

AIRFLEX-Diffuser

We supply Mov

AIRFLEX range of products includes a wide range of aeration products as fine bubble and Coarse bubble membrane diffuser-Tube type and Disc type diffuser. The AIRFLEX Membrane Diffuser is manufactured from high Grade EPDM sleeves, environmentally resistant and durable molded PVC base

PROCESS

In the waste water treatment process, Aeration, to be effective, must transfer oxygen to the liquid for use by microorganism, to produce a floc and mixing the liquor. Diffused aeration is effective method for aeration by means of porous diffusers installed at the bottom of the tank, in the aeration process, oxygen transfer takes place by molecular diffusion through the interface film between air and liquid and it increases in proportion to the interface area. For a given air flow, as the number of bubbles increases, the surface area increases and the rise velocity of bubbles decreases, the diffused aeration transfer more surface area to the liquid than mechanical aeration, e.g. diffuser emerging up to 2 mm bubbles presents six times more surface area to the liquid than surface aerator emitting 10 to 12 mm bubbles, also rise velocity of bubbles is lower. Surface area and rise velocity of bubbles contribute to the higher oxygen transfer capacity of diffused aeration system.

AIRFLEX TUBULAR DIFFUSER PRODUCT SPECIFICATION SHEET

Model	SIZE mm D x L	Connection	uPVC support pipe OD in mm	Perforation length in mm	Min. Active surface area of diffuser	Air discharge per diffuser at medium duty in M ³ /hr	@ Nos. of " " Slit perforation Slit length	Oxygen transfer per diffuser(SOTR) SAE in O ₂ Kg/kw/hr
"AIRFLEX -1"	63x625	3/4" BSP Female thread	63	600	0.1 m ²	7-9	12244	Up to 3
"AIRFLEX -2"	63x1000	3/4" BSP Female thread	63	1000	0.18 m ²	8.5-11.8	17660	Up to 4
"AIRFLEX -3"	90x1000	1" BSP Female thread	90	1000	0.251 m ²	11-14.5	19450	Up to 4.32

AIRFLEX FINE BUBBLE EPDM MEMBRANE DISC DIFFUSER DISC-245 / DISC-330

MODEL	DISC-245	DISC-330
Material of Membrane	EPDM	EPDM
Disc Base	PP	PP
Dia. Of Disc (mm)	245 (9")	330 (12")
Air Flow (M ³ /H)	1.0-7.2	1.0-12.0
Bubble Size (mm)	1-3	1-3
Floor Coverage (%)	2-25	2-25
Weight (kg)	0.60	0.85
Operating temp.(°C)	85	85
End connection	3/4" BSP Male thread	3/4" BSP Male thread
Perforated Area (M ²)	0.032	0.061



COARSE BUBBLE DIFFUSER :

SPECIFICATION :

- Model: DISC - 150
- Shape: Disc
- Size: 150mm (6") dia.
- Bubble Size: 4 to 5 mm
- Membrane: EPDM
- Membrane Support: PVC& ABS
- Operating Temp. : 85° C
- Air Discharge: From Peripheral
- No. of Air Discharge Ports: 8
- Air Flow Rate Per Diffuser: 4-10 m³/hr
- Min. Reqd. Qty. for Mixing: 1 Nos/ m²
- End connection: ¾" and 1" BSP Male thread
- Special Feature: Non Clog Arrangement