QL-OWS Ozone Water Machine Operation Manual

Dear Customers,

Many thanks for your choice of ozone machine. Your satisfaction is our continuous motivation, we will provide you with the best service from beginning to end. This ozone water system series product come with high quality and good performance. In order to facilitate your usage, please carefully read this manual carefully before operation, and according to the manual steps, welcome to inquire and provide valuable advice, if you have any questions. Because of possible product improvements, your purchase product’s introduction maybe completely consistent, hereby apologize.

**1、Preface**

1.1、**Scope of use**

Ozonated Water System (OWS) is a integrate ozone generator, mixing device, all in one system, it is convenient and installation friendly system to give you minimum installation work, it is content normal water inlet and ozonated water outlet.It’s widely used for water purification of Aquaculture and Zoos, bottle water, clean in space,cooling tower, drinking water treatment, food processing and storage, grain & feed remediation, swimming pool, waste water treatment, wine & beer, vegetable washer and so on.

1.2、**Using Environment**

1.2.1、Ambient temperature：-5℃~40℃；

1.2.2、Ambient humidity：≤55%；

1.2.3、There shall be no flammable and explosive gas and conductive powder dusts in the room. It’s not permitted to install the equipment in a place where alkaline air is easy to leak or with risk of explosion.

1.2.4、The ground for equipment installation must be horizontal, and the equipment shall be placed on ground or supports steadily.

1.2.5、There must be draft fan or air conditioner to keep air dry and the operating

environment in good ventilation.

**1.3、Characteristic**

1.3.1: Technology corona discharge quartz ozone cell.

1.3.2: Adjustable water flow rate, advanced air or water-cooling.

1.3.3: Inner PSA oxygen generator unit.

1.3.4: Over-temperature protection,over current protection

1.3.5: Integrate ozone generators, oxygen concentrator, mixing pump

1.3.6: High concentration ozonated up to 1-4 ppm.

1. **Technical Parameters**

|  |  |  |
| --- | --- | --- |
| **Model** | | **QL-OWS-20G** |
| **Ozonated water output** | Flow rate | 1-3.5m3/Hr |
| Concentration | 1-4 PPM |
| Output pressure | 2-3kg/cm^2 |
| **Operating requirements** | Voltage | 220V/50Hz |
| Power | 1.2KW |
| Temperature | 5-40℃ |
| Inlet Pipe diameter | 1” |
| Outlet pipe diameter | 3/4” |
| **Dimension** | / | 90\*40\*131cm |
| **Net Weight** | / | 82Kg |

Note: because of the different conditions of using location, the technical parameters listed above may be deviation.

**3、Operation Instruction**

3.1, Choose the right concentration of ozone machine to different work environment and purpose,please contact our staff if advice is needed.

3.2, Place the machine at dry and ventilated area, connecting inlet water & outlet water with suitable PVC pipe . ( **Important** : For first time operation, make sure the water pump is full of water before running.)

3.3, Make sure the ozone concentration switch is minimum, Plug in 230V/50Hz, power indicator on; press **Air Pump switch** , and **Ozone switch** ，manual turn the **Ozone Concentration Switch** to maximum , adjust the oxygen flow to 2-3 LPM to get different ozonated water output .the ozone system start to produce ozone water..

3.4, After sterilization finish, manually turn down the ozone system. Adjust **Ozone Concentration Switch** to minimum, then turn off **Ozone Switch** and **Air Pump Switch** successively, unplug;

3.5, After disinfection completed, remove the ozone machine to dry ventilated place, avoid high temperature and high humidity environment damage the ozone system;

**4、Safety considerations**

4.1 This series of products using 230V/60Hz AC power source, if the voltage and frequency fluctuation range is heavy, may cause damage,abnormal or equipment failure;

4.2, The power cord plugs should keep in contact with the socket firmly, otherwise may cause abnormal electricity or even get an electric shock, endanger personal safety;

4.3, Users should regularly check the power cord; Don't let the standing legs, or other heavy objects live on the power line ; Please be careful when moving machine, don't roll or damage the power cord; replaced a new one when the power cord was damage.

4.4, Please do not use in a environment with explosion danger products;

4.5, High voltage inside the machine,it is strictly prohibited to open the back door,touching, or putting hands inside the machine;

4.6, When it don't work or need to do the maintain, unplug the power. Strictly prohibited to spray, rinse with water.do not place it in the damp, not ventilated place in case affecting the product electric insulation performance;

4.7, Prohibited to remove, modified this product, maintenance must be conducted by a professional or trained personnel;

4.8, Please do not use this product near the high precision electronic equipment, as wave interference may cause wrong operation or other problems;

4.9, Avoid excessive damp, water or other liquid go into this product may cause leakage or other faulty.

4.10, Avoid using volatile solution or organic solvent cleaning the equipment, it might damage the surface of equipment.

4.11, Using qualified safe and reliable grounding connected to avoid eliminate fire hazards;

4.12, Forbidden staff working in the high concentration of ozone space,necessary protective measures must applied when it must go inside..

**5、Warranty and Maintenance**

**Warranty terms:**

To ensure you enjoy the perfect after sale service from our company, please read through this manual carefully after receiving the product, and keep it properly.

After sale service commitment：

5.1 All products (not including consumable material, accessories) from our company are warranted for one year and lifetime maintenance from the date of purchasing.

5.2 The following occasions are excluded from the warranty, and our company may charge for the repairing materials.

5.2.1, Damage due to natural disaster or other majeure reasons;

5.2.2,Product damage by human during transportation;

5.2.3,Product damages due to unauthorized operation unless instructed by our comapny or our authorized distributor;

5.2.4,Product damages due to high humidity working environment or flooded by water;

5.2.5,Fail to provide proof of purchase or warranty card.

5.3 If on-site service is required, customer will be required to pay for the cost of traveling, and our compay or distributor can decide to come or not according to the distance.

***5.4 In the case of sterilization standard is not met due to improper operation or malfunction of the product, our company does not take any responsibility.***

**Maintenance**

(1) Fan filtering net cleaning/replacement: the dust net needs regular cleaning due to accumulate

dust from the air (refer to the maintenance cycle table below). Turn off the power before cleaning,and take off the cover of the fan. Then take out the stainless steel fan filtering net, clean it with clean water, and do not re-assemble it until it is dry.

(2) High voltage parts water removal: during humid season, there is moisture on connecting cable of the transformer (the high voltage unit), transformer, and the connecting cables of the ozone module.Dry it with cloth and hair dryer. Otherwise, it may lead to damage of the equipment.

(3) Ozone module inner chamber, discharge tube cleaning/ replacement: accumulate small partialon the inner chamber and electrode from the gas source will lower the ozone production and concentration. Hence, they need to be cleaned regularly.

**5.6 Maintenance cycle table**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Item | Content | Circle | | | | | Remark |
| month | Half year | One year | Two year | Three year |
| Fan filter net | Clean  replace | ☆ |  | ● |  |  | Cycling clean |
| Dry moisture on high voltage parts | Clean | ☆ |  |  |  |  | Maintain during humid season |
| Inner side of internal and external electrode | Clean |  |  | ☆ |  |  | Regular clean when used in beverage and food industry |
| Internal electrode | Replace |  |  |  | ● |  | Replace if high demanded |
| External electrode | Replace |  |  |  |  | ● | Replace if high demanded |

Note:

(1) ☆：means inspection, adjust or clean; ●：means replacement

(2) The above table is the suggested maintenance/ replacement cycle from manufacturer and customer can also conduct the maintenance/replacement according the actual operation environment and intensity of work

(3) All maintenance/replacement can only be conducted when the power is off and pressure release,ensuring the safety of the operation personnel.