



**CYCO<sup>®</sup>**

## Dry Fog Humidifier and Dust Control Nozzles



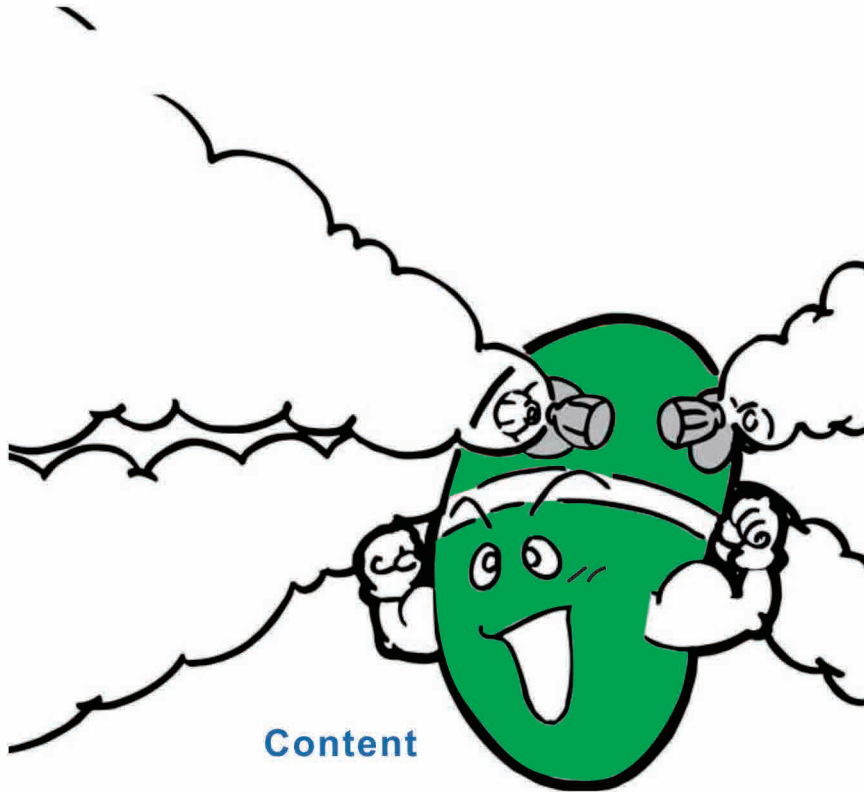
ООО «ТИ-СИСТЕМС» ИНЖИНИРИНГ И ПОСТАВКА ТЕХНОЛОГИЧЕСКОГО ОБОРУДОВАНИЯ

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Телефоны: +7 (495) 7774788, 7489626, (925) 5007155, 54, 65

Эл. почта: [info@tisys.ru](mailto:info@tisys.ru) [info@tisys.kz](mailto:info@tisys.kz) [info@tisys.by](mailto:info@tisys.by)

# AE Series



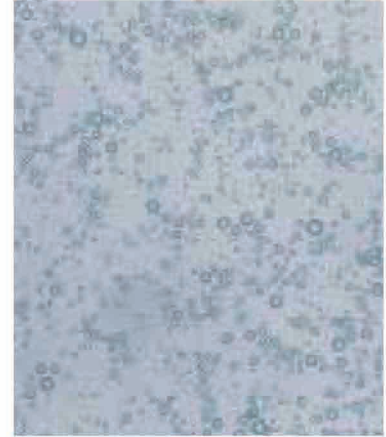
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# AE Series

## Small Particle Fog

Average diameter: 7.5um  
Capacity: 2.4L/h ( Air pressure is 0.3MPa)  
Easy installation, can install maximum 4 nozzles.



The high-quality dry fog humidifier - AE series produce silk-like ultra-dry mist particle. It is ideal for humidification in narrow space without wetting the wall.

### Properties

Compressed air pressure (Air pressure) MPa	Capacity (Capacity) L/h	Compressed air consumption (Air consumption) N.L/min
0.3	2.4	29
0.35	2.7	32.5

### AE Series

- ※ Please use under the air pressure range is 0.25-0.35MPa
- ※ The diameter value is the measured value of the laser Doppler method.

Model	When air pressure is 0.3MPa		Number of nozzles
	Capacity(L/h)	Air consumption (N.L/min)	
AE-3 (01) C	2.4	29	1
AE-3 (01) C	4.8	58	2
AE-3 (01) C	7.2	87	3
AE-3 (01) C	9.6	116	4

### Features of Dry Fog Humidifier :

- ※ High performance humidifier, most compact in the world, maximum humidifying capacity up to 9.6L/h ( air pressure is 0.3MPa ).
- ※ Quick disassembly, easy maintenance
- ※ Remarkable humidification effect, the national patented dry fog humidifier nozzle provides high-quality mist spray, with jet length over 4m.
- ※ Use ultra-small water storage tanks, which can't easily multiply bacteria.
- ※ Adopt high-tech nozzles, not easy to be blocked.
- ※ Automatic control by timer and controller.
- ※ No need to clean the humidifier if pure water processor is used.

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# AE Series

## Installation Kits

G1/8      G1/4

110

Φ77

**Material** Main body... PP  
 Nozzle tip... SUS303 and PPS  
 Nozzle tip... Fluorine glue, Nitrile rubber ring

**Weight** About 410g (when full of water)

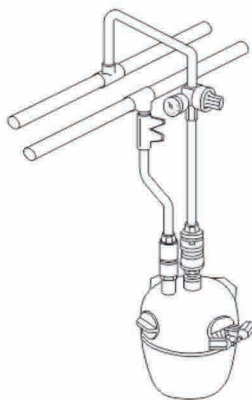
**Note:**

- ※ When using standard mounting accessories, the water pipe is G1/8 thread and the air pipe is G1/4 thread.
- ※ Please use it under the air pressure 0.3 MPa and water pressure 0.2 MPa or less.
- ※ Disassembling the product during use will cause water leakage. Therefore, please disassemble it after closing.
- ※ Mainly material is resin, so please do not over pressurized.

### Easy-handling Installation Kits

Necessary accessories for dry fog humidification nozzle, please order separately.

#### Standard installation kits



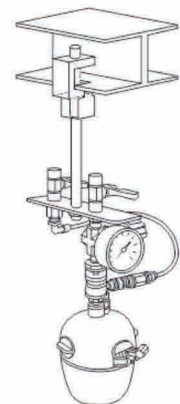
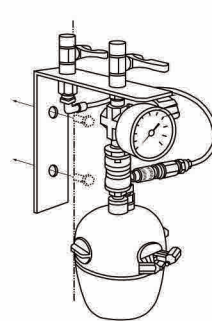
※ Standard installation kits are sold as spare parts, so you should assemble yourself.  
 The air pipe and water pipe are 1/4 PT female thread.

※ Includes all accessories except the bolts in the figure.  
 Please prepare the fixing bolts yourself, the diameter of the hole is 9.5mm. The air pipe and water pipe are 1/4 PT female thread.

### More Convenient and Safe Kits

It has been assembled well when selling, so you only need to switch on air and water device to use. ( sold separately )

#### Wall Mounting Kits    Hanging Type Kits



※ The I-beam connecting parts and long bolts are not included. Please prepare it by yourself.  
 The diameter of the hole is 9.5mm. The air pipe and water pipe are 1/4 PT female thread.

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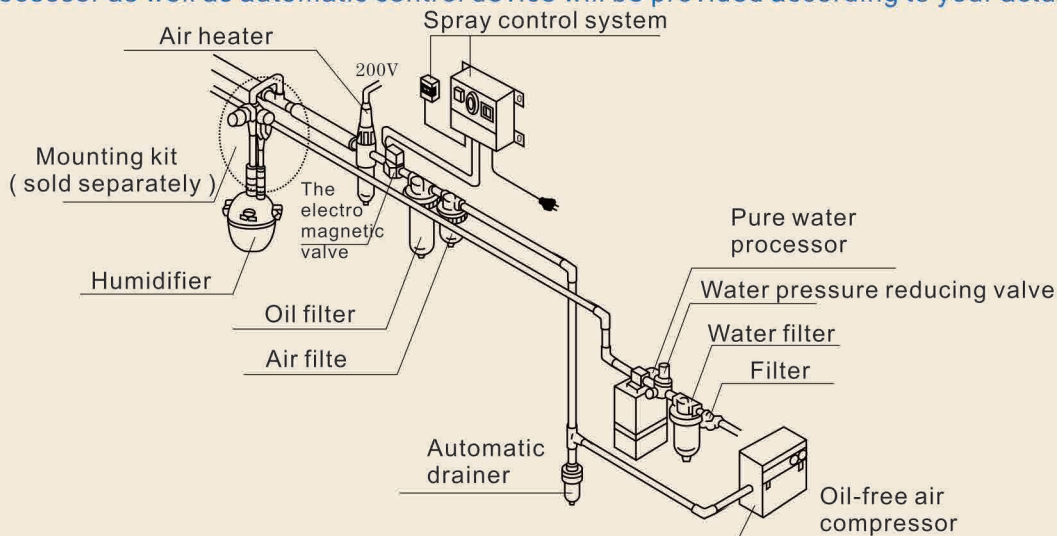
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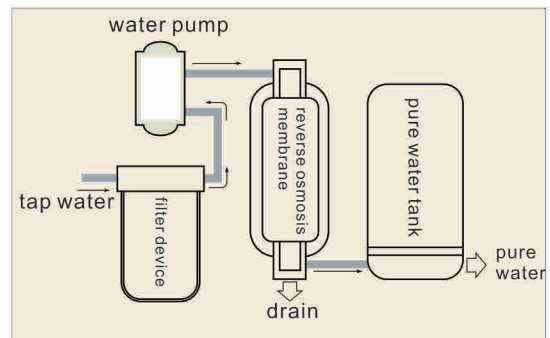
## Installation Kits

Keeping the humidifier functioning requires clean air and water. Air and water purification processor as well as automatic control device will be provided according to your actual needs.



## Small Water Purifier for High Performance Humidifier

With simple and compact structure. Pure water can easily get when power is on and raw water is introduced. Focus on basic function, low cost but high performance.



## ROF Series Specification

Model no		ROM-M1	ROM-M2	ROM-M4N	ROM-M6N
Amount of desalinated water(L/h)	Water temperature <sup>25</sup> °C	13	25	80	110
	Water temperature <sup>15</sup> °C	8.5	16	50	80
	Water temperature <sup>5</sup> °C	5	9.5	30	45
Displacement ( L/h )		15.5±20%	15.5±20%	40±20%	60±20%
Composition	Rofilm	1piece	2piece	4piece	6piece
	Activated carbon filter	10inch×1piece	10inch×1piece	10inch×2piece	
	Water tank	( 4L ) Contained	( 10L ) purchase in addition	( 10L ) purchase in addition	
Voltage50/60Hz		AC100V 1A	AC100V 1A	AC100V 5.5/5A	
DimensionsH×W×D (mm)		465x222x440	432x350x330	550x352x569	
Body weight(There is no water)		about 20Kg	about 20Kg	about 38Kg	about 40Kg
Water tank dimensions(mm)		---	φ 280 X H420	φ 280 X H420	
Water tank weight(There is no water)		---	3.7Kg	3.7Kg	

### Note:

- ※ When the water pressure is lower than 0.1 MPa, the effect may be poor. Then please use a pressure pump
- ※ ROF series is tap water. If the well water is used as the raw water, please fully pre-process the water.

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# AE Series

## Dry Fog Controller ( Humidity Automatic Control Device )

The necessary humidity automatic control device for humidifier's automatic operation. (range of application: 20%RH-90RH) For you furnish simple, economical digital type: present the humidity degree

### Digital type( RHC-021 )



Humidity Sensor

The current humidity and the set humidity are indicated by numbers. Small and exquisite, don't take up space. (Measurement accuracy  $\pm 3\%$ )

(corresponding 100-240V)

### Analog type( RHC-011 )



Humidity Sensor

The current humidity and the set humidity are indicated by numbers. Small and exquisite, don't take up space. (Measurement accuracy  $\pm 5\%$ )

(corresponding 100-240V)

## Small Water Purifier for High Performance Humidifier

### Air Compressor

- Provide clean air for dry fog humidifier.
- Various types are available depending on the number of units.



### Air Filter

- The air filter can effectively remove moisture and impurities in the compressed air, thereby purifying the air.
- Various types are available depending on the pipe diameter.



### Oil Filter

- It can remove the oil and moisture above 0.3um in the compressed air by the superfine fiber.
- The filter element needs to be replaced when the pressure drops to 0.07 MPa.
- Various types are available depending on the pipe diameter.



### The Solenoid Valve

- Automatically spray by controlling the closing of the air and liquid lines.



### Water Filter

- Remove impurities above 5u.
- Various types are available depending on the pipe diameter.



### Air Heater

- By inserting the insulation material outside the down flow pipe into the air line, it can prevent frost cracking ( often used in the cold region).

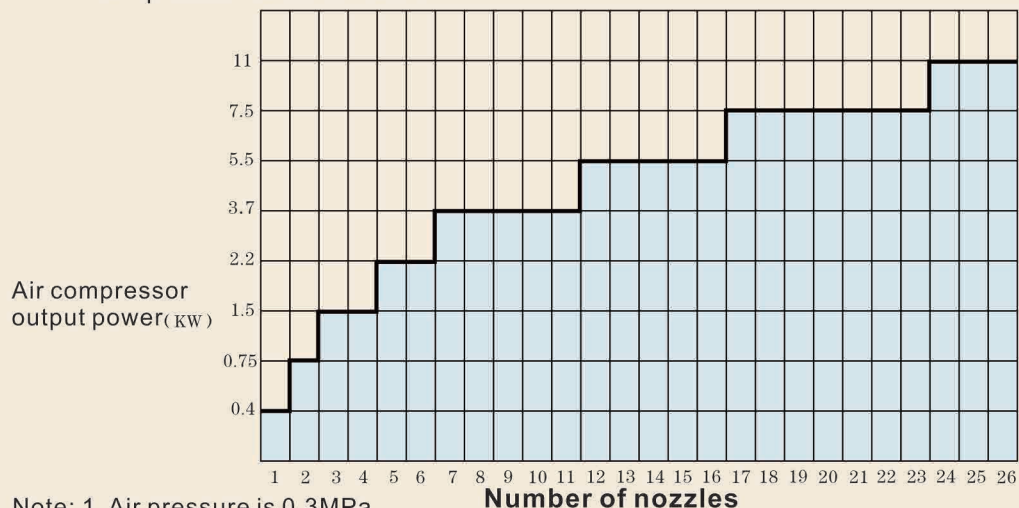


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## Machine Selection Table

Please select the necessary peripheral equipment according to the number of humidifiers.  
For piping, please refer to the air and water purification machine selection table and the recommended piping size. About material, stainless steel is recommended.

Air compressor selection table



Note: 1. Air pressure is 0.3MPa  
2. The air compressor uses a reciprocating compressor at 0.4-7.5 kWh and a spiral compressor at 11 kWh.  
3. The standard in the above table is the output value of air.

## Air and Water Purification Machine Selection Table

Nozzle		1-4 piece	5-7 piece	8-17 piece	18-33 piece
Air consumption	N.L/min	29×(Number of nozzles)			
Water volume	L/h	2.4×(Number of nozzles)			
Recommended nozzle size	Oxygen tube	1/4" above	3/8" above	1/2" above	3/4" above
	Water pipe	1/4" above	3/8" above		1/2" above
Air evolution machine	Air filter	join 3/8" Air kit		join 1/2" Air kit	join 3/4" Air kit
	Oil filter				
Water purification machine	Water filter	join 3/8" Water kit			join 1/2" Water kit
	Water pressure reducer				
	Pure water machine	ROF-M1	ROF-M2 Up to 8 nozzles	ROF-M4N Up to 25 nozzles	ROF-M6N Up to 40 nozzles

- ※ Please contact with us when the piping length is close to 100m.
- ※ The air kit includes an air filter, an oil filter, and a pipe joint connector.
- ※ The oil filter is equipped with a manual drain device.
- ※ The pure water volume of the pure water machine changes with the raw water temperature and pressure. The water kit includes a water filter, a water pressure reducing valve and a pipe joint. The water volume in the above table is the data under 15 degrees temperature and 0.1 MPa water pressure.

※ Please contact our sales staff when using more than 34 nozzles.  
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 Up to 5 nozzles.

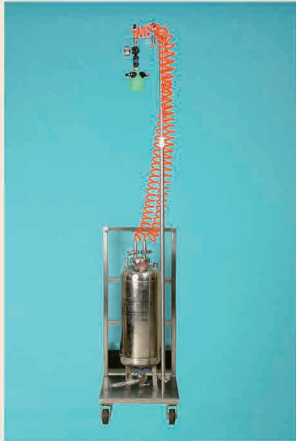
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# AE Series

## Moveable Humidifier Device

No need piping, simple and convenient, only need power and air source, can be used in any occasions. The humidifier combination consists of humidifier frame, liquid storage tank, and air compressor. No need piping tools. The installation cost is even lower if there is existing air source.



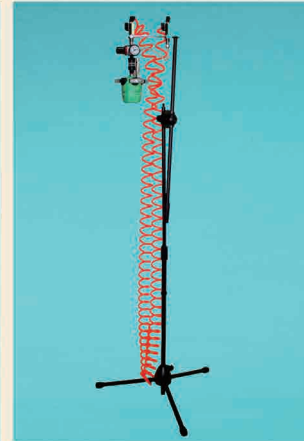
AE-3 (03) C



AE-3 (02) C



AE-3 (02) C-I



AE-3 (04) C

## Application

- ※ Printing, textile, paper mills
- ※ Localized humidification and anti-electrostatic around the machines
- ※ Anti-electrostatic in plastic and film factories and dry fog cooling
- ※ Humidification for various materials
- ※ Humidification in the freezer of vegetables, fruits and fresh foods
- ※ Gardening, greenhouse humidification
- ※ Poultry farms
- ※ Disinfection and deodorization of garbage dumps
- ※ Timed automatic humidification and automatic disinfection
- ※ When a small amount of dry fog is required
- ※ When installing a humidifier



AE-T1



AE-D1

## Mobile Air Compressor

Completely oil-free

Thanks to the use of a piston ring made of Teflon, it not only extends the service life but also purified air

Model No	Motor		Maximum pressure	Air discharge	Water tank capacity	Weight	Size
TO5P5S17	100V 0.55KW	50Hz	0.96MPa	60N.L/min	12L	20Kg	Length418mm Width495mm Height230mm
TO5P6S17		60Hz					

Note: Used only for humidifier with only one nozzle. Please prepare air source yourself when installing two nozzles and more.

## Hydraulic pressurized tank

Water tank capacity	Material	Highest pressure	Weight
18L	SUS304	0.7MPa	50Kg (Full of water=23KG)

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## Widely Options

- ※ Two types are available: medium spray (2.4L/H) and large spray (3L/H) ( air pressure is 0.3MPa, 1 nozzle)
- ※ 1-4 nozzles can be installed at the same time. The maximum working pressure of the four nozzle humidifiers is 12L/H. ( When the air pressure is 0.3MPa)
- ※ The humidity automatic control device and timing device are simple and effective.



# AE Series

## How to Use Dry Fog Humidifier Properly

### Safety Cautions

☞ **Keep the air pressure below 0.3 MPa (40 PSI) and the water pressure below 0.2 MPa (30 PSI).**

- ※ Excessive air pressure will cause the nozzle disengage from the pipe.
- ※ Excessive water pressure will cause the humidifier leak water. Pressure reducing valve can be used to lower the water pressure.

### Minimum water supply pressure

According to the number of nozzles, please set the water pressure above the water pressure listed in the following chart but under 0.2 MPa.

Number of nozzles	1	2	3	4
Minimum supply water pressure (MPa)	0.02	0.04	0.09	0.15

☞ **Please don't disassemble the humidifier under the air pressure and water pressure. It is dangerous.**

- ※ Disassembling the humidifier when there is water pressure will cause water leakage.
- ※ Please turn off the air source and water source before disassembling.

☞ **Please don't use the humidifier under the following environment:**

- ※ The ambient temperature is higher than 60 degrees (140 F)
- ※ Direct exposure to the sun or rain

☞ **Please use neutral detergent and soft towel to clean. Do not use hard brushes, polishing powder, paint and diluent.**

☞ **Please make sure the cover is properly connected to the body. If the cover is not properly connected, it will cause air leakage.**

☞ **Multiple nozzle heads can be installed to the dry fog humidifier. If one of the nozzles is blocked, other nozzles may not work properly, either.**

- ※ Please refer to the common fault judgment methods for the way to clean the nozzle.

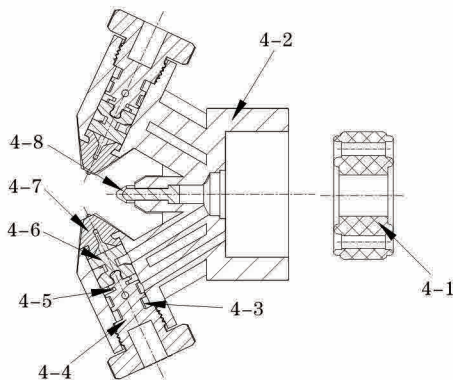
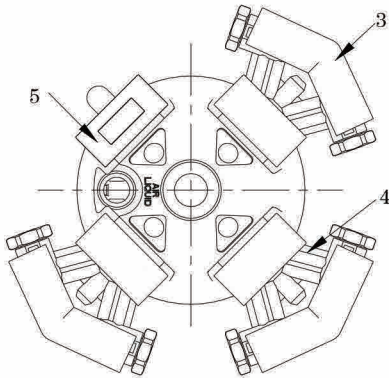
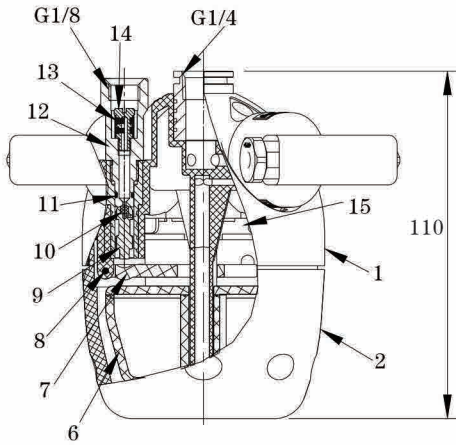
☞ **Please do not disassemble the dry fog humidifier except for normal maintenance.**

### How to Use Dry Fog Humidification Nozzle Correctly

For your convenience and extension of service life, please use clean compressed air and water. To ensure clean air and water, please use standard accessories and rustproof piping.

# AE Series

## Structure and Each Components Name



Number	Name	Material
1	Main Body	PP
2	Chassis	PP
3	Protective Cover	PP
4	Nozzle tip	PPS+SS/Brass
5	Plug	PPS
6	Pot	PP
7	Activity board	PP
8	Plug	303SS
9	Inlet pipe plug body	303SS
10	Inlet pipe plug	rubber
11	O-shaped rubber ring	nitrile rubber
12	Inlet pipe connector	303SS
13	Inlet tube filter screen	304SS
14	Inlet tube filter skeleton	303SS
15	Buckle ring	PP

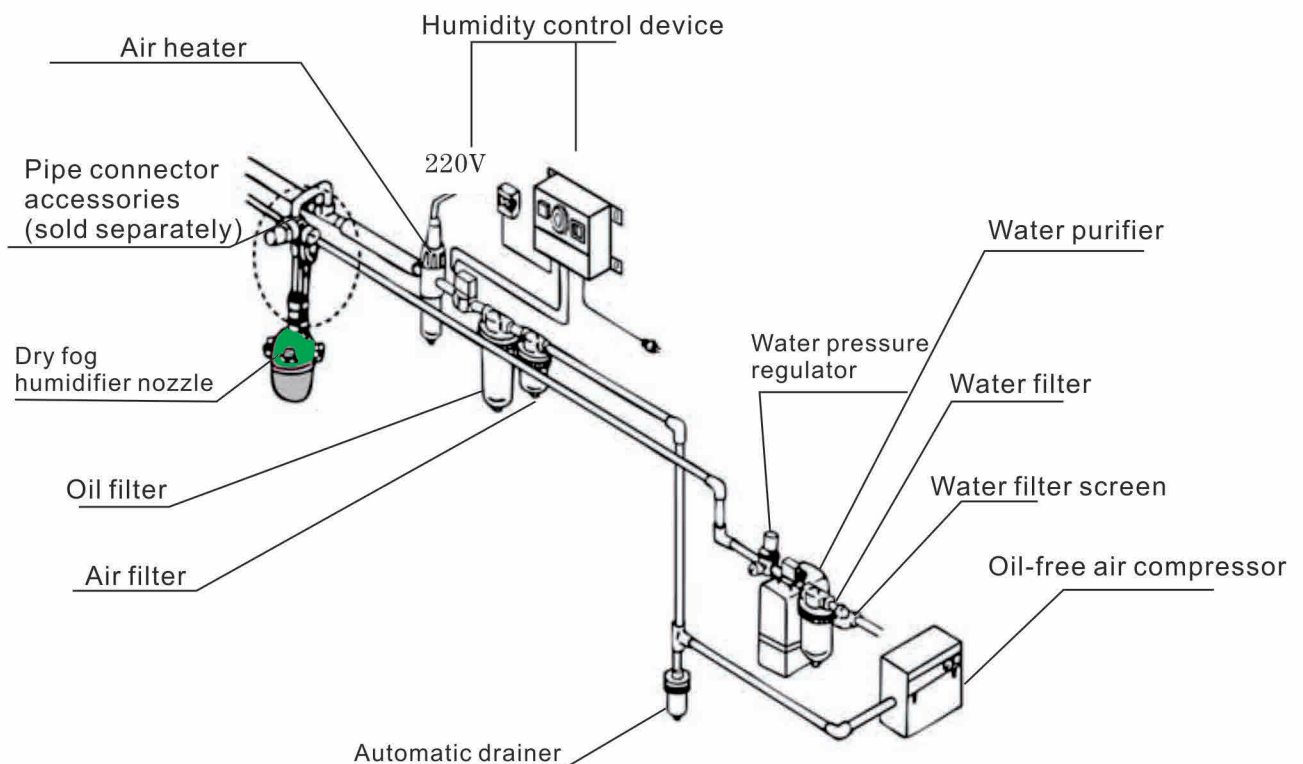
Number	Name	Material
4-1	Gasket	fluorine glue
4-2	Nozzle body	PPS
4-3	O-shaped rubber ring	nitrile rubber
4-4	Core	PPS
4-5	Core gasket	fluorine glue
4-6	Insert pin	303SS or Brass
4-7	Insert	Teflon
4-8	Blowing nozzle	303SS

# AE Series

## Precautions Before Installation

1. Make sure the compressed air is sufficient  
The compressed air consumption of one single dry fog humidifier nozzle is 29N.L/min. The dry fog sprayed will not wet the floor, machine and other items. Please check if there is enough air volume.
2. Do not use pipes that are easy to rust.
3. How to configure the pipeline  
If it is too long or curved, please use larger size pipe to compensate for the pressure loss.
4. Keep the pipeline clean  
Rust, dirt and debris will block the nozzle.
5. How to prevent the nozzle from freezing in low temperature regions  
Due to the "expansion refrigeration" phenomenon of the gas, it may cause the nozzle freeze under low temperature condition, so air heating device is installed.

## How to Choose Peripheral Devices



# AE Series

Standard connection accessories (sold separately)	<b>Three tools to choose from</b> 1) Pipe connection 2) Wall connection 3) Hanging connection	<b>Note:</b>
Installation recommendations	<b>Oil-free air compressor</b> Air filter ( filter degree is 5 µm) Oil filter ( filter degree is 0.01 µm) Automatic drainer Strainer Water filter ( filter degree is 5 µm) Water purifier	Provide clean air Remove impurities from compressed air Remove oil, dust and water from compressed air Automatically remove impurities in pipes Remove large particle impurities from water Automatically remove impurities in water Water filter ( filter degree is 5 µm ) Remove minerals and SiO <sub>2</sub> from water
Low temperature environment	Air heater	Prevent pipelines and nozzles from freezing, can also be used in winter
Automatic control	Controller and solenoid valve	Automatically maintain the specified temperature

## Detailed Installation Methods

### 1. Before installation

Please refer to the installation precautions, make sure the pressure is 0 in air line and water channel.  
Notes on the installation position:

1. Please keep no items within 4 meters in front of the nozzle.
2. Please do not place items directly under the nozzle.
3. Please install nozzle in the horizontal position.

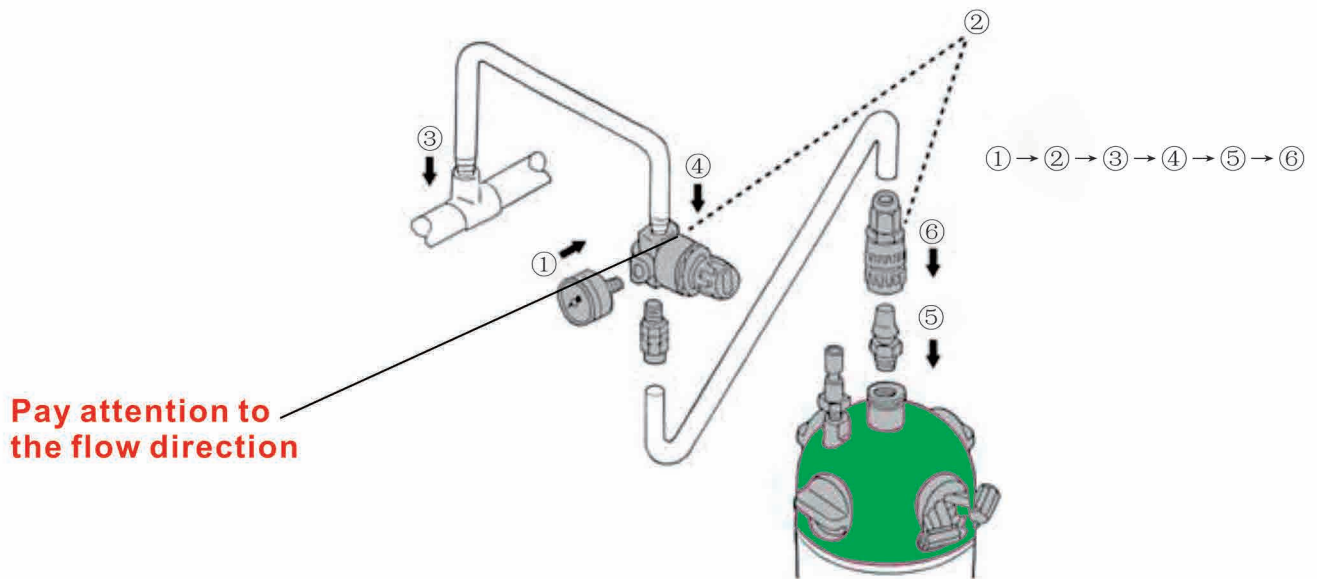
### 2. Installation of the pipe connection

The main part is made of resin, please handle it carefully!

1. It must be fixed to one side of the air
2. Please note not to screw it too tightly

### 1) Installation of the air circuit (please connect the air circuit first)

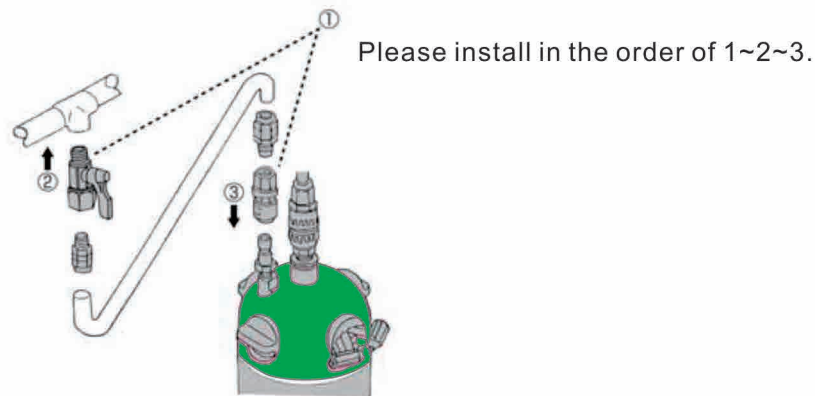
The air hose port should be set at the 1/4" interface in the center of the body



# AE Series

## 2) Installation of waterway

The interface of the waterway is at the 1/8" interface on the side of the center of the main body.



## 3. In use

The air pressure is 0.3MPa. The water pressure is 0.2MPa or less. Please refer to the minimum water supply pressure ( the lowest water pressure in safety precautions)

The water pressure at night is higher than that during the day. If the water pressure exceeds 0.2 MPa, it will not stop the water, and water leakage will happen. Thus a pressure reducing valve must be used.

When disassembling due to maintenance:

1 For security, please don't stop air and water first. 2 Disconnect the waterway. 3 Disconnect the air channel.

When installing again, please check if the water and air are disconnected. Please install in the order of 1 air 2 water.

## 4.Storage

If the nozzle will not used for a long time, the residual water must be drained, then cleaned and placed in a dry and dust-free environment.

## Correct Usage

### 1. Regular inspection

Please follow the air compressor and water purifier instructions for regular maintenance.

### 2. The ON-OFF function of fast spray can be activated more quickly

The ON-OFF function can be activated more quickly after the solenoid valve is installed nearby the nozzle.

### 3. Automatically control the humidity

After using the humidity control device, it can automatically maintain the set humidity, which is extraordinary.

## Daily Maintenance Methods

For safety, please close the water and air path first, and then carry out maintenance. Because it is dangerous to work at high place, Please maintain in safe place.

### 1. Disassemble the nozzle

1 Close the air path. 2 Close the waterway. 3 Disconnet the quick joint on the airway. 4 Disconnect the quick joint on the waterway. 5 Rotate the lower body to the left. 6 Remove the lower body

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# AE Series

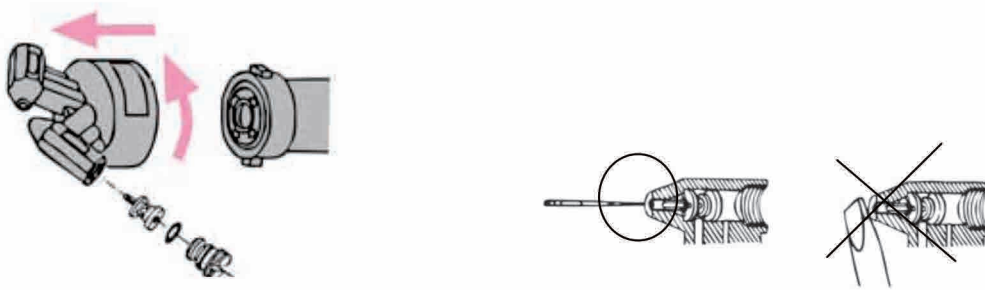
## 2. Filter cleaning

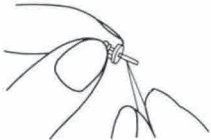

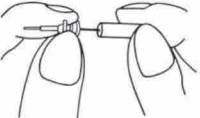
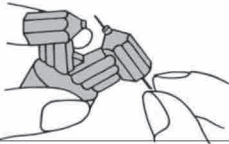
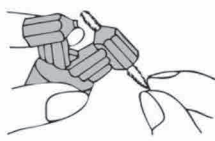
### 1) Filter on the water connector

- 1 Unscrew the water connector: use two wrenches to unscrew the water connector in the counter-clockwise direction.
- 2 Blow off the dirt on the filter screen with compressed air.

## 3. Maintenance of the nozzle (please use professional maintenance tools)

- 1 Unscrew the nozzle in the counter-clockwise direction.
- 2 Unscrew the hex head by hand and disassemble it. When disassembling, please pay attention to the moderate force of your hand, otherwise it will damage the nozzle.
- 3 Because it is a small part, please be careful not to lose it.



 <p>① Use a bamboo stick or toothpick to scrape the attachment on the front of the nozzle. Do not use metal.</p>	 <p>④ After scraping off the attachment, wipe it with neutral detergent.</p>
 <p>② Insert the needle into the liquid hole, remove the foreign matter and blow off the dirt with air</p>	 <p>⑤ Remove the attachment with strip according to the chart.</p>
 <p>③ Stretch the woolen strip back and forth several times, then use air to blow the dirt out</p>	<p>Installation method is in the reverse order of disassembly (5-4-3-2-1)</p>

Note: The nozzle material is Teflon, please do not scrape with hard object.

## 4. Durable age of each componen

The service life varies according to the actual situation. The following are reference values, please replace the device in advance.

Component Name	Lifetime
Nozzle tip O-shaped ring Component No.5-3	2 years
Main body water-stop part rubber valve Component NO.14	3 years

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Телефоны: +7 (495) 7774788, 17489626, (925) 5007155, 54, 65

Эл. почта: [info@tisys.ru](mailto:info@tisys.ru) [info@tisys.kz](mailto:info@tisys.kz) [info@tisys.by](mailto:info@tisys.by)

# AE Series

## Common Fault Judgement and Maintenance

If abnormal occurs, please immediately cut off the water and gas, and check the humidifier according to the following items.

Problems	Please check the following items	Solve ways
1. Do not spray or can't spray immediately 2. Brokenly spray	Is the air pressure correct?	Please set at 0.3MPa.
	Is the lid tight?	Close the cover tightly.
	Is the pressure relief valve facing correctly?	Set according to the flow direction.
	Is the orientation of the solenoid valve correct?	Set according to the flow direction.
	Is the solenoid valve working?	Set according to the flow direction.
	Is the filter on the inlet pipe joint blocked?	Clean the filter.
	Is the filter in the waterway blocked?	Clean the filter.
	Is the O-ring inside the nozzle installed correctly?	Install correctly or re-change one.
	Is there any dirt on the nozzle?	Remove dirt.
	Is the rubber ring between nozzle tip and adapter installed correctly?	Install correctly or re-change one.
3. The fog particles are very thick	Is the nozzle frozen?	Heat the air humidifier.
	Is the air and water installed correctly?	Install in the right way.
	Is the lid tight?	Close the cover tightly.
	The piping is too thin and there are too many elbows?	Change the thicker piping and reduce the elbow.
	Is the air pressure appropriate?	Set the pressure at 0.3MPa.
	Is the air filter dirty?	Clean the air filter or replace a new one.
4. There are water-drops from the nozzle.	Is the solenoid valve dirty?	Clean the solenoid valve or change a new one.
	Is there any dirt in the spout?	Clean the spout.
5. There is water leak from the main body of the humidifier.	Is the water pressure below 0.2MPa?	Set it below 0.2MPa.
	Is the water shut-off valve installed correctly?	Correctly install or replace one.
	Is the inlet pipe loose?	Spin it tightly.

Note: If there is still no normal spray after all inspection according to the above items, please contact our salesman.

# AE Series

## 1. Maintenance

Please Follow The Instructions For maintenance.

Distinction	Event	Content
Daily inspection	Check the pressure gauge	In the spray status, the air pressure value in the air compressor should be set as 0.3MPa.
	Check the amount of impurities accumulated in the air filter	According to the place where the air compressor is placed, the amount of sediment is also
	Check the operation of the solenoid valve (when there is a controller)	Check if the solenoid valve is working properly (the humidity automatic control device is also confirmed as good)
Periodic inspection	Clean the inner core of the air and oil filter	Use neutral detergent to wash once a month.
	Clean the water filter	Wash with water once a month, then blow with air till dried.
Check the humidifier regularly (when it is not in use)	Remove water and gas from the piping	When not in use, be sure to remove water and gas from the piping.
	Wash water filter	Please wash it when not in use. Please carefully check and clean dirt and rust when reuse.
	Blow dry the air inside the pipe	Blow dry the air in the pipeline before and after use.

## 2. Parts Replacement

Parts name	Replacement period
Inner core in air filter and oil filter	2 years
Inner core in water filter	4years
Pressure reducing valve partition	2 years
Plunger in solenoid valve	5years



# AE Series

## Peripheral Machines

### Air Compressor



- 1) Provide clean air to the nozzle
- 2) Various models are available depending on the number of units.

### Automatic Drainer



- 1) After installation on the air piping, the residual sewage in the pipe can be automatically discharged.
- 2) If the air volume that can pass through is below 100 N.L./min, the device will not work.

### Oil Filter



- 1) Remove oil and moisture above 0.03  $\mu\text{m}$  in compressed air by superfine fibers.
- 2) The core need to be replaced when the pressure drops to 0.07MPa.
- 3) Various types are available depending on the pipe diameter.

### Air Filter



- 1) The air filter can effectively remove moisture and impurities in the compressed air to purify the air
- 2) Various types are available depending on the pipe diameter.

### Water Filter



- 1) Remove impurities in water above 5 microns.
- 2) Various types are available depending on the pipe diameter.

### Water Filter Screen



- 1) The 150 mesh screen can remove impurities in water above 0.1mm.
- 2) If use water dispenser, be sure to install a 10-15 mesh filter on the upper stream.

# AE Series

## Water Pressure Regulator



- 1) Precise control of water supply pressure..
- 2) The set pressure is from 0.01 MPa to 0.35MPa.

## Water Purifier



- 1) The reverse-permeation membrane type water purifier, which can remove impurities in water, can effectively prevent the nozzle from being blocked.

## Humidity Automatic Control Device



- 1) Control the humidity to the desired value regardless of day and night.
- 2) Small and lightweight design.
- 3) The voltage is between 100-240V.

## Humidity Sensor



- 1) Send temperature signal to the controller.
- 2) Use the latest ultra-small polymer molecules.

## The Electromagnetic Valve



- 1) Automatic control the supply of air and liquid.

## Air Heater



- 1) An air heater is inserted into the air line, and the insulation material outside the pipe prevents it from frost cracking.

# AE Series

## Dry Fog Humidifier Equipment Test Report




2012191101Z  
有效期至2014年2月17日

检测编号: WJ20121039  
Test No.

**广州工业微生物检测中心**  
**GUANGZHOU INDUSTRY MICROBE TEST CENTER**  
**检测报告**  
**REPORT FOR ANALYSIS**

收样日期: 2012年5月28日      检测日期: 2012年6月6日  
Date Received      Date Analyzed

样品名称 Name of Sample	塔福 NW20	样品来源 Source of Sample	送样 Client
委托单位 Applicant	东莞市东原科技实业有限公司	委托人 Client	张瑞
生产日期和批号 Date and Batch Number of Production	—	样品数量 Quantity of Sample	1份 (2瓶, 1L/瓶)
样品状态 State of Sample	液体	样品包装 Packing of Sample	瓶装
检验依据和方法 Standard and Methods	《消毒技术规范》(2002年版) 2.1.3 空气消毒效果鉴定试验		
检测项目 Items of Analysis	杀灭率 (枯草芽孢杆菌 CMCC(B)63501, 黑曲霉 ATCC 16404)		
备注 Remarks	—		

试验条件:  
Test conditions  
温度 26℃, 湿度: 50~70%RH.  
消毒空间: 13m<sup>3</sup>.  
样品与水配比: 1:2.

试验结果:  
Test results

样品编号	试验菌种	作用时间	对照组		试验组		杀灭率 (%)		
			初始菌落数 (cfu/m <sup>3</sup> )	作用后菌落数 (cfu/m <sup>3</sup> )	自然消亡率 (%)	消毒后菌落数 (cfu/m <sup>3</sup> )			
WJ20121039-1	枯草芽孢杆菌	1.5h	1	2.45×10 <sup>5</sup>	5.21×10 <sup>4</sup>	78.73	3.22×10 <sup>3</sup>	41	99.94
			2	4.11×10 <sup>5</sup>	9.24×10 <sup>4</sup>	77.52	2.85×10 <sup>3</sup>	32	99.95
			3	2.67×10 <sup>5</sup>	6.02×10 <sup>4</sup>	77.45	2.33×10 <sup>3</sup>	42	99.92
	黑曲霉	1h	1	7.83×10 <sup>4</sup>	1.99×10 <sup>4</sup>	86.08	1.02×10 <sup>3</sup>	34	99.76
			2	8.13×10 <sup>4</sup>	1.16×10 <sup>4</sup>	85.73	1.12×10 <sup>3</sup>	85	99.87
			3	8.33×10 <sup>4</sup>	1.43×10 <sup>4</sup>	82.83	1.04×10 <sup>3</sup>	16	99.91



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编制:   
Organizer and Checker  
职称: 工程师  
Business

批准:   
Issuer  
职务: 高级工程师  
Business

签发日期: 2012.6.6  
Date Reported  
检测专用章  
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第 1 页, 共 1 页

2012191101Z  
有效期至2014年2月17日

Test No.: WJ20121039

**Guangzhou Industry Microbe Test Center**  
**Report For Analysis**

Date Received: May 28, 2012  
Date Tested: June 6, 2012


Name of Sample	NW20	Source of Sample	Delivery
Applicant	Changyuan Technology Industry Co.,LTD	Client	Zhang Yao
Number of Production	—	Quantity of Sample	One(2 bottle, 1L/bottle)
State of sample	Liquid	Packing of sample	In bottle
Standard and Methods	<Technical Standard For disinfection>2.1.3		
Items of Analysis	Killing Rate ( <i>Bacillus subtilis</i> CMCC(B)63501, <i>Aspergillus niger</i> ATCC 9642)		
Remarks	—		


Test conditions  
Temperature 26℃, Humidity 50~70%RH;  
Test Room: 13m<sup>3</sup>.  
The proportion of sample and water: 1:2.

Test results

Number of Sample	Test Bacteria	Test Time	Test number	Control Test Items			Test Items		
				Original Bacteria Count (cfu/m <sup>3</sup> )	Bacteria Count after Treatment (cfu/m <sup>3</sup> )	Physical Death Rate (%)	Original Bacteria Count (cfu/m <sup>3</sup> )	Bacteria Count after Treatment (cfu/m <sup>3</sup> )	Killing Rate (%)
WJ20121039-1	<i>Bacillus subtilis</i>	1.5h	1	2.45×10 <sup>5</sup>	5.21×10 <sup>4</sup>	78.73	3.22×10 <sup>3</sup>	41	99.94
			2	4.11×10 <sup>5</sup>	9.24×10 <sup>4</sup>	77.52	2.85×10 <sup>3</sup>	32	99.95
			3	2.67×10 <sup>5</sup>	6.02×10 <sup>4</sup>	77.45	2.33×10 <sup>3</sup>	42	99.92
	<i>Aspergillus niger</i>	1h	1	7.83×10 <sup>4</sup>	1.09×10 <sup>4</sup>	86.08	1.02×10 <sup>3</sup>	34	99.76
			2	8.13×10 <sup>4</sup>	1.16×10 <sup>4</sup>	85.73	1.12×10 <sup>3</sup>	85	99.87
			3	8.33×10 <sup>4</sup>	1.43×10 <sup>4</sup>	82.83	1.04×10 <sup>3</sup>	16	99.91

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Issuer:   
Business: Senior Engineer

Date Reported: 2012.6.6  
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