

## HORIZONTAL SHAFT BRUSH SURFACE AERATOR



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#### HORIZONTAL SHAFT BRUSH SURFACE AERATOR

#### General Description and Intended Use

Horizontal brush surface aerator is used to provide the necessary oxygen to the microorganisms to enable them to maintain their vital activities in aeration pools and to prepare the mixture in biological wastewater treatment facilities. In addition, it cools the wastewater in the unit.

# Working Principle Of Equipment

Horizontal brush surface aerators consist of a shaft group rotating in a horizontal axis, brush group connected to the shaft and drive group moving the shaft. The wastewater is provided oxygen when brush system throws the wastewater to the air as water droplets. Thanks to micro bubbles arising during this procedure, the wastewater is provided oxygen, and the efficiency of volatile organic material cleaning is increased.

Horizontal brush surface aerator can be designed by driving from single drive unit of two shaft groups by taking pool dimension and necessary oxygen requirements into account. Surface aerators are assembled between the reinforced concrete as half sunken.





# **TECHNICAL SPECIFICATIONS**

- It is designed and manufactured in the optimum size and number by taking pool dimension and necessary oxygen requirement into account.
- An end of the main shaft group is supported between bearings and the other end is connected to the drive group.
- Both ends of the main shaft group are protected with plates against wastewater splash.
- As it does not require assembly in the pool, it is preferred due to easy assembly and disassembly, maintenance opportunity without discharging the pool and quiet operation.

It is operated under oxygen meter control, so it is prevented to provide oxygen more than the sufficient amount for microorganisms and operational costs are minimized.

#### **Material Details**

- Shaft Group: They can be manufactured as DIN 1.4301 (AISI 304) or DIN 1.4401 (AISI 316).
- Brush Group: They can be manufactured as DIN 1.4301 (AISI 304) or DIN 1.4401 (AISI 316).

"Different materials can be preferred in accordance with the request of the customer."

### ACCESSORIES

- Oxygen Meter\*
- Frequency Inverter\*
- Emergency Button\*
- Local Power and Control Panel\*
- \* Optional accessories are defined.

# ADVANTAGES

- High Mixing Performance,
- Compact Design,
- Easy Transportation and Mounting,
- Low Operation and Maintenance Costs,
- Manufactured From Corrosion Resistant Material, Long-Life Steel Construction,
- Economical and Resistant Design,
- Long Operation Life.

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No	Part Name
1	Motor / Reducer
2	Shaft Group
3	Brush Group
4	Coupling Connection
5	Bearing

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# **DALAD Mühendislik**

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