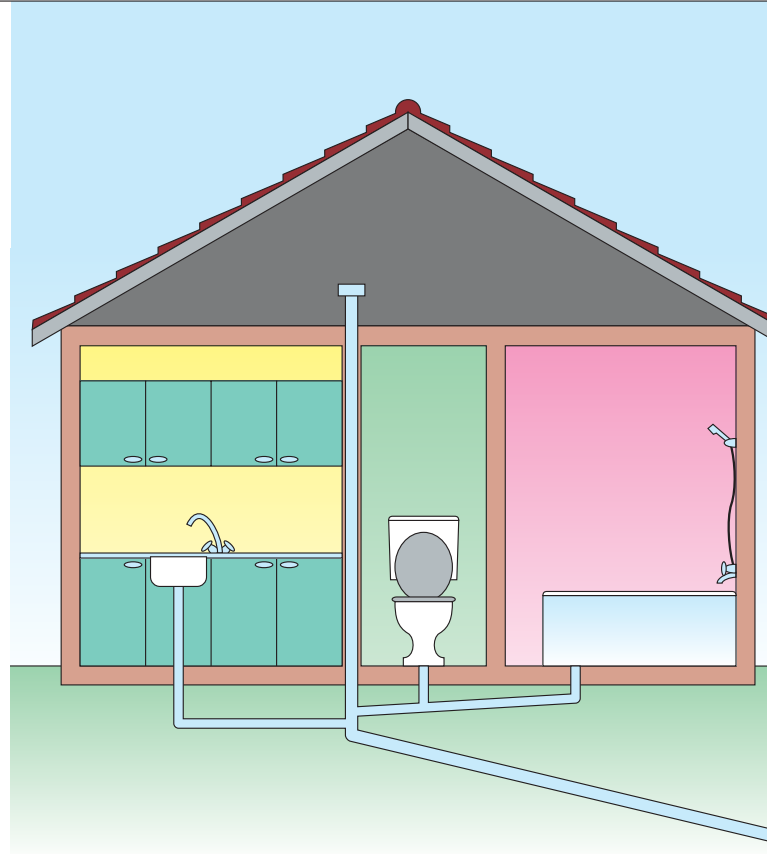
For the transfer toward the collection point, a technical expedient is used, which consist in creating, all along the collector and at a distance of about 50 meters one from the other, some siphons (denominated transport pockets), in which the sewage flowing inside assumes a potentially favourable shape allowing to become one more a plug as soon as new sewage and air are put in the pipeline.

VACUUM STATION AND COLLECTION

The vacuum collection station constitutes the final part of the plant and has the double function of collecting the sewage coming from the collectors (to be sent by the waste pumps to the chosen delivery point) and to create and to restore the wished vacuum level into the collectors.

The collection and vacuum station can be realized according to different plants types.

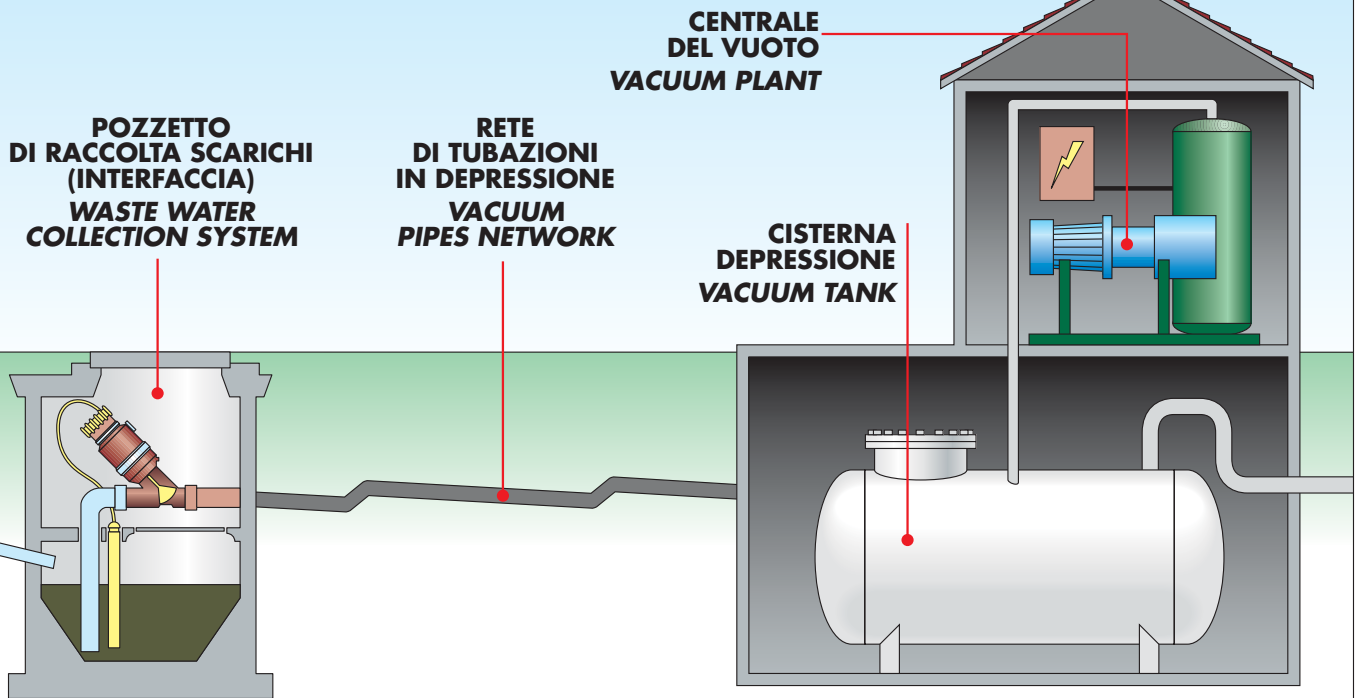
The collection tank can be in vacuum or open air, with waste pumps installed in the tank, and provides to lift and to send the sewage at the delivery point, in some plants types solutions waste pumps aren't necessary.



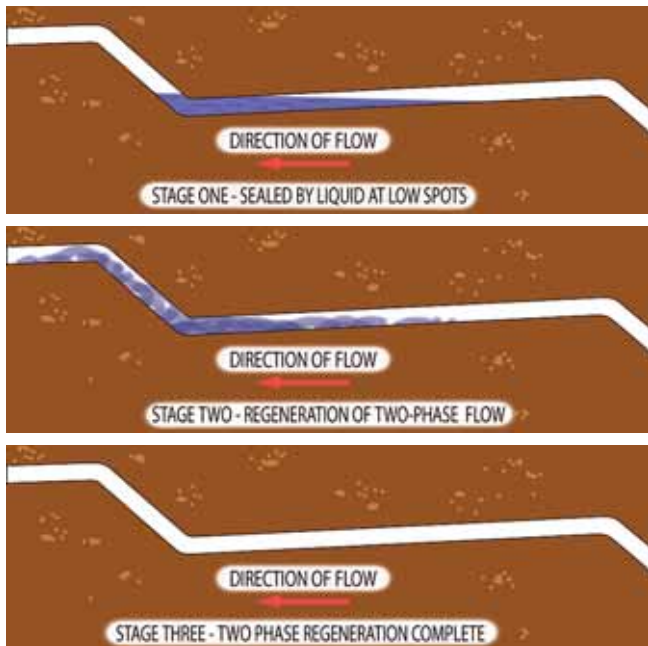
In the photo: particular of the automatic interface valve.



Above: carriage sheft for valve.
At the right: vacuum pumps' box.



Above: valve operation scheme.



On left: pipe vacuum functioning.
Above: vacuum plant.



- *Technical support*
- *Complete management of plants and sewer networks*
- *Supervision of clients' plant management*
- *Analytical laboratory testing*
- *Consulting service regarding environmental issues and working with regulating bodies*



PLANT MANAGEMENT

TECHNICAL SUPPORT

With the goal of providing every client with the best possible service EURO MEC has adopted an after sales service delivered by competent staff.

With every sales proposal, a Technical Support Program is offered in the contract, this is to ensure that the plants supplied and installed are able to guarantee the best results regarding acceptable discharge values and constant operating efficiency over time. Furthermore this program provides consultancy with personnel experienced in dealing with regulatory bodies.

EURO MEC's contract provides for the assessment and maintenance of plants once or twice a year, valid for 6 months, or based on the clients needs, with the exclusion of spare parts if required, cleaning and disposal of resulting sludge and intervention for extraordinary maintenance.

The cost of analyses is included in the technical support contract. EURO MEC's technicians will compile a "technical intervention report" for each visit detailing the state of the plant.



INTERVENTION PROVIDED FOR IN THE STANDARD CONTRACT

Different checks and interventions are required for each different type of plant:

Rain water treatment plants

- Cleaning and function verifying probe
- Mechanical verification of tubing and barriers
- Functional verification of backflow valve
- Verification of automatic tank emptying

Hydrocarbon separation plants

- Checking and cleaning of coalescence filter
- Functional verification of shutter and floatation devices
- Mechanical verification of tubing and barriers
- Checking of sludge and oil tanks

Biological plants with small dimensions

- Checking of sludge in roughing tank
- Verification of sludge concentration in oxidation
- Verification of tubing, devices and electric blowers
- Verification of electrical controls and timers
- Measurement of electricity levels being used by all electrical equipment

Biological plants with medium dimensions and those for industrial use

- Support, from start up, in getting new plant fully operational
- Complete plant management or supervision of the client's management
- Scheduled management of plants with verification of process parameters, and analytical testing on site or in laboratories
- Functional verification of equipment with regular and extraordinary maintenance
- 24 hour support service
- Consulting service regarding environmental issues and discharge permits
- Consulting service regarding working with regulating bodies
- Training for plant management staff
- Complete water and sludge analysis service







GENERAL CATALOGUE ON CD-ROM

www.euromec.net





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