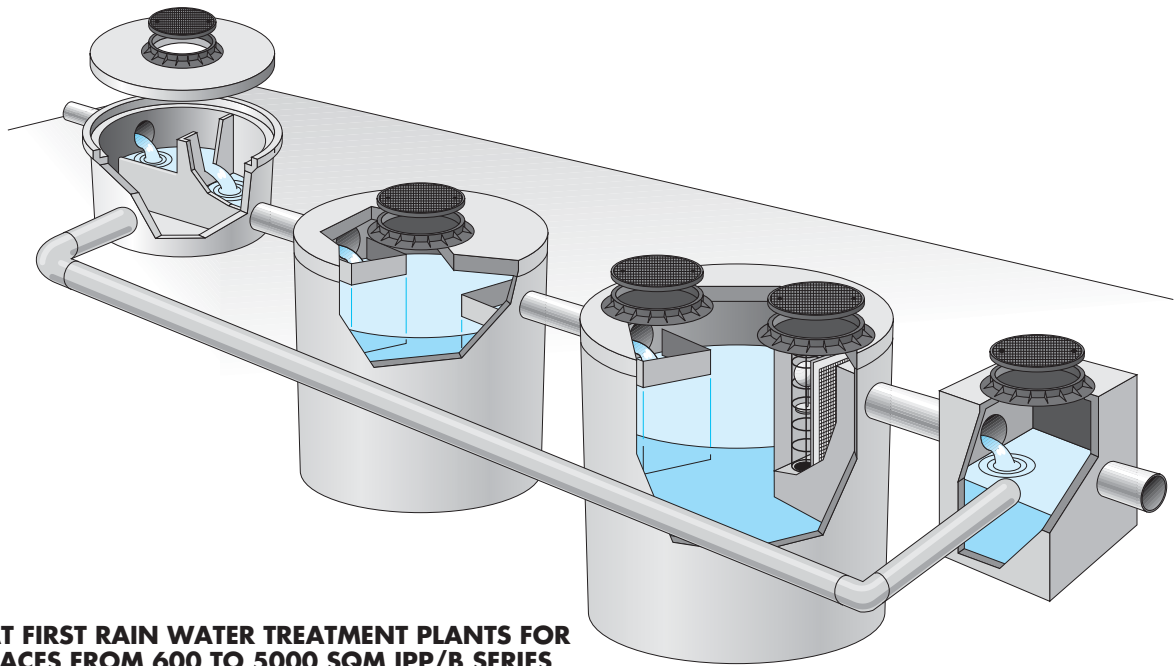


RAIN WATER TREATMENT PLANTS AND EQUIPMENT

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

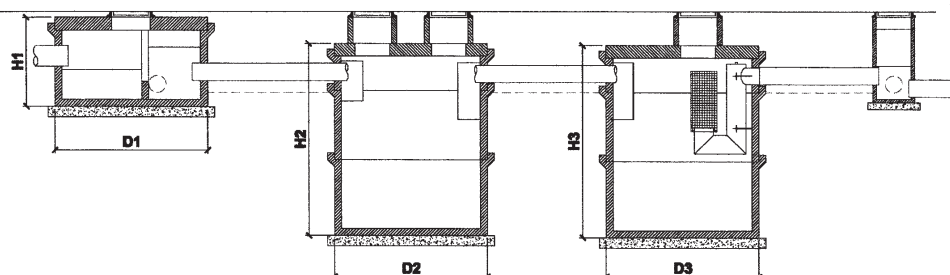
Tanks	:	highly resistant vibrated reinforced concrete
Shafts	:	D400 cast iron
Internal carpentry	:	AISI 304 stainless steel

SPECIFICATION

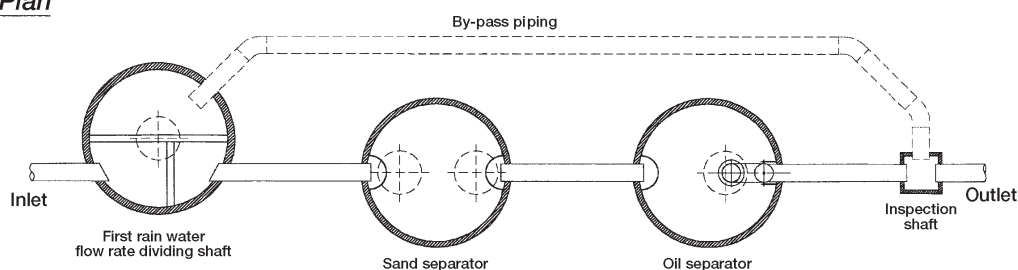
"Supply of a first rain water treatment plant type EURO MEC IPP/B series for the first rain water treatment by means of a by-pass, composed of highly resistant reinforced concrete tanks divided into three sections: a flow rate dividing section, a sand separation section and an oil separation section, 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	2,00	2,00	2,00	2,00
- height	H1	m	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	2,50
- height	H2	m	1,75	2,68	2,29	2,79	2,79	2,85
Oil separator dimensions:								
- diameter	D3	m	1,40	1,40	2,00	2,00	2,00	2,50
- height	H3	m	1,75	1,75	1,79	1,79	2,29	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

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