

WASTE WATER TREATMENT PLANT WITH BIOLOGICAL FILTER OR RECIRCULATED TRICKLE BED REACTOR

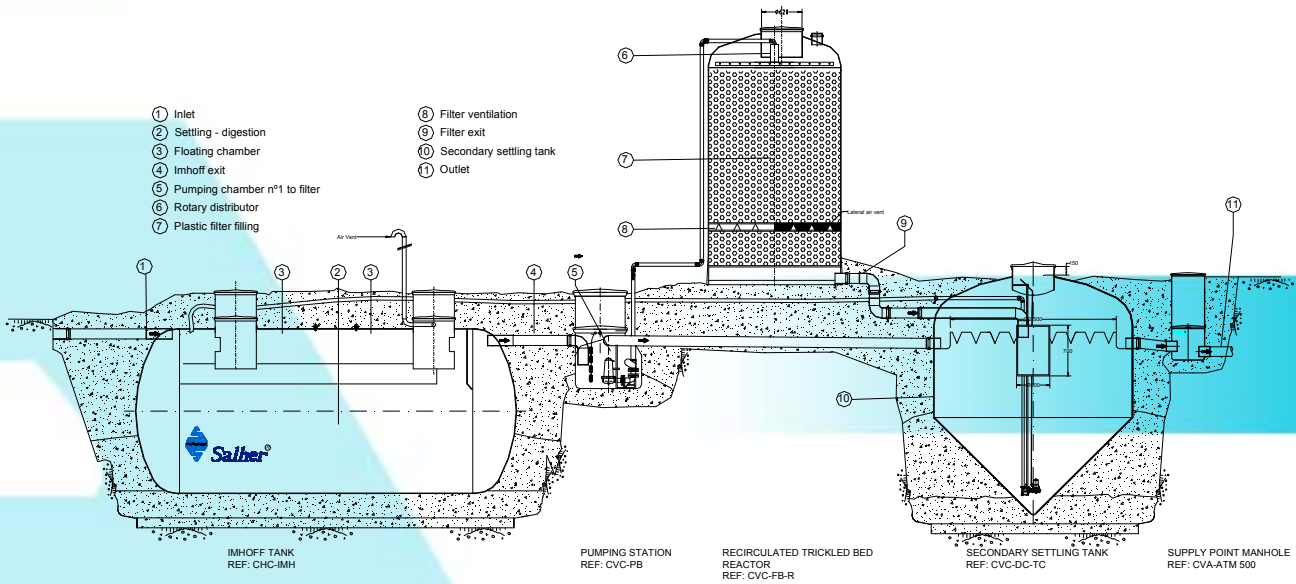
REF: IMH – LBR - TC

Applications:

- Organic matter removal (BOD₅).
- Suspended solids removal (SS).

Characteristics:

- Salher brand, model IMH-LBR-TC.
- Manufactured in Glass Fiber Reinforced Polyester (GFRP) with orthophthalic resins.
- Organic matter removal efficiency (BOD₅): 85-90%.
- Suspended solids (SS) removal efficiency: 90%.
- Primary treatment consisting in settling-digestion process (Imhoff tank).
- Secondary treatment by trickling filter, fed by a rotary distributor (rotary arm), bottom draw-off system and natural ventilation.
- Synthetic filter with high porosity index (95%) and a high specific surface area (140m²/m³).
- Single pump lifting station for biological filter supply with a level float switch.
Optional: 2 pumps with automatic alternate functioning.
- Independent inverted cone-bottom centre-feed secondary clarifier in GFRP with Thompson V-notch weir.
- A submersible pump for the sludge draw-off and return to the Imhoff tank digestion chamber with auto-coupling system.
- Partial or complete recirculation of the treated water to increase the treatment efficiency.
- PVC inlet and outlet pipes.
- Manholes with GFRP cover.
- Outlet tube in the manhole to install a ventilation pipe.



3

PE	FLOW [m ³ /d]	IMHOFF TANK			SLBR (tricking filter)			SETTLING TANK			MANHOLE		
		CAPACITY [m ³]	LENGTH [m]	Ø [m]	CAPACITY [m ³]	Ø [m]	H [m]	CAPACITY [m ³]	Ø [m]	H [m]	CAPACITY [m ³]	Ø [m]	H [m]
50	7,5	7,5	2,79	2,0	3,0	1,2	2,6	2,0	1,2	2,17	1,0	12	1,0
100	15,0	13,5	4,70	2,0	6,0	1,7	2,6	4,0	1,7	2,33	1,0	1,2	1,0
150	22,5	18,75	4,32	2,5	9,0	2,0	2,75	6,0	1,7	3,21	1,5	1,2	1,45
200	30,0	26,25	5,85	2,5	11,0	2,0	3,4	8,0	2,0	3,21	1,5	1,2	1,45
250	37,5	33,75	7,38	2,5	13,5	2,2	3,4	10,0	2,25	3,27	2	1,4	1,44
300	45,0	37,5	8,14	2,5	16,5	2,5	3,3	12,0	2,5	3,28	2,5	1,4	1,76
350	52,5	45,0	9,67	2,5	18,5	2,5	3,7	14,0	2,5	3,69	2,5	1,4	1,76
400	60,0	48,75	10,44	2,5	22,0	3,0	3,1	16,0	3,0	3,26	3,0	1,7	1,49
450	67,5	56,25	11,96	2,5	24,0	3,0	3,4	18,0	3,0	3,55	3,0	1,7	1,49
500	75,0	63,75	9,60	3,0	26,0	3,0	3,7	20,0	3,0	3,83	3,5	1,7	1,70
600	90,0	75,0	11,30	3,0	33,0	3,5	3,35	23,0	3,5	3,56	4,0	1,7	1,93
700	105,0	90,0	13,30	3,0	36,5	3,5	3,8	27,0	3,5	3,97	5,0	2,0	1,80
800	120,0	97,5	10,80	3,5	43,0	4,0	3,4	30,0	3,5	4,28	6,0	2,0	2,11
900	135,0	112,5	11,30	3,5	47,0	4,0	3,7	35,0	4,0	4,12	6,0	2,0	2,11
1000	150,0	120	13,16	3,5	51,0	4,0	4,1	40,0	4,0	4,52	7,0	2,0	2,41