SURFACE AERATION

AER-AS

AERATOR-MIXER

SFA enviro

FLOATING SURFACE AERATOR

Aquaturbo

MAIN CHARACTERISTICS

Axial flow aerator with patented instantaneous radial discharge. World renowned for high aeration efficiency in field conditions due to maximum transfer of kinetic energy to water surface.

Installations range from small tanks to large lagoons due to high mixing and oxygen dispersion characteristic in the form of an apple shaped flow.

ADVANTAGES

EXCELLENT EFFICIENCY IN WASTEWATER

MAINTAINS THE SAME O_2 IN EFFICIENCY OVER TIME

EXCEPTIONAL MIXING AND OXYGEN DISPERSION

ADAPTABLE TO SUIT VARIED WATER LEVELS

WATER LEVEL DOES NOT AFFECT EFFICIENCY

SUITABLE FOR VARIOUS LAGOONS, TANKS, OR DITCHES; ANY SHAPE OR ANY SIZE

SUITABLE FOR FIXED AND VARIABLE SPEED FREQUENCY OPERATION

UNPARALLELED WATER-COOLING CAPABILITIES – ADJUSTABLE RATE

MINIMAL NOISE IN OPERATION

LOW-AEROSOL PRODUCTION AND LOW-ODOUR EMISSION

EASE OF INSTALLATION – EVEN WHILST THE PLANT REMAINS ONLINE

MINIMAL MAINTENANCE

SIMPLICITY OF DESIGN AND OPERATION

NO GEARBOX, NO SUBMERGED BEARINGS, NO MECHANICAL SEALS, NO BLOWERS, NO PIPEWORK, OR VALVES

LONG SERVICE LIFE – NO CONSUMABLE PARTS, NO MAJOR WEAR SURFACES

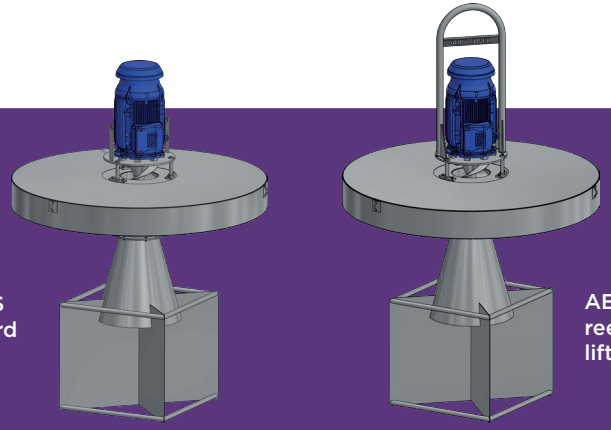
100% STAINLESS STEEL CONSTRUCTION

CONSTRUCTION

- Reduce or extended draft suction cone cross-cone to suit water level
- 3 mooring eyes
- Alternate materials of construction – AISI 316L stainless steel; duplex stainless steel upon request
- Special cone-cross options to suit application -e.g., flow through design for oxidation ditch with varying flows characteristics

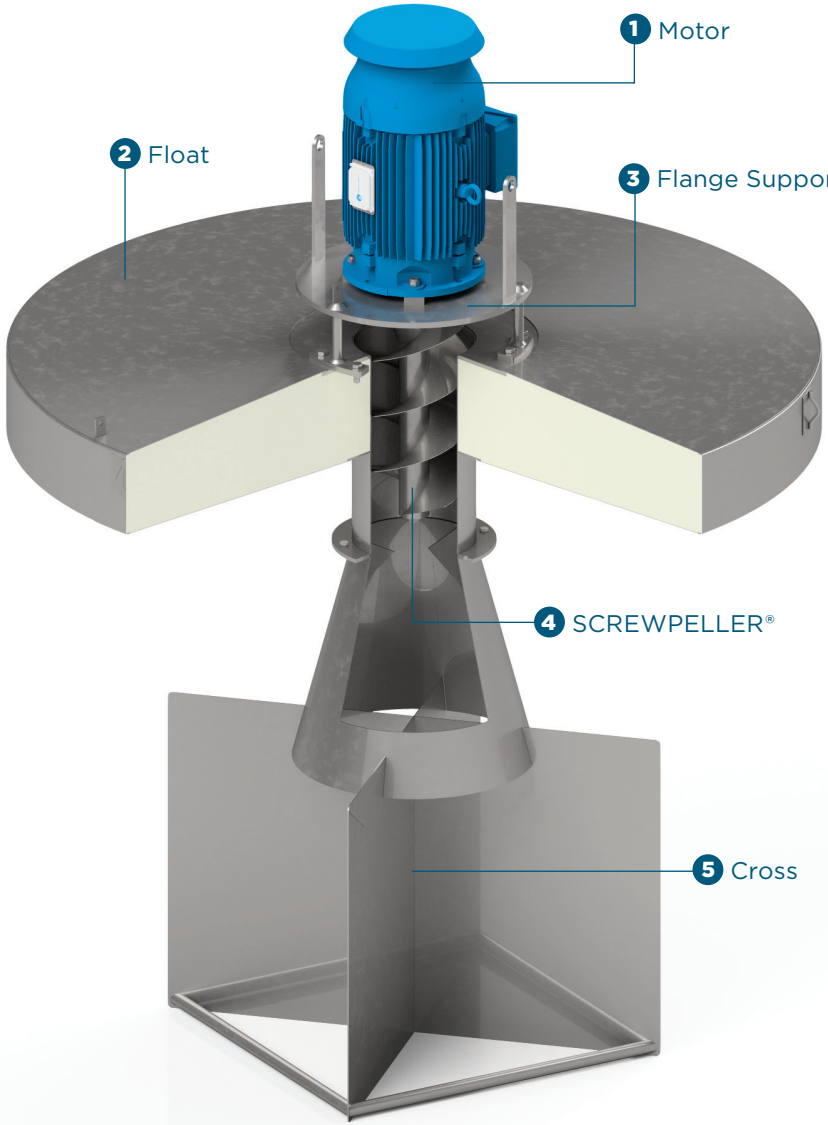
COMPONENTS

- High efficiency motor, mooring eyes
- Guiding tubes system
- Anti-vortex Vanes
- Cone-cross
- Soft-edge liner base
- Screwpeller®
- Large stabilisation cross
- 100% Stainless steel construction
- Anti-erosion plate



AER-AS
Standard

AER-AS with
reenforced
lifting bracket



OPERATIONAL WATER LEVELS + ZONES

			WATER LEVELS				ZONE OF INFLUENCE		
			Min waterlevel at min draft*	Min waterlevel at standard draft*	Max waterlevel at standard draft	Max waterlevel at max draft	A** Hight turbulance diameter	B complete mix diameter	C oxygen dispersion diameter
Model	kW	rpm	m	m	m	m	m	m	m
SERIES 24 4Pol ⏦ 1500 rpm									
AER-AS 0075-24	0.75	1455	0.63	0.98	1.80	2.80	2.5	7	20
AER-AS 0110-24	1.1	1460	0.69	1.00	1.90	2.90	3.5	8	24
AER-AS 0150-24	4.5	1455	0.71	1.05	2.05	3.05	4.5	9	28
AER-AS 0220-24	2.2	1440	0.74	0.98	2.20	3.20	5.5	12	45
AER-A S0300-24	3	1440	0.74	1.06	2.40	3.40	6.5	13	45
AER-AS 0400-24	4	1450	0.80	1.11	2.50	3.50	8	14	47
AER-AS 0550-24	5.5	1465	0.85	1.26	2.60	3.60	9.5	15	49
AER-AS 0750-24	7.5	1465	0.90	1.33	2.80	3.80	10	16	52
AER-AS 1100-24	11	1470	1.00	1.46	3.00	4.00	10.5	19	61
AER-AS 1500-24	15	1470	1.08	1.53	3.20	4.70	11	22	70
AER-AS 1850-24	18.5	1470	1.10	1.73	3.30	4.80	11.5	24	75
AER-AS 2200-24	22	1475	1.10	1.83	3.40	4.90	12	25	80
AER-AS 3000-24	30	1480	1.20	2.14	3.60	5.10	13	25.5	86
AER-AS 3700-24	37	1480	1.24	2.08	3.80	5.30	14	26	90
AER-AS 4500-24	45	1480	1.26	2.16	3.90	5.40	15	26.5	95
AER-AS 5500-24	55	1480	1.38	2.30	4.00	5.50	16	27	100
SERIES 16 6Pol ⏦ 1000 rpm									
AER-AS0750-16	7.5	975	1.00	1.45	2.90	3.90	10.5	18	51
AER-AS1100-16	11	975	1.09	1.68	3.10	4.10	11.5	20	63
AER-AS1500-16	15	975	1.10	1.75	3.30	4.80	12	23	72
AER-AS1850-16	18.5	975	1.15	2.11	3.40	4.90	12.5	25	78
AER-AS2200-16	22	980	1.20	2.13	3.55	5.05	13	27	84
AER-AS3000-16	30	985	1.20	2.17	3.80	5.30	14	31	95
AER-AS3700-16	37	985	1.26	2.28	3.90	5.40	14.5	33	100
AER-AS4500-16	45	990	1.35	2.35	4.05	5.55	15	35	107
AER-AS5500-16	55	990	1.49	2.47	4.20	5.95	15.5	40	116
AER-AS7500-16	75	990	1.60	2.86	4.50	6.25	16.5	44	128
AER-AS9000-16	90	990	1.60	3.05	4.65	6.40	17	46	137
AER-AS1100-16	110	990	1.90	2.95	4.80	6.55	17.5	50	143
AER-AS13200-16	132	990	1.90	2.93	5.00	6.75	18	52	145
SERIES 12 8Pol ⏦ 750 rpm									
AER-AS 3700-12	37	740	1.49	2.39	4.20	5.70	15	34	103
AER-AS 4500-12	45	740	1.53	2.47	4.35	5.85	15.5	36	110
AER-AS 5500-12	55	740	1.79	2.89	4.55	6.30	16	41	119
AER-AS 7500-12	75	740	1.85	2.99	4.80	6.55	17	48	128
AER-AS 9000-12	90	740	2.10	3.41	5.00	6.75	17.5	49	135
AER-AS 11000-12	110	750	2.14	3.46	5.20	6.95	18	53	144
AER-AS 13200-12	132	750	2.25	3.64	5.40	7.15	18	57	150
AER-AS 16000-12	160	750	2.32	3.76	5.60	7.35	18.5	60	154
AER-AS 20000-12	200	750	2.39	3.89	5.90	7.65	19	62	157

Please note :

Final aerator selection and exact draft is dependent upon many factors including basin construction (concrete, earthen, membrane liner or other), water level fluctuation; nature and degree of settled deposits, process objectives (complete mix, partial mix, laminar mix or other) and whether the influent is screened. An Anti-erosion Plate is often specified for operation in shallow earthen or membrane lined basins and when settled deposits are present.

** Min water levels 1 and 2 are draft plus 0.1m*

Please note:

Zones A, B and C are averages values depending on basin dimensions, water levels, solid concentration, operational hours per day and reactor configuration.

*** Zone A is min basin diameter and min aerator centres.*

OPTIONS

- Alternate WEG paint plans and colours upon request
- WEG W3Seal* with brass labyrinth seal for ultimate ingress protection
- Tropicalised Windings -Internal paint system

VARIOUS DRAFTS OPTIONS FOR SUCTION CONES

MIN drafts – STD draft – MAX draft

Each Aquaturbo AER-AS surface aerator has a standard depth suction cone with an associated min and max water level range. The draft can be reduced or extended within the operational limits of each model. Optimum mixing and oxygen transfer is achieved when the correct draft is selected to suit the water level.

A STEP AHEAD IN WATER TECHNOLOGY

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