DAGA
Equipment for the environment®

SURFACE AERATION ROTOR

For wastewater treatment

MR10

dagaequipment.com

FEATURES

- High capacity of water oxygenation.
- Adaptation of oxygen transfer through immersion control of rotor blades.
- Delivery of pre-engineered systems to be easily assembled by local labour.
- Applications for urban and industrial wastewater treatment facilities

/SURFACE AERATION ROTOR

MR10

DESCRIPTION

Horizontal surface-aeration rotor for oxygenation of water and degradation of organic matter in wastewater treatment plants.

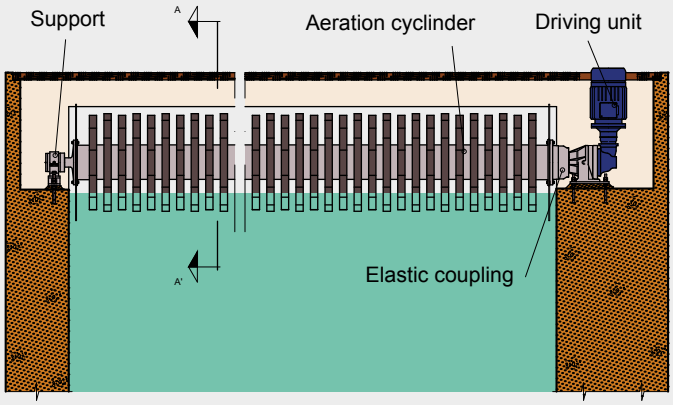
The equipment consists of blades coupled to a horizontal shaft that rotates by means of a driver. The blades are made of polyamide reinforced with fibreglass, which gives them the strength and flexibility required to trigger the superficial agitation of the water and the turbulences that will bring the air to the lower layers of the water stream.

APPLICATION

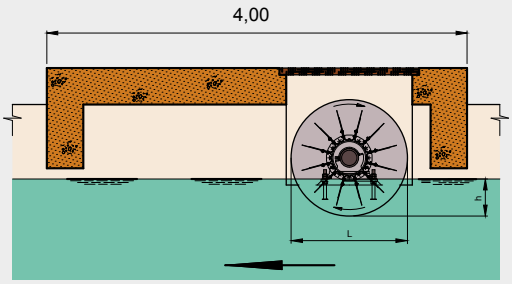
The surface aeration rotors are installed in series in aerations tanks of wastewater treatment plants as part of the biological treatment and pollutant breaking-down of wastewater.

MAIN FEATURES

- High quality rotating-mechanical components.
- High water oxygenation capacity and availability under demanding operation conditions.
- The high reliability of the aerator provides the required stability for the biological water treatment processes.
- Low energy consumption and easy maintenance.
- Customer support service.



Front view



Side view

SITE SETTING AND OPERATION

The surface aeration rotors are delivered as pre-engineered units to be easily assembled by local labour. The equipment is installed superficially and transversally to the water stream on the perimeter walls of the aeration tank. The immersion of the rotor blades and the agitation energy transmitted to the water determine the level of oxygen transfer to the water stream. The immersion level of the rotor blades (rotor submergence) may be controlled with a weir-type gate at the point of the effluent outlet, thus adapting the oxygen supply to the wastewater stream. Occasionally, a deflector screen may be installed downstream the rotor in order to increase the depth of the turbulence and oxygen insertion caused by the rotor.

RANGE OF PRODUCTS

Single diameter of the rotor: 1.000 mm

Type of rotor	Length	Rotor's frequency	Power	Max. O_2* transfer	Max. immersion
MR10-300	3.0 m	74 rpm 49 - 74 rpm	15 kW 10 - 15 kW	8.8 kgO_2/m-h 4.5 - 8.8 kgO_2/m-h	29 cm
MR10-450	4.5 m	74 rpm 49 - 74 rpm	22 kW 15 - 22 kW	8.8 kgO_2/m-h 4.5 - 8.8 kgO_2/m-h	29 cm
MR10-600	6.0 m	83 rpm 55 - 83 rpm	30 kW 28 - 43 kW	9.4 kgO_2/m-h 5.8 - 9.4 kgO_2/m-h	24 cm
MR10-750	7.5 m	83 rpm 55 - 83 rpm	37 kW 24 - 36 kW	9.4 kgO_2/m-h 5.8 - 9.4 kgO_2/m-h	24 cm
MR10-900	9.0 m	83 rpm 55 - 83 rpm	45 kW 32 - 50 kW	9.4 kgO_2/m-h 5.8 - 9.4 kgO_2/m-h	24 cm

(*) The oxygen transfer is indicated in kg of O_2 per meter of width and in 1 hour.

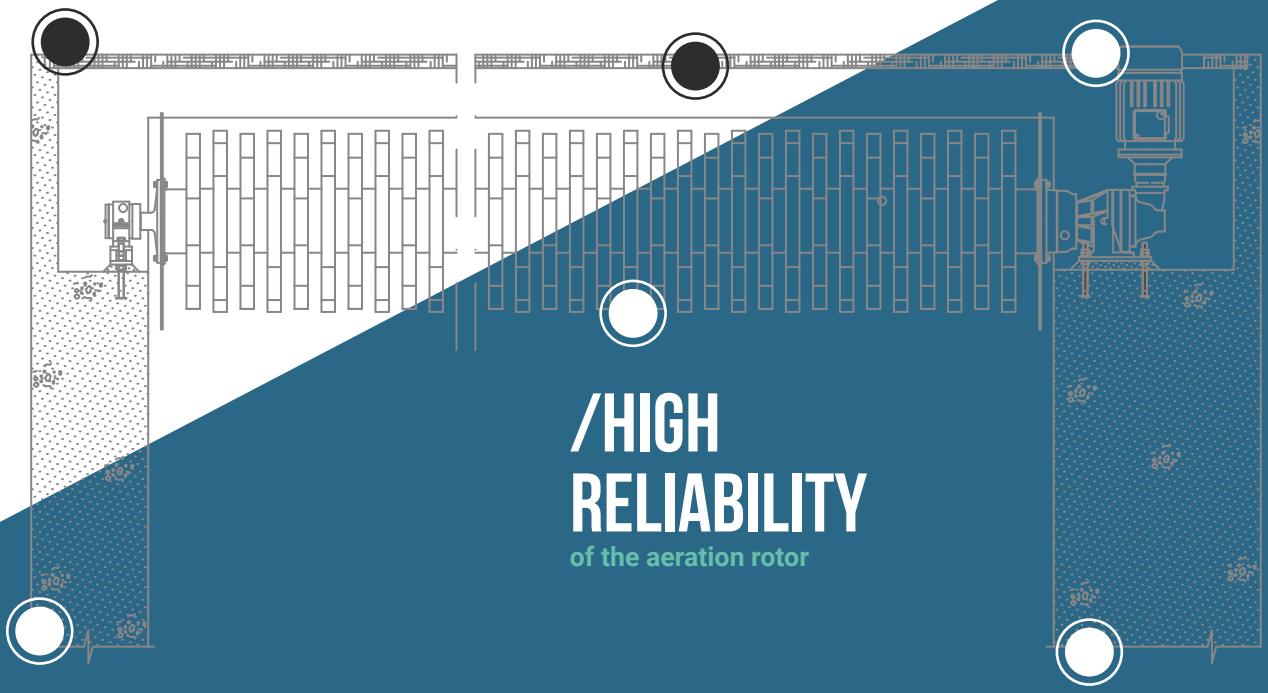
/HIGH QUALITY
of mechanical components

Oxygenation of water

/UNDER HIGHLY DEMANDING CONDITIONS

High capacity of

/WATER OXYGENATION



/HIGH RELIABILITY
of the aeration rotor

/LOW ENERGY CONSUMPTION
and easy maintenance

/PERSONALISED CUSTOMER SUPPORT
and after-sales service

DAGA EQUIPMENT
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ISO 9001 Quality Management System

ISO 14001 Environmental Management System

OHSAS 18001 Health & Safety Management System