

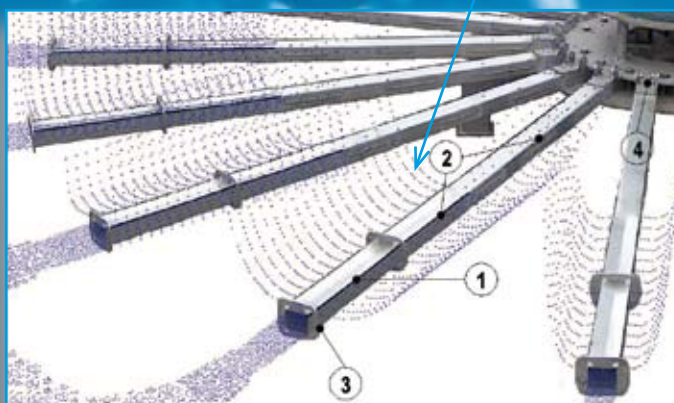


AQUASYSTEMS INTERNATIONAL NV



AQUA TURBO® SUBMERSIBLE AERATOR Series AER-SB and Series AER-SB/L

- ✓ Good oxygen transfer in waste water with moderate and high solids concentrations
- ✓ Standard construction material: AISI 304L
- ✓ Can be adapted to most tank configurations
- ✓ Intensive mixing
- ✓ Simple installation
- ✓ No requirement to empty the tank, neither to install the equipment, nor for the maintenance
- ✓ Low sound level
- ✓ Unit power from 1,1 to 110 kW
- ✓ Two executions in function of the tank surface area:
 - series SB :
without air diffusion channels,
for narrow tanks
 - series SB/L :
with non-clogging air diffusion channels,
for large tanks ; the channels
increase the efficiency of O₂-transfer
- ✓ Option: hardwearing execution when erosive material is present



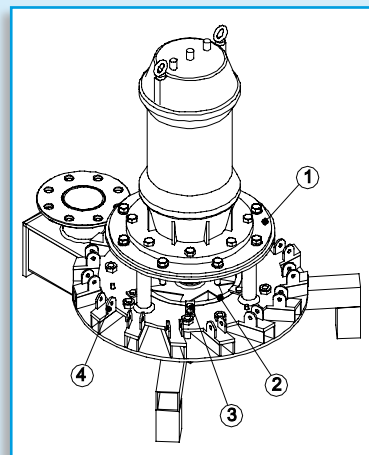
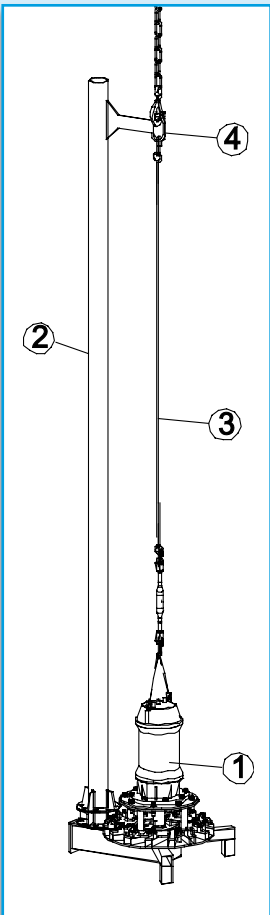
STANDARD INSTALLATION

The standard installation of a submersible aerator AER-SB generally consists of the following (see drawing):

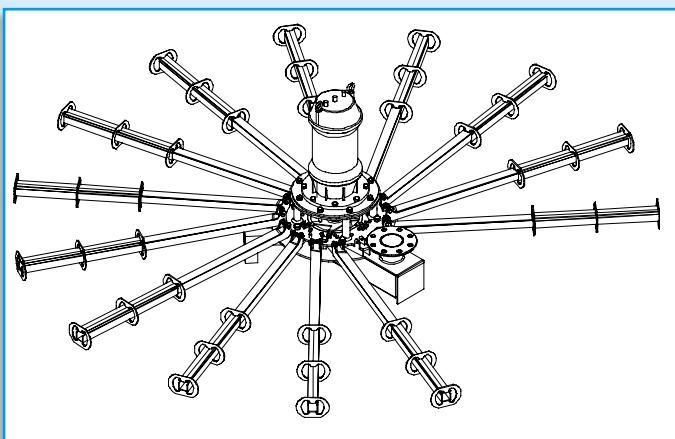
- the aerator, together with its submersible electrical motor (1) positioned on the bottom of the basin
- an air-intake pipe (2)
- and a lifting cable (3), with lifting bracket (4).

Some construction details (standard) are to be noticed (see drawing and photo beneath):

- the intermediate flange (1) and the calibrated ring (2), fixed with bolts and clamps (3), are especially developed to enable a quick inspection of the wearing parts of the equipment, and an easy replacement thereof
- the connection brackets (4) enable an easy installation of the air diffusion channels



AIR DIFFUSION CHANNELS

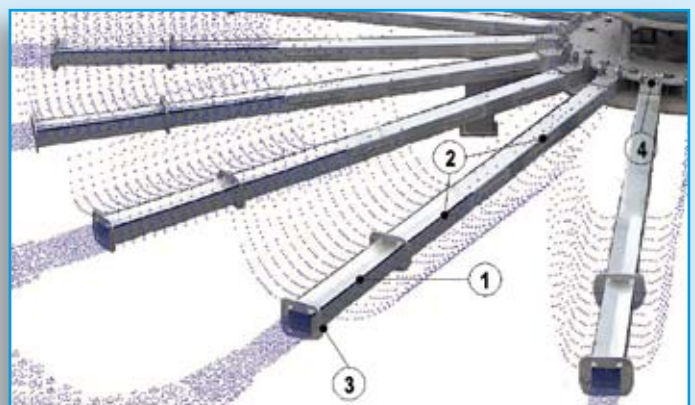


The specialy engineered air diffusion channels:

- increase the oxygen transfer, up to 20%
- assure an optimal distribution of **fine air bubbles** into the basin

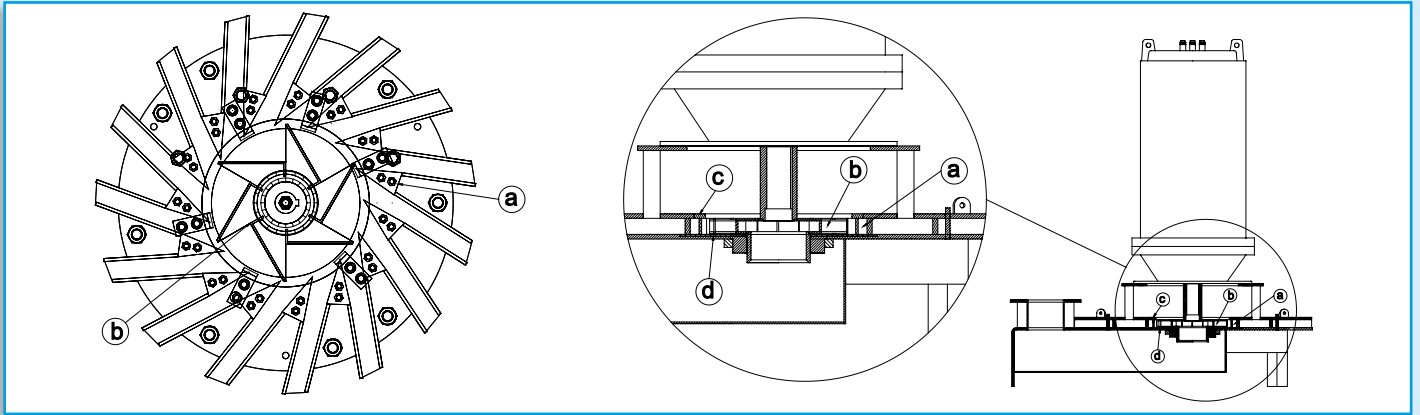
Construction details:

- optimal air distribution due to bilateral slits (1) on the outside of the channels, halfway down (2)
- non-clogging rings (3)
- non-clogging connection to aerator (4)



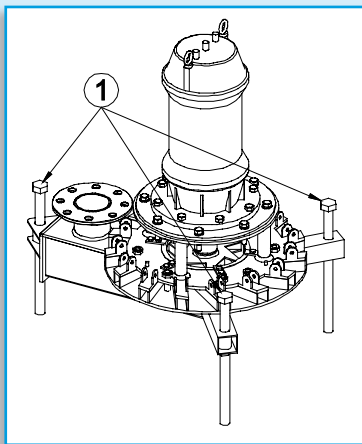
PRINCIPAL OPTIONS

- Hardwearing execution :



Hardened channel inlet 600 Brinell (a) + Cobranox Impeller 300 Brinell (b) + Cobranox exchangeable ring 300 Brinell (c) + Cobranox inlet plate 300 Brinell (d) (approximate values).
These are recommended when erosive material is present.

- 3 adjustable support legs for :
 - slanted surfaces
 - or to raise the aerator



- Stainless Steel silencer ; reduces the sound level with approximately 20 dB(A)



- Folding system for channels, with cables.
This system enables the passage of the aerator through an opening with small dimensions, for installation and maintenance.



CHARACTERISTICS

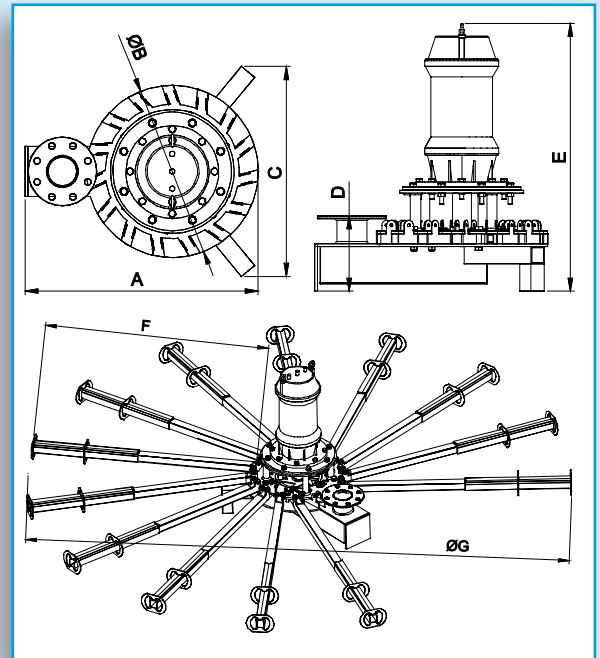
DENOMINATION

Name of the product : AQUA TURBO® : AER-SB 0550-24

SB : Submersible aerator without channels
 SB/L : Submersible aerator with channels

Motor power in kW x 100

24 : 1500 rpm (4 poles)



MATERIALS (standard)

Motor-housing : cast iron – epoxy coated
 Mechanical seal : SiC/SiC
 Automatic and continue surveillance of the water tightness and the temperature of the motor
 Propeller : Stainless steel AISI 304L
 Vacuum chamber : Stainless steel AISI 304L
 Air channel : Stainless steel AISI 304L
 Diffusor : Stainless steel AISI 304L
 Air seal : POM
 Bolts and nuts : A2

Other materials on request (Stainless steel AISI 316L and A4)

BASIC DATA

Model	P motor (kW)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	tube (DN)	weight (kg)	weight channels* (kg)	max. liquid height	bassin dimensions	
													min. recommended	max recommended
0110-24	1,1	623	390	398	300	659	500	1400	80	70	15	6	1500	8000
0150-24	1,5	623	390	398	300	659	500	1400	80	72	15	6	1500	9000
0220-24	2,2	623	390	398	300	659	500	1400	80	75	15	6	1500	12000
0300-24	3,0	623	390	398	300	722	800	2100	80	89	20	6	2200	13000
0400-24	4,0	623	390	398	300	722	800	2100	80	93	20	6	2200	14000
0550-24	5,5	680	500	609	300	776	800	2100	80	111	20	8	2200	15000
0750-24	7,5	680	500	609	300	921	800	2100	80	118	24	8	2200	16000
0900-24	9,0	1060	850	1140	300	1083	1000	2850	100	210	36	8	2950	17000
1100-24	11	1060	850	1140	300	1123	1000	2850	100	234	36	10	2950	19000
1500-24	15	1060	850	1140	300	1123	1000	2850	100	248	38	10	2950	22000
1850-24	18,5	1060	850	1140	300	1248	1000	2850	100	292	38	10	2950	24000
2200-24	22	1060	850	1140	300	1248	1000	2850	125	305	42	10	2950	25000
3000-24	30	1080	850	1140	300	1258	1500	3850	125	325	73	10	3950	25500
3700-24	37	1300	1000	1230	300	1380	2000	4920	150	500	109	10	5020	26000
4500-24	45	1300	1000	1230	300	1380	2000	4920	150	525	109	10	5020	26500
5500-24	55	1300	1000	1230	300	1380	2000	4920	150	730	109	10	5020	27000
7500-24	75	1300	1000	1230	300	1400	2000	4920	200	855	109	10	5020	27500
9000-24	90	1300	1000	1230	300	1560	2000	4920	200	1105	109	10	5020	28000
11000-24	110	1300	1000	1230	300	1560	2000	4920	200	1165	109	10	5020	29000

* only for AER-SB/L

This table contains the dimensions of the AER-SB(/L), series 24 (1500 rpm) for a water level of 5m.
 All values are indicative. AQUASYSTEMS INTERNATIONAL NV reserves the right to adjust these values at any time.

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