







### Water treatment solutions





These allow a quality wash since the demineralised water has a very low salt content, thus preventing the appearance of spots on the final rinse. There are different models, treating both low and high salinity water by reverse osmosis. Istobal demineralisers use scale preventer to preserve the membranes.

All the models are modular – a feature which means the machines can be adapted to the expansion needs of the site, by simply adding more filtering modules and so increase production. the difference between the different models is in output capacity, which ranges from 5 m<sup>3</sup>/d to 20 m<sup>3</sup>/d.

They can all be installed in a cabinet, without the need for building work or a big available space.



These are pre-treatment machines and are at present used to prolong the life of the boilers and prevent scale build-up on the site's equipment as a whole.





Istobal recyclers are effective and odour-free, and their mission is to improve the quality of the water after the waste separating stage and reuse it in subsequent washes. They do not use chemical products and require minimum maintenance. There are two categories: Biological units and Sand bed filtering. All units achieve a reuse percentage of between 65% (when demineralised water is used in the rinse) and 75% (when rinsing with mains / well water).

Istobal's specialist technicians will advise you on the minimum civil works that will be needed for the space available.





## **DOSERS FOR**DISINFECTION

These units work autonomously. They control the pH and level of disinfectant in the water to be used in the wash machine or to be dumped, as well as reducing the amount of algae pollution on the wash machine.

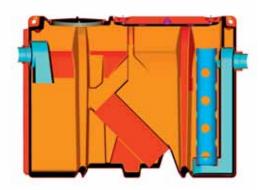
They can also provide the level of disinfection needed in cases where the Health Authorities consider there to be a risk of Legionella proliferating.



Hydrocarbons in water resulting from the vehicle washing process can be run off to the drains. However, if the pollutant dumped by the facility exceeds the legally-permitted limits, the water containing hydrocarbons must be treated.

According to DIN 1999 and European Norm EN-858, as certified by SGS, the treatment must achieve a hydrocarbon concentration lower than 5 mg/l.

Our range of separators is designed to retain the hydrocarbons contained in the water produced by the wash process as well as rainwater and surface run-off and so achieve a concentration <5mg/l. Our separators thus fall within Class I of la norm EN-858.

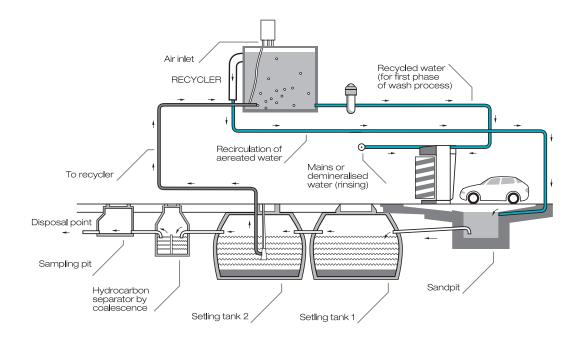


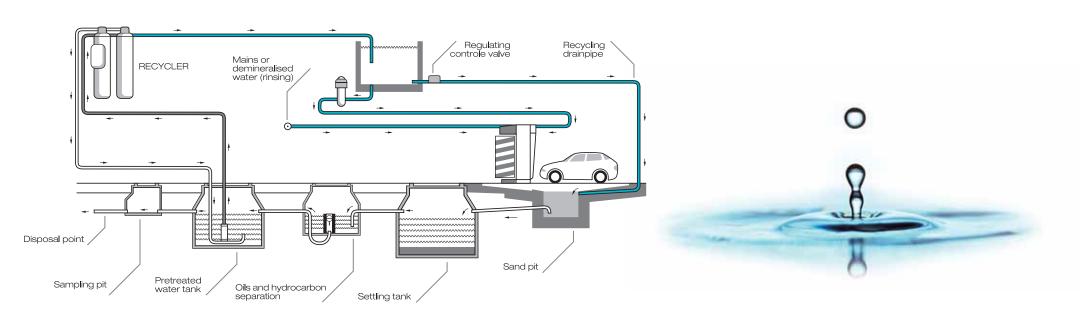


# Those in the know prefer Istobal

To provide a response to these situations, Istobal has designed a full range of solutions for treating, recycling and disinfecting water. A specially-designed line for the world of vehicle washing. Pre- and post- treatment, designed exclusively by the whole R&D team at Istobal and adapted to the specific conditions of every zone and customer, the world over.

Softeners, demineralisers, recyclers and dosers to disinfect and improve the quality of the wash water, leaving it free of smells and without the need for large scale works. The system is ecological, too. Recycling the water means respect for the environment, while at the same time allowing savings on water bills.





#### **Softeners**

Model	N° Bottles	Litres of resin	Dimensions (m)	Flow rate (I/h)
4083500	1	40	0.254 x 1.118	2,500
4081100	1	100	0.356 x 1.651	3,000
4015900	2	80	0.254 x 1,118	2,500
4016000	2	80	0.254 x 1.118	2,500
4016100	2	120	0.305 x 1.220	3,000
4016300	2	280	0.356 x 1.651	4,000

#### **Demineralisers**

Mo	odel	Production	N° Membranes	
Low salinity	High salinity	(m <sup>3</sup> /day)		
4DA3100		1 - 1,5	1	
4DA3200		2,5 - 3	2	
4DA3300		3 - 4	3	
4DA1100	4DA2100	4 - 6	1	
4DA1200	4DA2200	8 - 12	2	
4DA1300	4DA2300	12 - 18	3	
4DA1400	4DA2400	18 - 22	4	

#### Recyclers

Model	Operation	Production (m³/hour)	Pretreated water tank (m³)	Settling tank (m³)
4RB0100	Biologic	6	-	10
4WRA5100	Physical for high pressure	2.5	3	5
4WRA5200	Physical for high pressure	5	3	5
4WRA5300	Physical for high pressure	7.5	3	5
4WRA5400	Physical for high pressure	10	5	8
4WRA5500	Physical for high pressure	15	5	8

#### **Dosers for disinfection**

Model	Dimensions (m)	Format	Range of Readings	Range of P. Redox
4DD0100	0.580 x 0.490 x 1.770	Wall panel	0 - 14 units en pH	-/+ 500 MV

#### **Hidrocarbon separators**

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Model	Dimensions (m)	Flow rate (l/s)	Weight (Kg.)			
5060000	1.570 x 1.180 x 1.058	1.5	80			
5060100	1.570 x 1.180 x 1.200	3	95			
5060200	2.300 x 1.180 x 1.271	6	115			
5060300	2.300 x 1.180 x 1.721	10	132			
5WSH1000	2.300 x 1.180 x 1.721	15	137			

#### Sludge and sand settlers in polyethylene (PE)

Capacity litres	Weight Kg.	Height mm.	Ø mm.	HE inlet mm.	HS outlet mm.
3.000	89	1.935	1.600	1.632	1.585
5.000	160	2.104	2.000	1.650	1.600
8.000	220	2.974	2.000	2.360	2,310
	3.000 5.000	litres Kg.   3.000 89   5.000 160	litres Kg. mm.   3.000 89 1.935   5.000 160 2.104	litres Kg. mm. mm.   3.000 89 1.935 1.600   5.000 160 2.104 2.000	litres Kg. mm. mm. mm.   3.000 89 1.935 1.600 1.632   5.000 160 2.104 2.000 1.650

ISTOBAL, S.A., reserves the right to undertake any changes it may deem necessary for product improvement.





