



Submersible Aerator

Submersible Aerator & Submersible Ejector

TR/TRN/BER SERIES



THIS IS THE FINAL ANSWER FOR ALL THE AERATION WORKS.

SUBMERSIBLE AERATOR Series

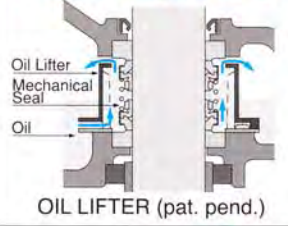
TR/TRN

The structure of the model TR Tsurumi Submersible Aerator employs an impeller connected directly to the motor. As can be seen in the illustration, the rotation of this impeller creates a centrifugal force in the water, and through this centrifugal force an area of negative pressure appears at the periphery of the impeller. The result is a self-feeding force which draws air from the atmosphere through air-inlet pipe. The air sucked down into the water is subjected to an air/water collision within the guide casing, and then this mixed air-water current is forcibly discharged through the discharge outlets.

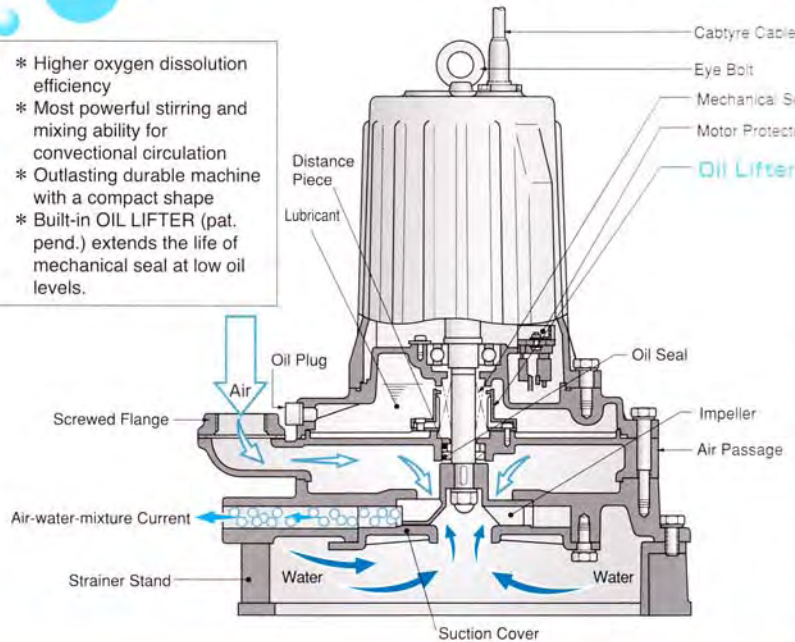
The results of this include the following: an air/water mixture effect caused by the collision of air and water with the guide casing, a circulation and convection effect caused by the air-water-mixture current discharged from the discharge outlets and, in addition, an extremely high

efficiency of oxygen saturation caused by a high level of oxygen movement resulting from the presence of a large amount of air molecules. Furthermore, there is absolutely no fear of the motor becoming moistened because the design of the structure allows the air which is sucked into it to pass beneath the motor forming a layer of air between the motor and the water.

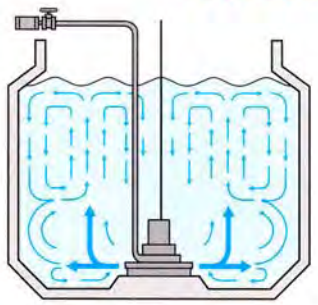
FEATURES



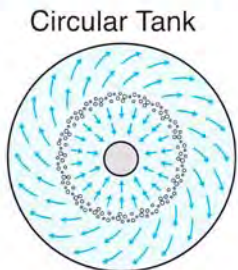
- * Higher oxygen dissolution efficiency
- * Most powerful stirring and mixing ability for convectional circulation
- * Outlasting durable machine with a compact shape
- * Built-in OIL LIFTER (pat. pend.) extends the life of mechanical seal at low oil levels.



CONVECTION PATTERN TR/TRN

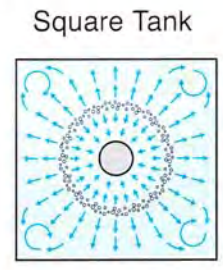


Rectangular Tank



Circular Tank

(length proportion of tank is 1:1.5 or less)



Square Tank

(length proportion of tank is 1:2)

SUBMERSIBLE EJECTOR Series

BER/TOS-BER

The Tsurumi Submersible Ejector, as shown in the figure, draws air in from the vicinity of jet nozzle by means of the water power discharged from the submersible pump. A mixture of air and water is then produced inside the diffuser. This mixture is pressurized just to the point where the pressure exceeds the water pressure around the ejection outlet, and then it forcibly jets into the surrounding water. As a result, the ejected current is jetted in a single direction for a comparatively long range, enabling the generation of an extremely large churning effect.

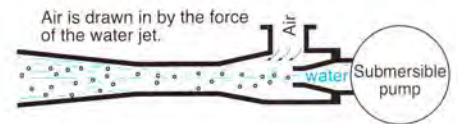
Furthermore, even if the water depth fluctuates, the required shaft power hardly changes. The volume of air emission is freely adjusted as well. Because of this, the submersible ejector is also ideal as a aerator in equalizing tanks where the fluctuation in the water level is comparatively great.

Because Tsurumi submersible sewage pump can be used as well as our entire line of standard accessories, this unit

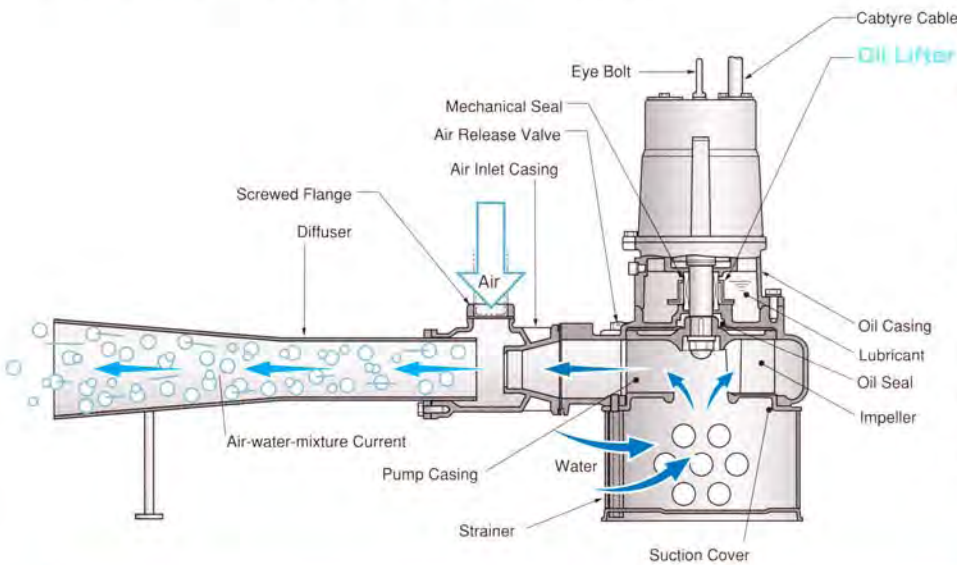
can be used with confidence as the main aerator in industrial waste water treatment system. A particularly large sales point is the fact that due to the air/water collision that occurs while the suction-induced air is in a minutely particulated, pressurized state, the oxygen dissolution efficiency is remarkably high.

The principle of the ejector system

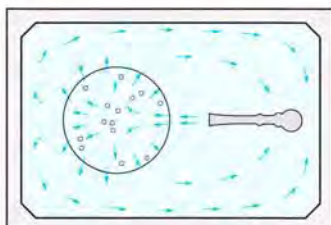
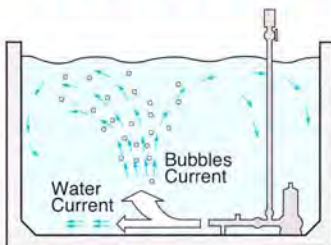
This system is a combination of a submersible pump and a jet pump. By the action of the ejection current of the submersible pump, a self-feeding force is generated, which draws air from the surface of the water through a air-inlet pipe. This air is mixed with the water and the mixture is ejected. The churning force caused by this ejection current is remarkably strong, with the result that exceptionally efficient oxygen dissolution is produced.



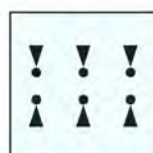
The mixture is pressurized to the point (exceeding the water pressure), where it can be ejected. As result, minute air bubbles and water are ejected in a pressurized state, enabling a large amount of oxygen to be dissolved in the water.



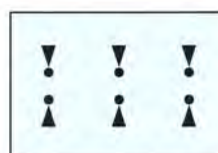
CONVECTION PATTERN and RECOMMENDED INSTALLATION BER



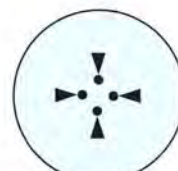
Square Tank



Rectangular Tank



Circular Tank



MODEL TR SUBMERSIBLE AERATOR



FEATURES

Compared with the other models (TRN), the amount of oxygen dissolution kg·O₂/h is significantly high. The same can be said in regards to the efficiency of its circulation convection. On the mechanical side, the shaft seal mechanism utilizes an extremely tight mechanical seal which incorporates an oil seal and an oil bath system. This, in addition to an air cushion system, makes the axis seal mechanism over three times as durable as previous systems.

USES

- For use in pre-aeration and primary aeration in industrial waste water treatment.
- For use as an oxygen suction mechanism for cultivation purposes.

SPECIFICATIONS

Dia of Air Pipe mm	Frequency Hz	Model	Motor Output kW	Phase	No. of Outlet	Air Volume-Depth m ³ /h·m	Oxygen Supply kg·O ₂ /h	SS Revolution r.p.m	Starting Method	Weight kg			
32	50	8-TR3	0.75	Three	6	11-3	0.35~0.6	3000	D.O.L	60			
		15-TR3	1.5			25-3	1.0~1.4			60			
	60	8-TR3	0.75			11-3	0.35~0.6			60			
		15-TR3	1.5			25-3	1.0~1.4			60			
50	50	22-TR3	2.2			36-3	1.8~2.8	1500		D.O.L or 3-Δ	165		
		37-TR3	3.7			60-3	3.5~5.0				175		
		55-TR3	5.5			90-3	5.5~7.7				200		
		22-TR3	2.2			36-3	1.8~2.8				165		
	60	37-TR3	3.7		60-3	3.5~5.0	1800	175					
		55-TR3	5.5		90-3	5.5~7.7		200					
		80	50		75-TR3	7.5		125-3	8.2~11.3		1500	D.O.L or 3-Δ	220
					110-TR3	11		200-3	13~18				240
60	150-TR3		15		260-3	17~23	1800	280					
	75-TR3		7.5		125-3	8.2~11.3		220					
100	50	110-TR3	11		200-3	13~18	1500	3-Δ	240				
		150-TR3	15		260-3	17~23			280				
		190-TR2	19	330-3	20~27	1800			530				
		220-TR2	22	400-3	24~36				530				
	60	190-TR2	19	330-3	20~27		1800		530				
		220-TR2	22	400-3	24~36				530				

*The oxygen supply capacity will vary depending on the condition of the liquid, the water temperature, the water depth and the shape of the tank. Please consult if you need larger models than above.

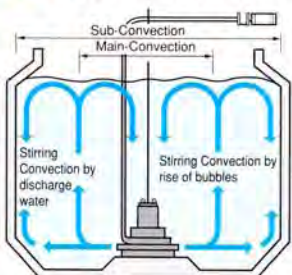
CABTYRE CABLES (D.O.L.)

Motor Output kW	200~240V		380~525V		Material	Length m
	Cores×mm ²	Dia mm	Cores×mm ²	Dia mm		
0.75	4×1.25	13.0	4×1.25	13.0	PVC Sheath	6
1.5	4×1.25	13.0	4×1.25	13.0		
2.2	4×1.25	13.0	4×1.25	13.0		
3.7	4×2	13.9	4×2	13.9		
5.5	4×3.5	14.1	4×3.5	14.1	Chloroprene Sheath	8
7.5	4×5.5	16.8	4×5.5	16.8		

(λ-Δ)

Motor Output kW	200~240V		380~525V		Material	Length m
	Cores×mm ²	Dia mm	Cores×mm ²	Dia mm		
11	{ 7×5.5 2×2	24.4	{ 7×3.5 2×2	23.4	Chloroprene Sheath	8
15	{ 7×8 2×2	25.6	{ 7×5.5 2×2	24.4		
19·22	4×14	21.7	4×14	21.7	Chloroprene Sheath	10
	3×14	19.7	3×14	19.7		
	2×2	12.2	2×2	12.2		

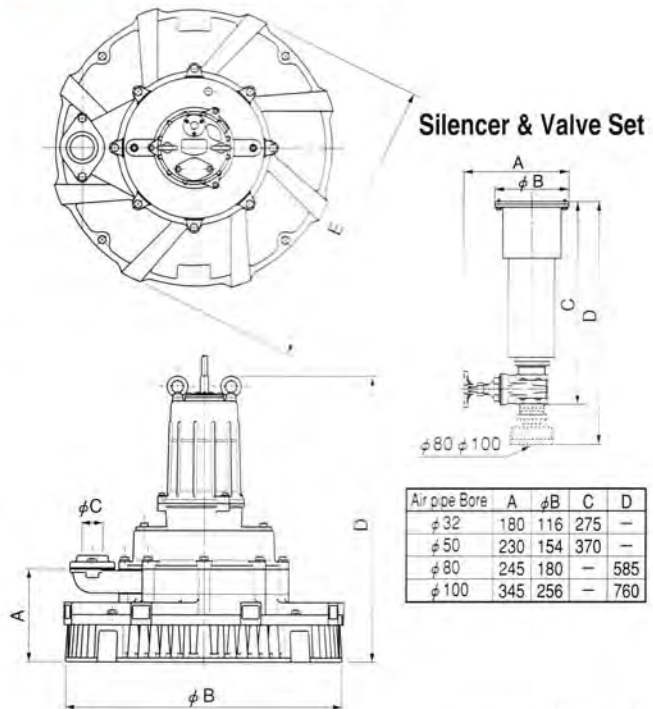
CONVECTION PATTERN



Model	Main-Convection m	Sub-Convection m	Max. Depth m
8-TR3	1.2	2.0	3.2
15-TR3	1.5	2.5	3.2
22-TR3	2.5	5.0	3.6
37-TR3	3.0	6.0	3.6
55-TR3	3.5	7.0	3.6
75-TR3	4.5	9.0	4.1
110-TR3	5.0	10.0	4.7
150-TR3	5.5	11.0	4.7
190-TR2	6.0	12.0	5.0
220-TR2	6.0	12.0	5.0

Main-Convection...direct oxidation by bubbles.
Sub-Convection...indirect oxidation by convective stirring.

DIMENSIONS (Example)



(Unit: mm)

Model	A	B	φC*	D	E
8-TR3	146	376	32	473	400
15-TR3	146	376	32	473	400
22-TR3	224	670	50	687	700
37-TR3	224	670	50	692	700
55-TR3	224	670	50	833	700
75-TR3	244	670	80	866	700
110-TR3	244	670	80	896	700
150-TR3	256	670	80	968	700
190-TR2	325	975	100	1163	1000
220-TR2	325	975	100	1163	1000

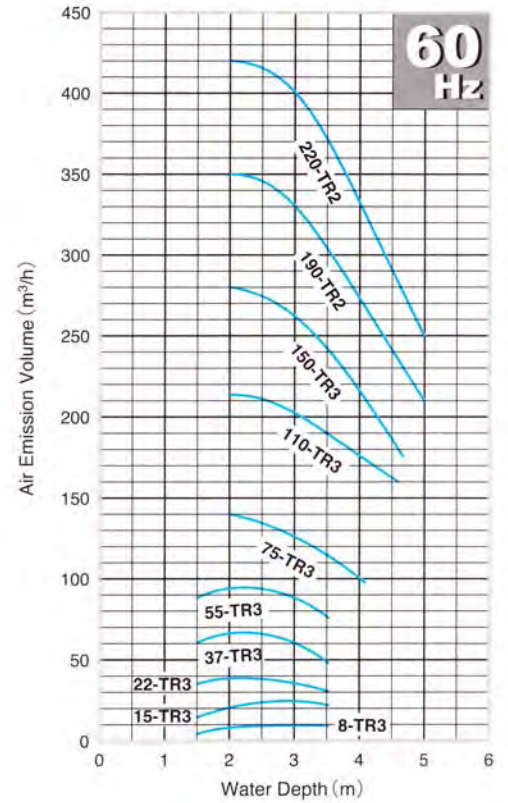
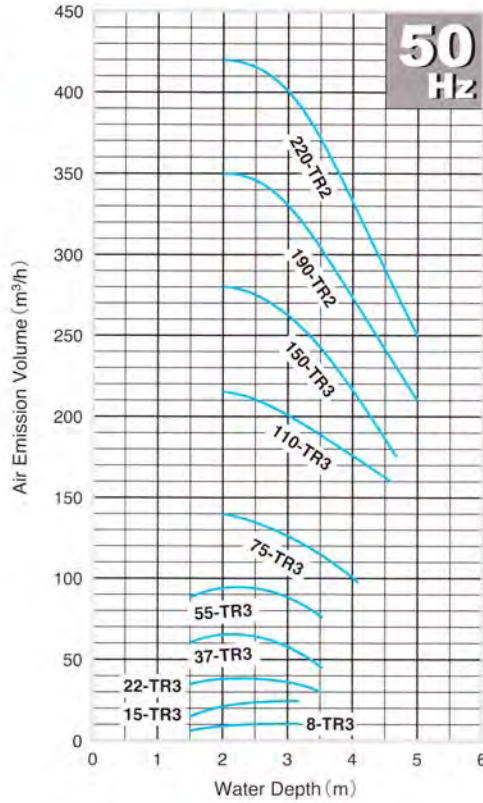
*Nominal size

MODEL TR SUBMERSIBLE AERATOR



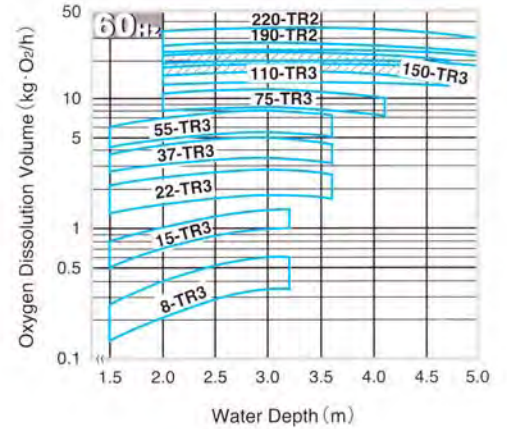
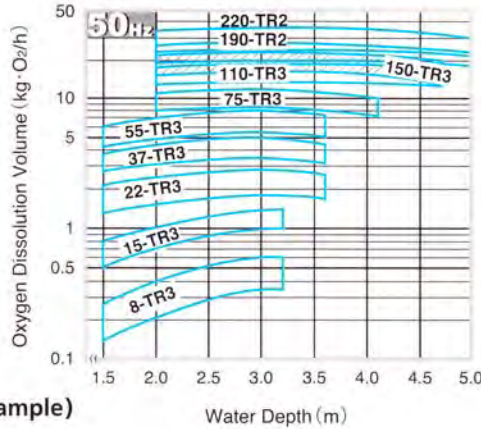
AIR EMISSION VOLUME-WATER DEPTH CURVE

(The air emission value may vary $\pm 5\%$)

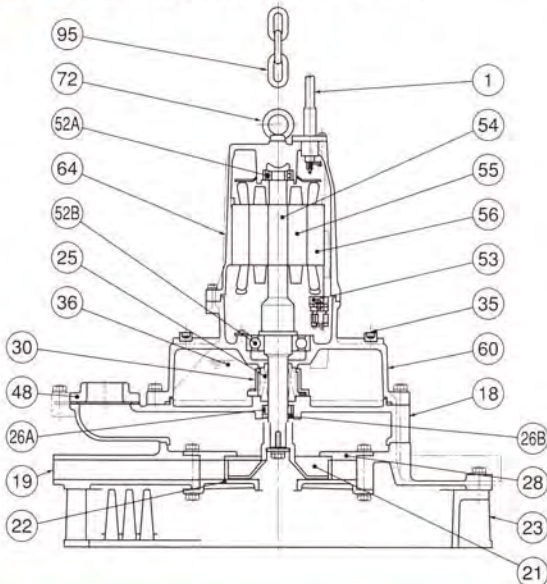


OXYGEN DISSOLUTION VOLUME-WATER DEPTH CURVE

(at 20°C, Clear Water)



CONSTRUCTION (Example)



No.	DESCRIPTIONS	MATERIAL	No.	DESCRIPTIONS	MATERIAL
1	Cabtyre Cable	PVC Sheath	48	Screwed Flange	Gray Iron Casting
18	Air Passage	Gray Iron Casting	52A	Upper Bearing	6204ZCC3
19	Guide Vane	Gray Iron Casting	52B	Lower Bearing	6309ZCC3
21	Impeller	Stainless Steel Casting	53	Motor Protector	
22	Suction Cover	Stainless Steel Casting	54	Shaft	Stainless Steel 420J2
23	Strainer Stand	Ductile Iron Casting	55	Rotor	
25	Mechanical Seal	H-30A	56	Stator	
26A	Distance Piece	Carbon Steel Pipe	60	Bearing Housing	Gray Iron Casting
26B	Oil Seal	VC30486	64	Motor Frame	Gray Iron Casting
28	Middle Plate	Gray Iron Casting	72	Eye Bolt	Structure Steel
30	Oil Lifter	Plastic	95	Chain	Structure Steel,5m
35	Oil Plug	Stainless Steel 304			
36	Lubricant	Turbine Oil (ISO VG32)			

STANDARD ACCESSORIES

- Silencer & Valve Set - 1pc.
- Lifting Chain (5m) - 1pc.

MODEL TRN SUBMERSIBLE AERATOR



FEATURES

The impeller passage is larger than that of model TR. There will be a little change in the amount of air discharge even if placed in a shallow water depth.

USES

- For use in pre-aeration and primary aeration systems of community plants.
- For use in the aeration of sewage treatment in the livestock industry.

SPECIFICATIONS

Dia of Air Pipe mm	Frequency Hz	Model	Motor Output kW	Phase	No. of Outlet	Air Volume-Depth m ³ /h-m	Oxygen Supply kg·O ₂ /h	SS Revolution r.p.m	Starting Method	Weight kg	
32	50	8-TRN3	0.75	Three	6	8-3	0.26~0.44	3000	D.O.L.	62	
		15-TRN3	1.5			22-3	0.88~1.2			62	
	60	8-TRN3	0.75			8-3	0.26~0.44	3600		62	
		15-TRN3	1.5			22-3	0.88~1.2			62	
50	50	22-TRN3	2.2		8	6	32-3	1.8~2.5	1500	D.O.L. or λ-Δ	165
		37-TRN3	3.7				54-3	3.5~4.5			175
		55-TRN3	5.5				80-3	5.5~6.9			210
	60	22-TRN3	2.2			32-3	1.8~2.5	1800	165		
		37-TRN3	3.7	54-3		3.5~4.5	175				
		55-TRN3	5.5	80-3		5.5~6.9	210				
80	50	75-TRN3	7.5	8	6	112-3	8.1~10	1500	D.O.L. or λ-Δ	230	
		110-TRN3	11			175-3	13~16			250	
	60	75-TRN3	7.5		112-3	8.1~10	1800	230			
		110-TRN3	11		175-3	13~16		250			

*The oxygen supply capacity will vary depending on the condition of the liquid, the water temperature, the water depth and the shape of the tank.

CABTYRE CABLES

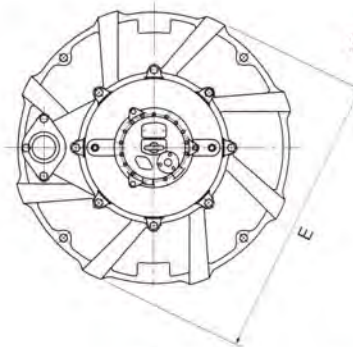
(D.O.L.)

Motor Output kW	200~240V		380~525V		Material	Length m
	Cores×mm ²	Dia mm	Cores×mm ²	Dia mm		
0.75	4×1.25	13.0	4×1.25	13.0	PVC Sheath	6
1.5	4×1.25	13.0	4×1.25	13.0		
2.2	4×1.25	13.0	4×1.25	13.0		
3.7	4×2	13.9	4×2	13.9		
5.5	4×3.5	14.1	4×3.5	14.1	Chloroprene Sheath	8
7.5	4×5.5	16.8	4×5.5	16.8		

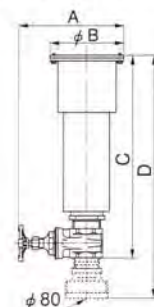
(λ-Δ)

Motor Output kW	200~240V		380~525V		Material	Length m
	Cores×mm ²	Dia mm	Cores×mm ²	Dia mm		
11	{ 7×5.5 2×2	24.4	{ 7×3.5 2×2	23.4	Chloroprene Sheath	8

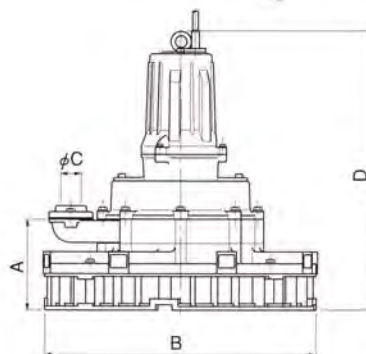
DIMENSIONS (Example)



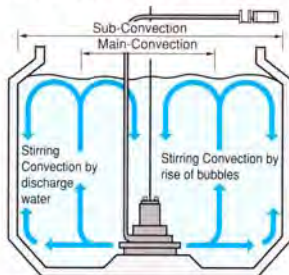
Silencer & Valve Set



Air pipe Bore	A	φB	C	D
φ 32	180	116	275	—
φ 50	230	154	370	—
φ 80	245	180	—	585



CONVECTION PATTERN



Main-Convection...direct oxidation by bubbles.
Sub-Convection...indirect oxidation by convectional stirring.

Model	Main-Convection m	Sub-Convection m	Max. Depth m
8-TRN3	1.0	1.8	3.2
15-TRN3	1.4	2.4	3.2
22-TRN3	2.3	4.7	3.6
37-TRN3	2.8	5.7	3.6
55-TRN3	3.3	6.7	3.6
75-TRN3	4.3	8.6	4.1
110-TRN3	4.8	9.6	4.7

(Unit: mm)

Model	A	B	φ C*	D	E
8-TRN3	146	376	32	473	400
15-TRN3	146	376	32	473	400
22-TRN3	226	670	50	689	700
37-TRN3	226	670	50	694	700
55-TRN3	226	670	50	835	700
75-TRN3	246	670	80	868	700
110-TRN3	246	670	80	898	700

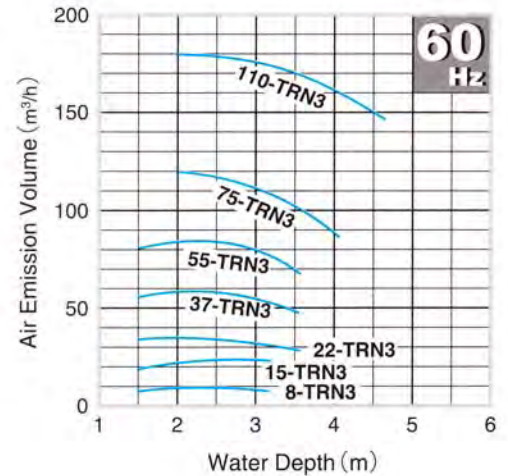
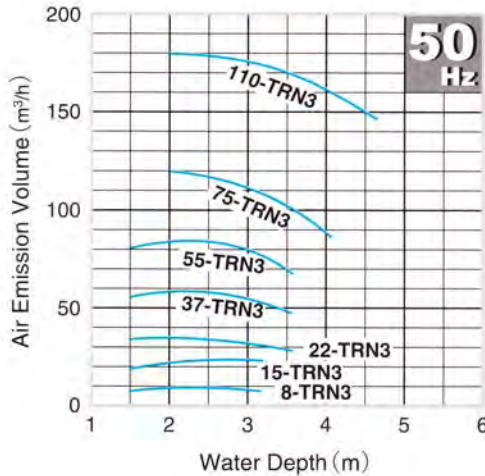
*Nominal size

MODEL TRN SUBMERSIBLE AERATOR



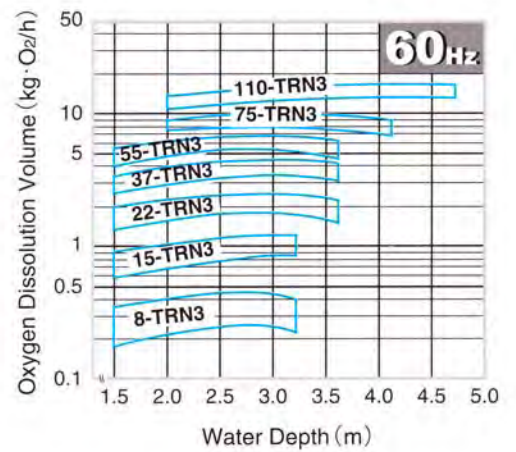
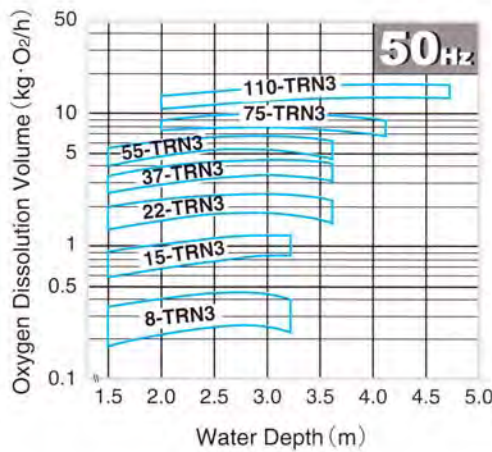
AIR EMISSION VOLUME-WATER DEPTH CURVE

(The air emission value may vary $\pm 5\%$)

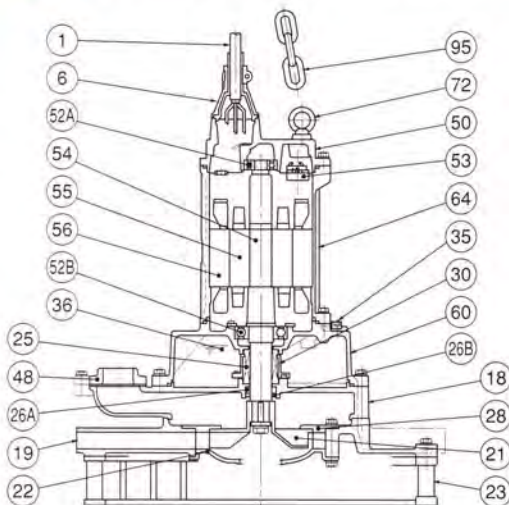


OXYGEN DISSOLUTION VOLUME-WATER DEPTH CURVE

(at 20 C, Clear Water)



CONSTRUCTION (Example)



No.	DESCRIPTIONS	MATERIAL	No.	DESCRIPTIONS	MATERIAL
1	Cable	Chloroprene Sheath	48	Screwed Flange	Gray Iron Casting
6	Stuffing Box	Gray Iron Casting	50	Motor Bracket	Gray Iron Casting
18	Air Passage	Gray Iron Casting	52A	Upper Bearing	6305ZCC3
19	Guide Vane	Gray Iron Casting	52B	Lower Bearing	6309ZCC3
21	Impeller	Stainless Steel Casting	53	Motor Protector	
22	Suction Cover	Stainless Steel Casting	54	Shaft	Stainless Steel 420J2
23	Strainer Stand	Ductile Iron Casting	55	Rotor	
25	Mechanical Seal	H-40	56	Stator	
26A	Distance Piece	Carbon Steel Pipe	60	Bearing Housing	Gray Iron Casting
26B	Oil Seal	VC40586	64	Motor Frame	Gray Iron Casting
28	Middle Plate	Gray Iron Casting	72	Eye Bolt	Structure Steel
30	Oil Lifter	Plastic	95	Chain	Structure Steel, 5m
35	Oil Plug	Stainless Steel 304			
36	Lubricant	Turbine Oil (ISO VG32)			

STANDARD ACCESSORIES ● Silencer & Valve Set - 1pc. ● Lifting Chain (5m) - 1pc.

MODEL BER/TOS-BER SUBMERSIBLE EJECTOR



FEATURES

The powerful single direction jet current is unrivaled in vertical stirring convection. And its required shaft power is not so much changed when the depth changes.

USES

- For use in pre-aeration and primary aeration in industrial waste water treatment.
- For use as an oxygen suction mechanism for cultivation purposes.

SPECIFICATIONS

Dia of Air Pipe mm	Frequency Hz	Model		Motor Output kW	Phase	S.S. Revolution r.p.m	Starting Method	Air Volume-Depth m ³ /h-m	Oxygen Supply kg·O ₂ /h	Circulation Capacity m ³ /h	Tank Dimension			Available Depth m	Weight	
		Free Standing	Guide Rail Fitting								Max. Length m	Max. Width m	Max. Depth m		Free Standing kg	Guide Rail Fitting kg
25	50	8-BER4	TOS- 8BER4	0.75	Three	3000	D.O.L.	11-3	0.45~0.55	22	3	2	4	1~3	28	23
	60	8-BER4	TOS- 8BER4	0.75		3600	D.O.L.	9-3	0.35~0.45	21	3	2	4	1~3	28	23
32	50	15-BER3	TOS-15BER3	1.5		3000	D.O.L.	28-3	1.3~1.5	41	4	3.5	4	1~3	43	34
	60	15-BER3	TOS-15BER3	1.5		3600	D.O.L.	24-3	1.1~1.3	40	4	3.5	4	1~3	43	34
50	50	22-BER5	TOS-22BER5	2.2		1500	D.O.L.	45-3	2.2~2.6	63	5	5	4.5	1.5~3.5	75	61
		37-BER5	TOS-37BER5	3.7		1500	D.O.L. or 1:Δ	80-3	3.6~4.3	94	6	6	5	2~4	91	77
		55-BER5	TOS-55BER5	5.5		1500	D.O.L. or 1:Δ	120-3	6.0~7.0	126	7	7	6	2~5	149	132
	60	22-BER5	TOS-22BER5	2.2		1800	D.O.L.	38-3	1.9~2.2	60	5	5	4.5	1.5~3.5	75	61
		37-BER5	TOS-37BER5	3.7		1800	D.O.L. or 1:Δ	70-3	3.2~3.7	90	6	6	5	2~4	91	77
		55-BER5	TOS-55BER5	5.5		1800	D.O.L. or 1:Δ	105-3	5.3~6.1	120	7	7	6	2~5	149	132

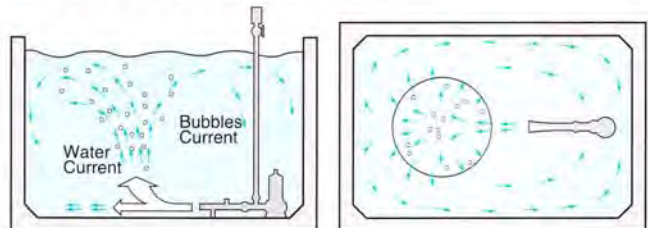
*The oxygen supply capacity will vary depending on the condition of the liquid, the water temperature, the water depth and the shape of the tank.

CABTYRE CABLES

(D.O.L.)

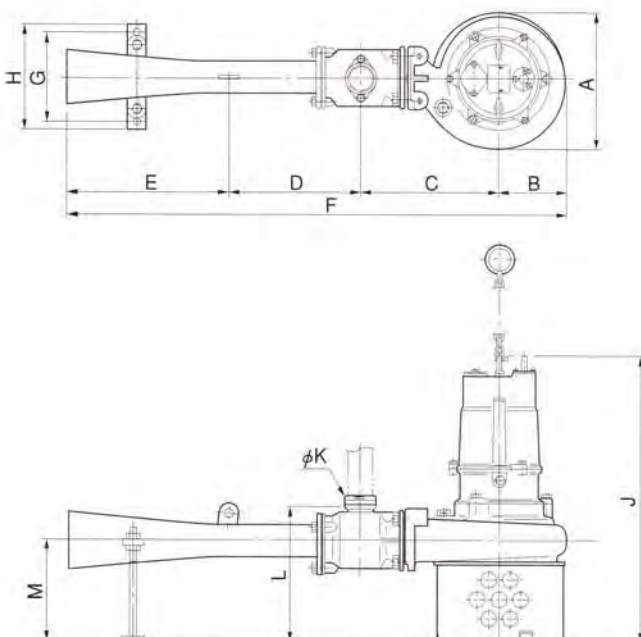
Motor Output kW	200~240V		380~525V		Material	Length m
	Cores×mm ²	Dia mm	Cores×mm ²	Dia mm		
0.75	4×1.25	11.1	4×1.25	11.1	P.V.C Sheath	6
1.5	4×1.25	11.1	4×1.25	11.1		
2.2	4×2	11.8	4×2	11.8		
3.7	4×3.5	13.9	4×2	11.8		
5.5	4×5.5	17.4	4×3.5	14.1		

CONVECTION PATTERN



DIMENSIONS

(Example)



(Unit: mm)

Model	8-BER4	15-BER3	22-BER5	37-BER5	55-BER5
A	194	222	317	325	391
B	97	114	154	160	194
C	200	244	317	317	360
D	169	267	307	307	401
E	208	270	380	380	460
F	674	895	1158	1164	1415
G	150	150	220	220	220
H	180	180	260	260	260
J	461	562	679	753	942
φ K*	25	32	50	50	50
L	195	224	312	317	341
M	150	159	232	237	256

*Nominal size

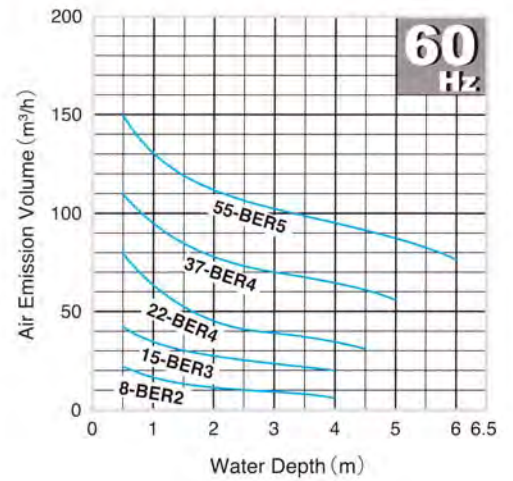
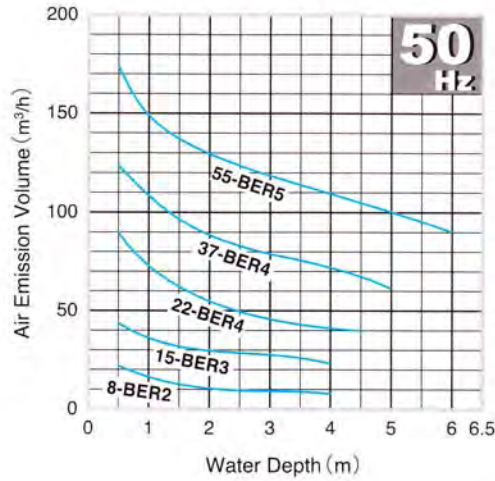
STANDARD ACCESSORIES Free Standing ● Silencer & Valve Set - 1pc. ● Lifting Chain (5m) - 1pc. Tos-Type

MODEL BER/TOS-BER SUBMERSIBLE EJECTOR



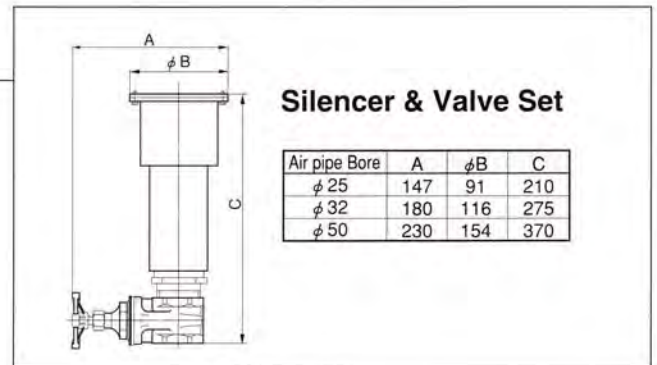
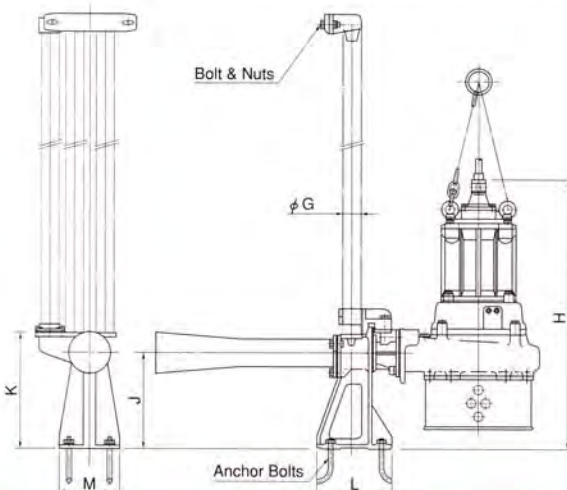
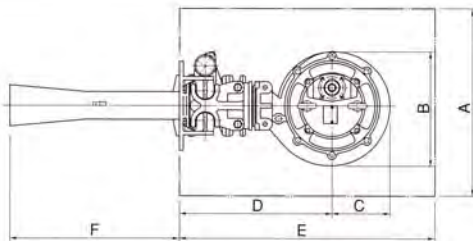
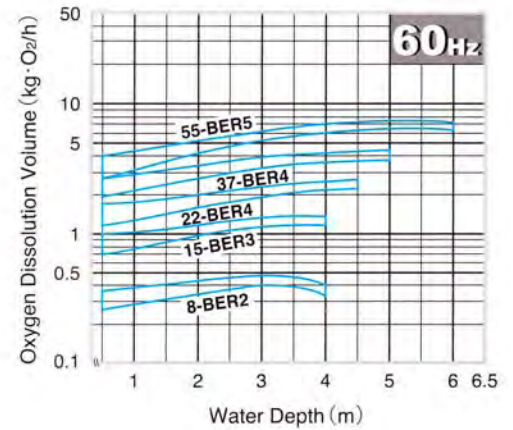
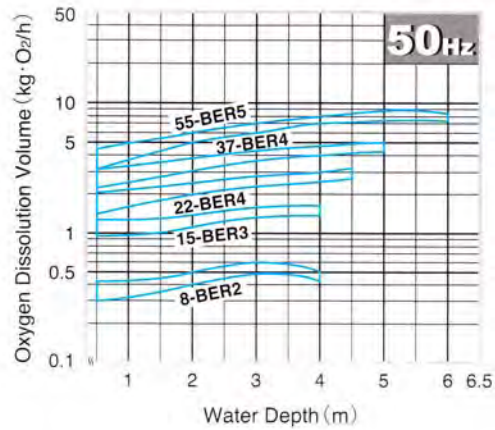
AIR EMISSION VOLUME-WATER DEPTH CURVE

(The air emission value may vary $\pm 5\%$)



OXYGEN DISSOLUTION VOLUME-WATER DEPTH CURVE

(at 20°C, Clear Water)



(Unit: mm)

Model	TOS-8BER2	TOS-15BER3	TOS-22BER4	TOS-37BER4	TOS-55BER5
A	350	450	450	450	500
B	194	222	317	325	391
C	97	114	154	160	194
D	288	353	462	462	517
E	550	650	700	700	750
F	289	443	546	546	711
ϕG^*	25	32	50	50	50
H	512	603	768	837	1006
J	200	200	320	320	320
K	238	250	385	385	385
L	170	190	250	250	250
M	110	130	200	200	200

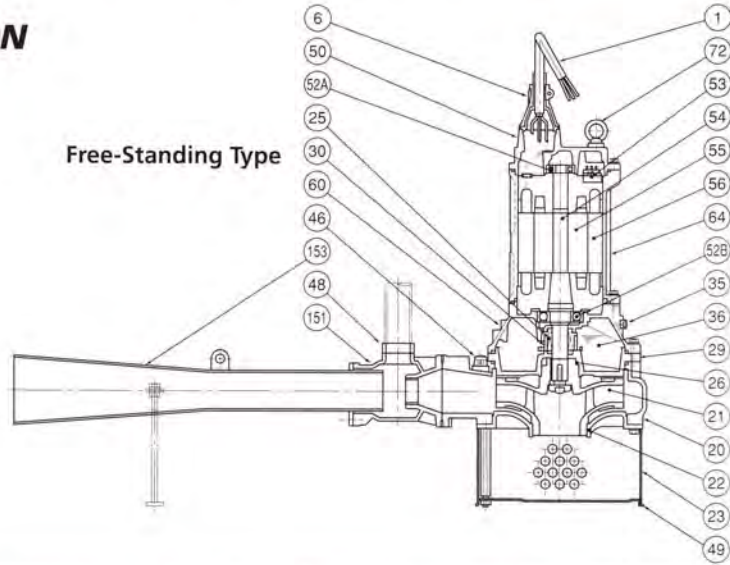
*Nominal size

● Silencer & Valve Set - 1pc. ● Lifting Chain (5m) - 1pc. ● Guide Support - 1set. ● Air-Inlet Casing - 1set.

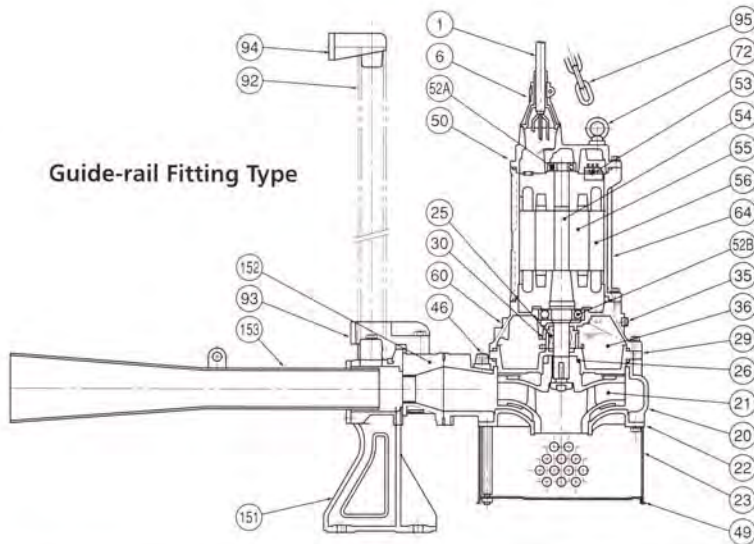
Weight: 0.75kw 10kg, 1.5kw 20kg
2.2/3.7kw 35kg, 5.5kw 40kg

MODEL BER/TOS-BER SUBMERSIBLE EJECTOR

CONSTRUCTION (Example)



No.	DESCRIPTIONS	MATERIAL	No.	DESCRIPTIONS	MATERIAL	No.	DESCRIPTIONS	MATERIAL
1	Cabtyre Cable	Chloroprene Sheath	35	Oil Plug	Stainless Steel 304	55	Rotor	
6	Stuffing Box	Gray Iron Casting	36	Lubricant	Turbine Oil (ISO VG32)	56	Stator	
20	Pump Casing	Gray Iron Casting	46	Air Release Valve	Nylon	60	Bearing Housing	Gray Iron Casting
21	Impeller	Gray Iron Casting	48	Screwed Flange	Gray Iron Casting	64	Motor Frame	Gray Iron Casting
22	Suction Cover	Gray Iron Casting	49	Bottom Plate	Steel Plate	72	Eye Bolt	Structure Steel
23	Strainer	Steel Plate	50	Motor Bracket	Gray Iron Casting	151	Air-Inlet Casing	Gray Iron Casting
25	Mechanical Seal	H-35A	52A	Upper Bearing	6305ZZC3	153	Diffuser	Structure Steel Nylon Coated
26	Oil Seal	TC608212	52B	Lower Bearing	6309ZZC3			
29	Oil Casing	Gray Iron Casting	53	Motor Protector				
30	Oil Lifter	Plastic	54	Shaft	Stainless Steel 420J2			



No.	DESCRIPTIONS	MATERIAL	No.	DESCRIPTIONS	MATERIAL	No.	DESCRIPTIONS	MATERIAL
1	Cabtyre Cable	Chloroprene Sheath	36	Lubricant	Turbine Oil (ISO VG32)	64	Motor Frame	Gray Iron Casting
6	Stuffing Box	Gray Iron Casting	46	Air Release Valve	Nylon	72	Eye Bolt	Structure Steel
20	Pump Casing	Gray Iron Casting	49	Bottom Plate	Steel Plate	92	Guide Pipe	Galvanized Steel Pipe (Option)
21	Impeller	Gray Iron Casting	50	Motor Bracket	Gray Iron Casting	93	Guide Hook	Ductile Iron Casting
22	Suction Cover	Gray Iron Casting	52A	Upper Bearing	6305ZZC3	94	Guide Support	Ductile Iron Casting
23	Strainer	Steel Plate	52B	Lower Bearing	6309ZZC3	95	Lifting Chain	Structure Steel
25	Mechanical Seal	H-35A	53	Motor Protector		151	Air-Inlet Casing	Gray Iron Casting
26	Oil Seal	TC608212	54	Shaft	Stainless Steel 420J2	152	Nozzle	Gray Iron Casting
29	Oil Casing	Gray Iron Casting	55	Rotor		153	Diffuser	Structure Steel Nylon Coated
30	Oil Lifter	Plastic	56	Stator				
35	Oil Plug	Stainless Steel 304	60	Bearing Housing	Gray Iron Casting			

THE SELECTION OF THE RIGHT MODEL OF AERATION EQUIPMENT

FIRST OF ALL, QUESTIONS FOR THE PURCHASER AND
ITEMS TO BE INVESTIGATED

ABSOLUTELY NECESSARY INFORMATION

- Type of influent
- System of treatment
- Volume of influent
- Influent BOD ● Effluent BOD
- SS SS
- PH PH
- MLSS (ppm)
- Size and shape of aeration tank
- Effective capacity of aeration tank
- Size and capacity of equalizing tank
- Water temperature
- Required volume of oxygen ($\text{kg}\cdot\text{O}_2/\text{h}$)

OTHER ITEMS

- Power source, Frequency
- Size of the existing tank
- Effluent destination (river, sewer, etc.)

The main factors involved in selecting the right water treatment equipment are the followings.

1. Exactly what degree of aeration capability is necessary?
2. Exactly what amount of oxygen is required for the activated sludge of the aeration tank?

When these factors are known, the goal is to select only the size and type of aeration equipment needed to meet these requirements.

Because Tsurumi equipments offer extremely high oxygen dissolution efficiency, the method of selecting by the factor of necessary oxygen volume ($\text{kg}\cdot\text{O}_2/\text{h}$) is both advantageous and theoretically accurate.

Pumps & Other Equipments for **Water Treatment**



SEWAGE TRANSFER PUMPS

B
Series



BZ
Series



AUTOMATIC BAR SCREENS

KM
Series



KS
Series



HIGH PRESSURE PUMPS for defoaming

PSF
Series



SF
Series



FLOATING SCUM SKIMMER

FSP Series



FLOATING DECANTER

FHP Series



OUTFALL PUMPS

B
Series



BA Series
(automatic)



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