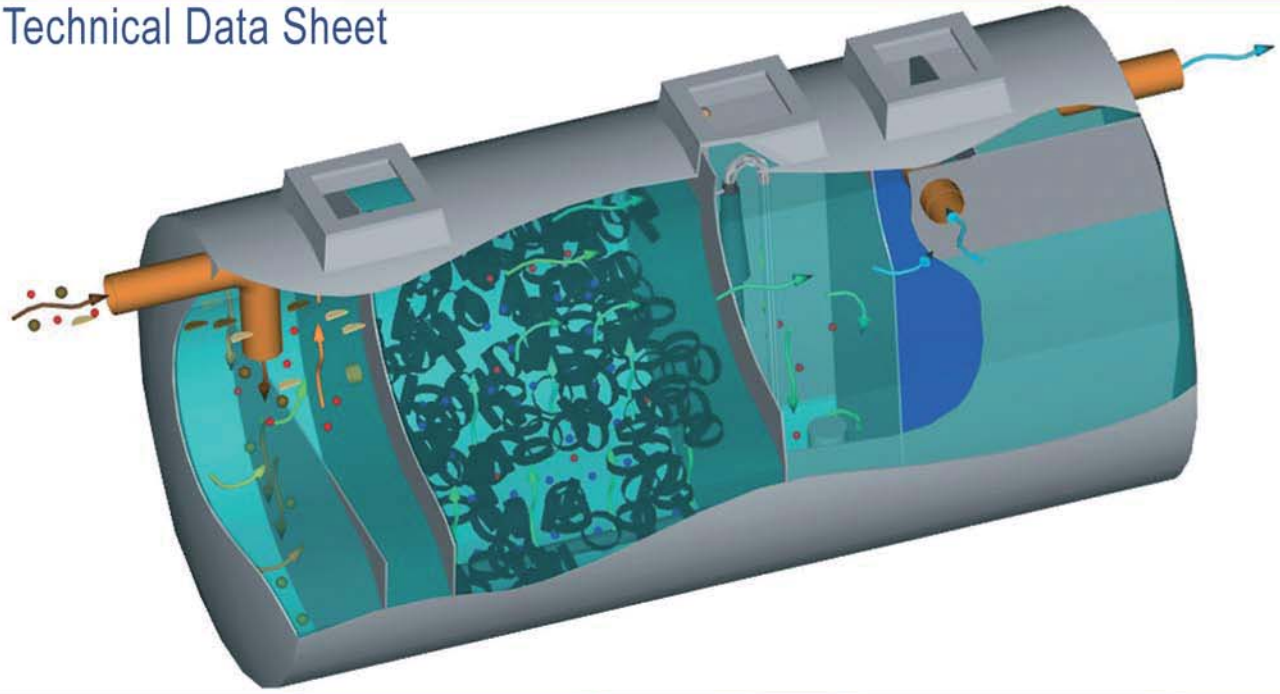
manzi
IMPIANTI DEPURAZIONE ACQUE

COMBINED BIOLOGICAL SYSTEM Mod. DCAF

Technical Data Sheet



Description

DEPURCOMPACT mod. DCAF is made of FRP (Fiberglass Reinforced Polyester). It is a monobloc treatment system with a 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. DCAF 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 and a sampling pit. It is also equipped with a filter pack to ensure effluents with suspended solids within the limits in the tables established by Italian Law Decree D. Lgs 152/06.

Technical Specifications

model DCAF	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**	**2.50**	**3.10**	**3.10**	**4.00**	**4.40**	**3.70**	**4.50**	**5.50**	**6.70**	**7.50**
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	1.10	1.00	1.40	1.80	2.20	1.50	2.00	2.50	3.00	3.50
Sludge trap / oil separator volume		m3	0.53	2.00	2.54	2.54	2.52	3.23	3.53	4.08	5.09	5.12
oxidation volume		m3	0.46	0.77	1.55	2.32	3.09	4.64	6.19	7.73	9.28	10.83
settling volume		m3	2.70	2.53	2.50	2.00	2.00	1.50	1.50	1.50	1.50	1.50
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	0.3	0.5	1.0	1.5	2.0	3.0	4.0	5.0	6.0	7.0
diameter of IN - OUT manifolds		mm	125	200	200	200	200	200	200	200	200	200
number of pumps		N°	1	2	2	2	2	2	2	2	2	2