

PURIFYING SYSTEMS

UNIVERSAL "SLUDGE RECIRCULATION" PURIFYING SYSTEM for the disposal of all domestic waste

rev. 1 25/05/06

DESCRIPTION

Total oxidation, active sludge, biological purification system for the disposal of domestic waste. Formed of a cylindrical PRFV tank, divided into three compartments.

Anaerobic digestion: during which the flow of incoming sewage slows, the sewage equalises, and the suspended solids drop and settle.

Oxidation: during which the pollutant load is transformed into a more stable substance, and the nitrogen oxidised. Aeration and mixing of the activated sludge occur through tiny air bubble diffusers fed by a diaphragm-type air compressor.

Final sedimentation to separate the active sludge from the waste and sediment the sludge conveyed by means of air-lift to the top of the system.



Machine marked **CE** in conformity with the safety provisions of MACHINE DIRECTIVE (98/37/CE).

GUARANTEED DISCHARGE LIMITS

Purified sewage conforms to parameters nos. 1 to 8 of Table 3 (Limit wastewater values in surface waters) provided for in Enclosure 5 of Legislative Decree no. 152/1999, and successive amendments and riders. These limits are guaranteed on the understanding that the system is periodically subjected to maintenance, operates continuously, and the characteristics of the incoming sewage conform with those specified in the project data.

PROJECT DATA

System sized using the "inhabitant equivalent" (I.E.) concept, which defines the specific water and organic load of a typical inhabitant. Calculated according to the maximum loads forecasted.

Water load per I.E

l/d 250

Organic load per I.E.

gBOD₅/d 60

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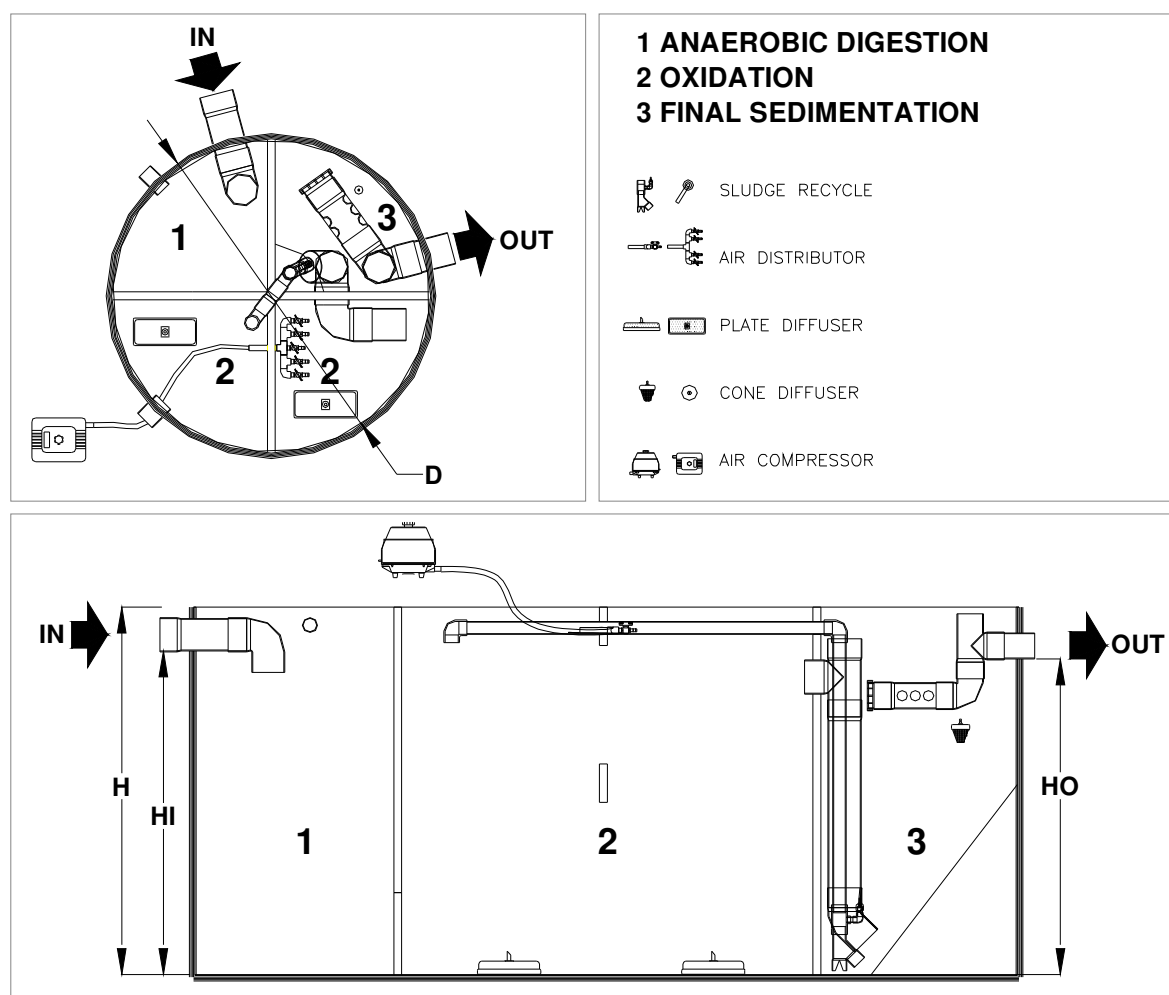
People	D Internal diameter	H Total height	HI Height at input	HO Height at output	Ø IN	Ø OUT	Capacity	Weight	Diaphragm- type air compressor Model
I.E.	mm	mm	mm	mm	mm	mm	lt	kg	
5	1200	1430	1260	1230	125	100	1390	100	HP 60
7	1400	1400	1230	1200	125	100	1850	130	HP 60
9	1400	1740	1570	1540	125	100	2370	150	HP 60
11	1600	1650	1480	1450	125	100	2920	130	HP 60
13	1600	1900	1690	1610	125	125	3240	150	HP 80
16	1800	1800	1590	1510	125	125	3840	170	HP 80
20	2000	1800	1590	1510	125	125	4740	180	HP 100
25	2000	2300	2090	2010	125	125	6310	220	HP 150
30	2500	1900	1690	1610	125	125	7900	300	HP 150
35	2500	2150	1940	1860	125	125	9130	330	HP 150
40	3000	1750	1540	1460	125	125	10320	320	HP 150
50	3000	2070	1860	1780	125	125	12580	390	HP 200

INPUT pipe air hoses Ø 63mm

OUTPUT biogas (Ø63 mm from 5 IE at 13 IE) (Ø80 mm from 16 IE at 50 IE)

SLUDGE RECYCLE (1P from 5 IE at 9 IE) (1G from 11 IE at 50 IE)

PLATE DIFFUSER (2P from 5 IE at 9 IE) (2M from 11 IE at 25 IE) (2G from 30 IE at 50 IE)



O.R.M. reserves the right to modify the technical features and sizes of its products at any time.