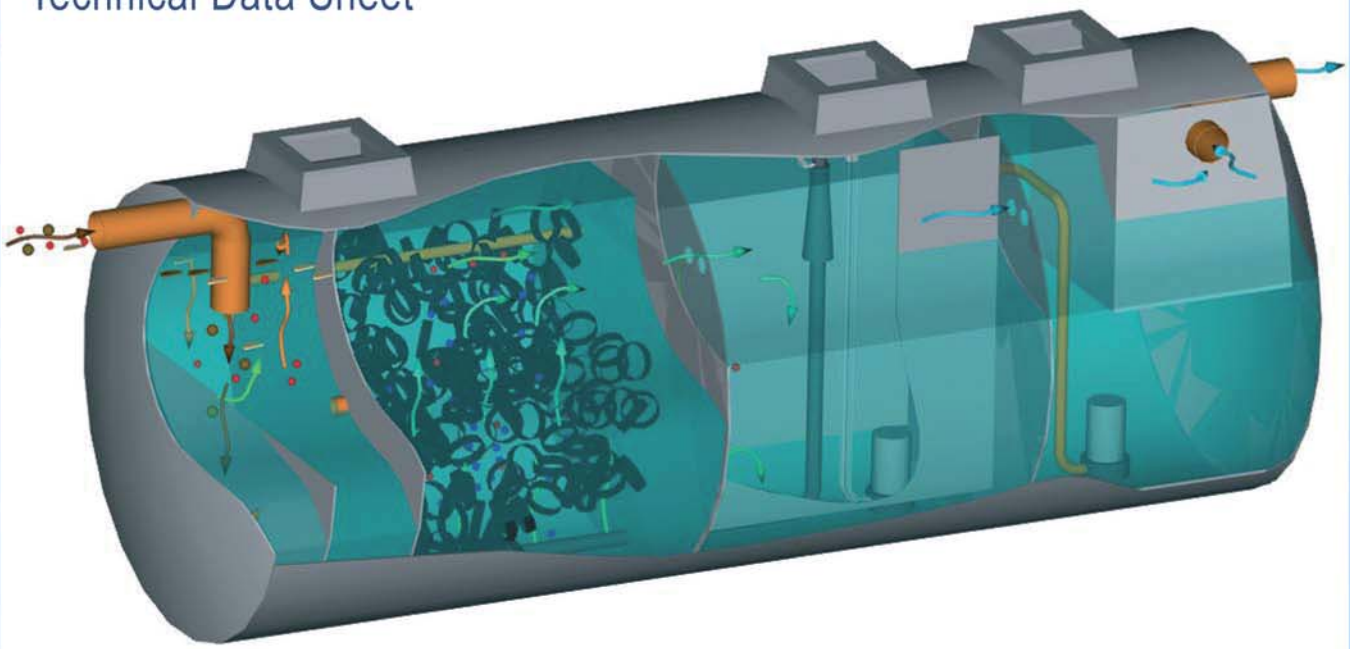
manzi
IMPIANTI DEPURAZIONE ACQUE

COMBINED BIOLOGICAL SYSTEM WITH REUSE Mod. DCAR

Technical Data Sheet



Description

DEPURCOMPACT mod. DCAR is made of FRP (Fiberglass Reinforced Polyester). It is a treatment system with combined biological process for treating industrial wastewater, particularly that of car wash facilities. The system features an activated sludge total oxidation process with both adhered and dispersed biomasses. DCAR has three 600x600 mm inspection windows. The oxygenation system is obtained by means of submersible electric pumps with Venturi ejectors and outdoor air inlet pipe. It comprises a primary sedimentation and oil separating sector, a biological reactor with bacterial bed and polypropylene filling vessels with no less than 180 m2/m3 specific surface area, a secondary sedimentation sector, a treated water storage sector allowing reuse and a sampling pit.

Technical Specifications

model DCAR	mod.		0.3	0.5	1.0	1.5	2.0	3.0	4.0	5.0	6.0	7.0
internal diameter	**D**	**m**	**1.20**	**1.60**	**2.00**	**2.00**	**2.00**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**
length	**L**	**m**	**3.10**	**4.60**	**4.30**	**5.80**	**6.20**	**5.00**	**5.80**	**6.80**	**8.00**	**8.80**
sludge trap - oil separator	A	m	0.50	1.20	0.90	0.90	0.90	0.80	0.90	1.00	1.30	1.30
biological oxidation	B	m	0.90	0.90	0.80	1.30	1.30	1.40	1.60	2.00	2.40	2.70
secondary settling	C	m	1.00	1.00	1.40	1.80	2.20	1.50	2.00	2.50	3.00	3.50
storage	D	m	0.70	1.50	1.20	1.80	1.80	1.30	1.30	1.30	1.30	1.30
sludge trap / oil separator volume		m3	0.53	2.00	2.62	2.52	2.52	3.23	3.53	4.04	5.04	5.01
oxidation volume		m3	0.43	0.72	1.43	2.15	2.87	4.30	5.73	7.17	8.60	10.03
settling volume		m	0.75	1.26	2.50	3.30	4.00	4.50	6.00	7.50	9.00	10.50
storage volume		m3	0.70	3.00	3.47	4.70	4.70	5.00	5.00	5.00	5.00	5.00
inlet height	H in	m	1.05	1.40	1.80	1.80	1.80	2.20	2.20	2.20	2.20	2.20
outlet height	H out	m	0.95	1.30	1.70	1.70	1.70	2.10	2.10	2.10	2.10	2.10
maximum flow rate		m3/h	0.30	0.50	1.00	1.50	2.00	3.00	4.00	5.00	6.00	7.00
diameter of IN - OUT manifolds		mm	125	200	200	200	200	200	200	200	200	200
number of oxid. + recirc. pumps		N°	1+1	2+1	2+1	2+1	2+1	2+1	2+1	2+1	2+1	2+1