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# MUSHROOM CULTIVATION

HUMIDITY CONTROL AND IRRIGATION  
FOR MUSHROOM FARMS

# INCREASE THE YIELD OF YOUR MUSHROOM FARM WITH HUMIDITY CONTROL AND IRRIGATION MANAGEMENT

## PROBLEMS ON MUSHROOM FARMS DUE TO INSUFFICIENT HUMIDITY



### UNWANTED EFFECTS DUE TO LACK OF HUMIDITY:



WATER AND WEIGHT LOSS



GROWTH STALL



COLOR SHIFT



CRACKS



REDUCED QUALITY



MOLD

## THIS IS IKEUCHI



### MADE IN JAPAN

All our products are developed and produced in Japan, which ensures our customers the highest standard in quality.



### SINCE 1954:

Ikeuchi has more than 70 years of experience in spray nozzle technology and serving the horticulture industry.



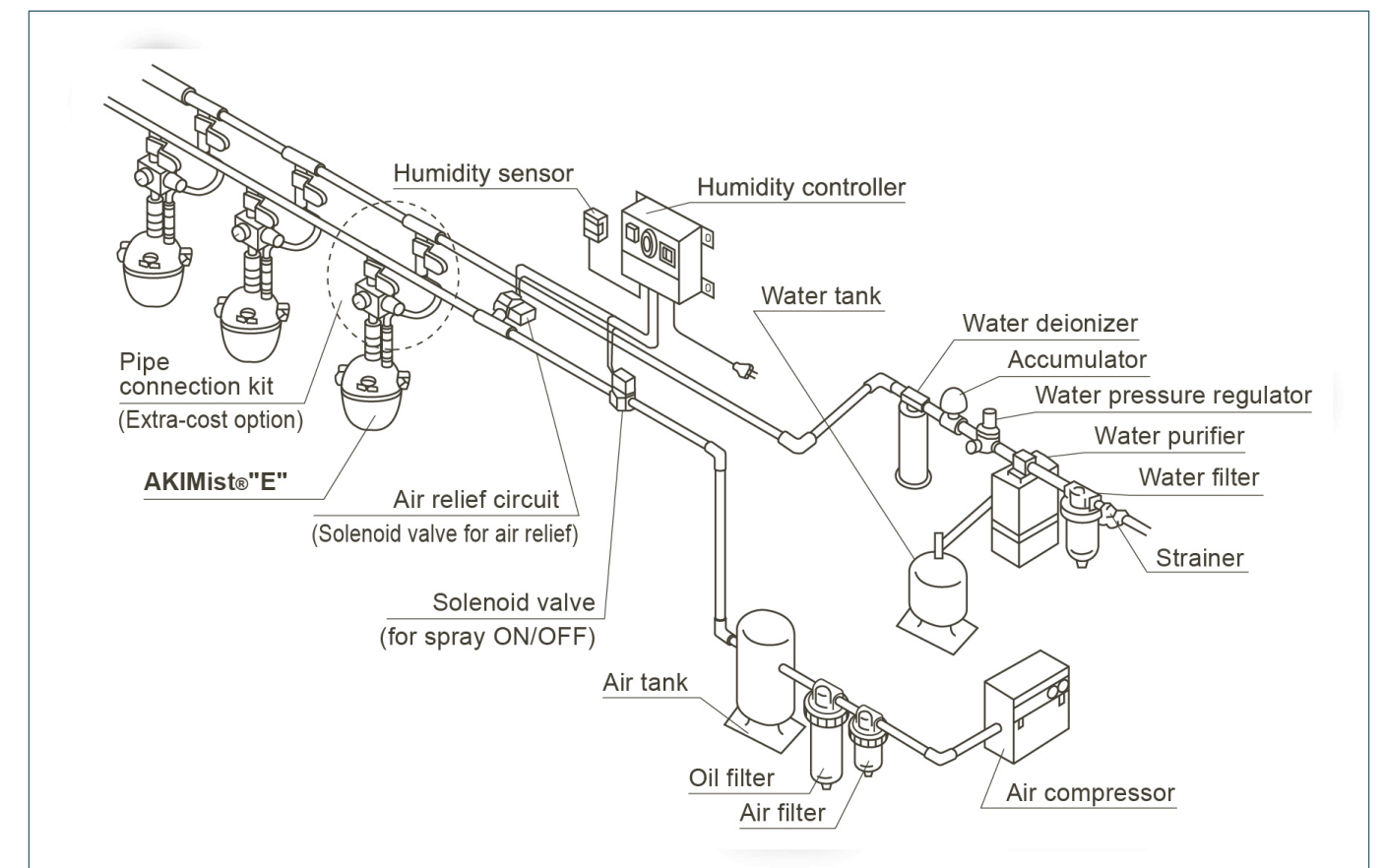
### CLOSE TO YOU:

Ikeuchi Europe is located in the Netherlands, from where we can serve all of Europe.

## IKEUCHI'S SOLUTION: AKIMIST® DRY FOG HUMIDIFICATION

**AKIMist®** is a Dry Fog humidification unit which can be combined with control equipment, reverse osmosis equipment and several other units for a complete system solution.

**Non-wetting Dry Fog** sprayed from AKIMist® produces and maintains a humidity-controlled environment without creating water puddles. Spraying droplets at an average size of 7.5 µm, the water droplets evaporate before reaching any surface,



## STANDARD INSTALLATION

We offer tailor-made solutions.

Before installation of an AKIMist® system, we analyze the customer's needs and site to create the ideal environment.

Humidification system planning and layout are designed to meet each and every customer's requirements to achieve the desired condition.

## DRY FOG HUMIDIFICATION SYSTEM AKIMIST® ITS APPLICATIONS

### PERFECT CONTROL

Managed by a control unit with a timer or humidity sensor, an AKIMist® system will keep a constant humidity level year-round in the growing room.

### FLEXIBLE INSTALLATION

Thanks to the small size of the Dry Fog humidifier AKIMist® (~5 inch), it can easily fit in a tight growing room or under a low ceiling. AKIMist® can either be mounted to the wall or ceiling with our easy installation kits. A portable version is also available.

### NO CONDENSATION

Due to its tiny droplet size with an average of 7.5 µm, AKIMist® does not cause any condensation or wetness in the growing room. This ensures a homogeneous growth of the mushrooms, and reduces the risk of mold.



## AKIMIST VS. ALTERNATIVE SYSTEMS

### THE ENERGY EFFICIENT HUMIDIFIER

#### Energy efficient

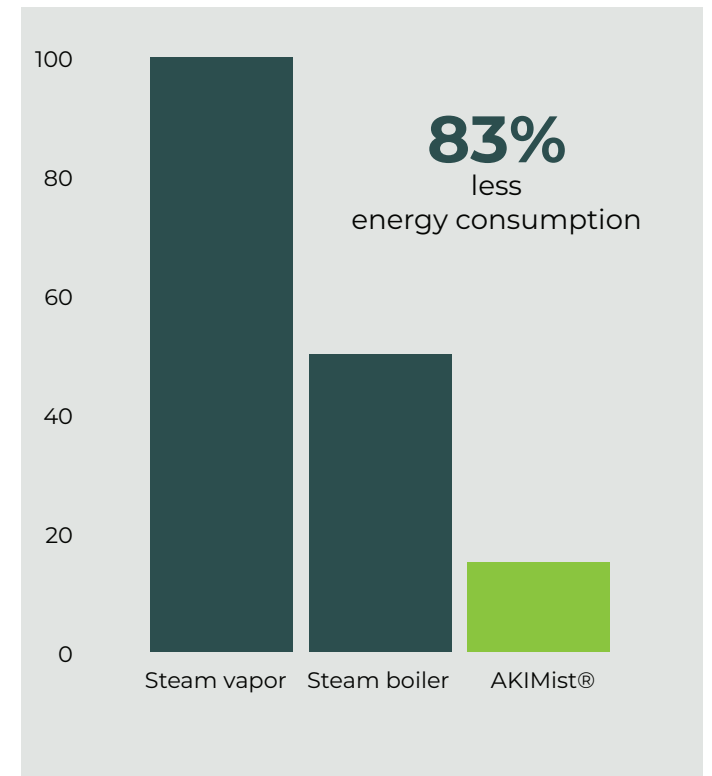
AKIMist® uses 83% less energy than conventional humidifiers such as steam.

#### Cost efficient

By switching from steam humidification to AKIMist®, you will save more than €50.000 per year on energy costs.

#### No risk of leakage:

Due to the tiny droplet size around 7.5 µm, AKIMist® is non-wetting. In addition, AKIMist® will stop spraying as soon as the compressed air is turned off, without any dripping.



## ADVANTAGES OF AKIMIST®:



### AKIMIST® ADVANTAGES:

- Non-wetting (7.5 µm)
- Non-condensing
- Compact - 5 Inch (13 cm)
- Easy to install
- Little maintenance
- Increased quality
- Higher yield
- Crack prevention
- Mold prevention

## IRRIGATION SYSTEM FOR MUSHROOM CULTIVATION INCREASE THE YIELD AND QUALITY OF YOUR MUSHROOMS

- Ikeuchi's SSP nozzle has been specifically developed for mushroom irrigation based on our clients needs.
- It has a 125° wide spray angle in order to cover a large growing bed with a limited spraying height.
- The uniform square pattern with wide angle makes it easier to achieve full coverage without overspray or missed areas.
- The SSP has a low Spray Impact: approx. 300 µm (classified as natural light rain) which is considered the ideal amount for most mushrooms.
- This spray nozzle is especially designed to spray only downwards in order to avoid damages on LED lights, and to prevent rotting of woods etc.



### ADVANTAGES:

#### ■ Higher yields:

Consistent and precisely controlled irrigation will lead to higher mushroom yields. Since mushrooms are composed primarily of water, insufficient moisture can lead to smaller, less desirable crops. Adequate irrigation helps ensure the growth of larger, more marketable mushrooms.

#### ■ Hydration

Hydration is important for a successful mushroom harvest. Without proper hydration control, mushrooms can become dehydrated or oversaturated, leading to poor yields or low-quality produce.

#### ■ Time management:

Having an automatic irrigation system will save an enormous amount of time and labour on your mushroom farm. Instead of manually watering each bed or container, farmers can set up irrigation schedules and let the system do the work, freeing up their valuable time for other essential tasks.

## CUSTOMER TESTIMONIALS

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“An organic mushroom farmer in France installed AKIMist® in their growing room and managed to increase their yield significantly.”



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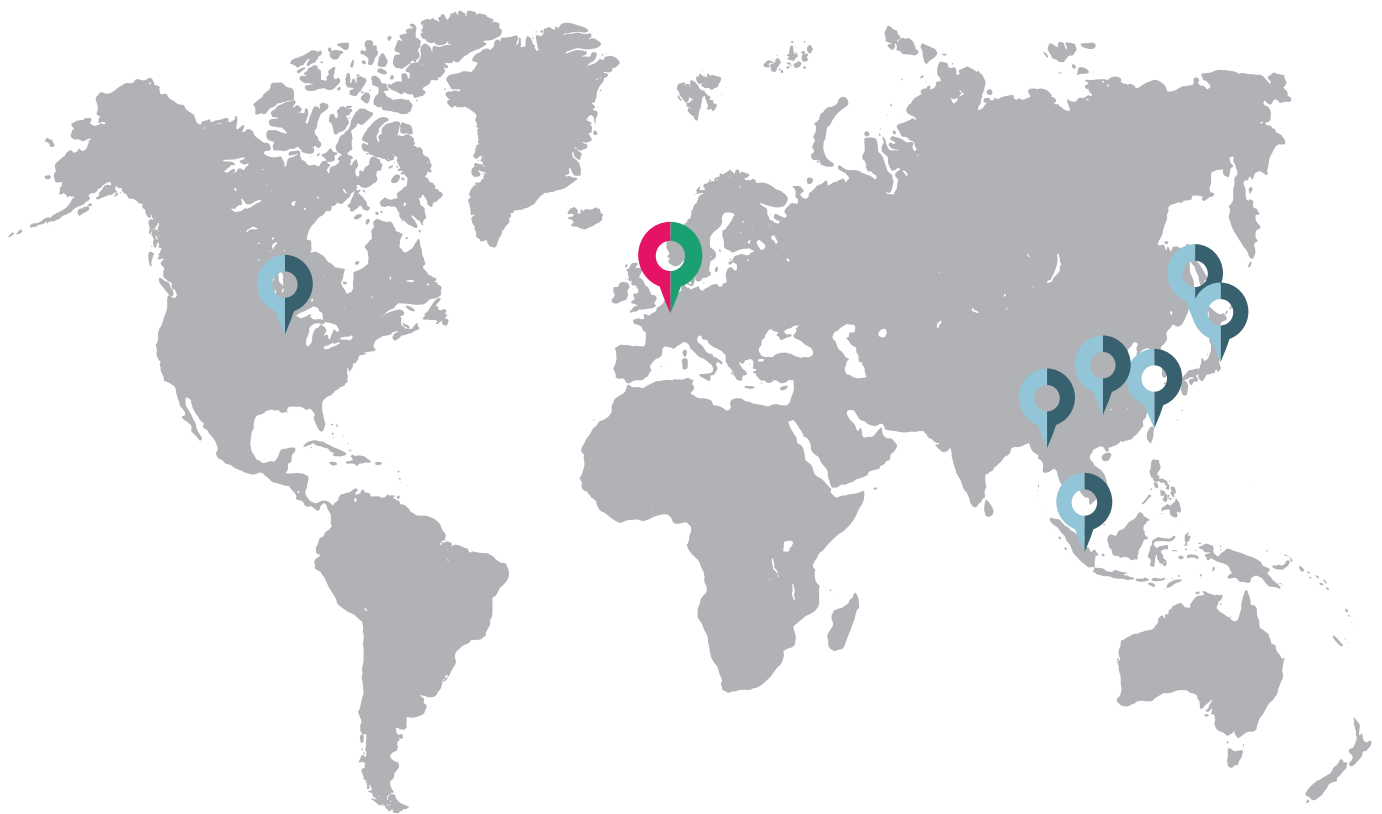
“A Belgian mushroom farmer successfully installed an Ikeuchi irrigation system to prevent the mushrooms from drying out.”



“

“A Dutch leading company in climate control for mushroom cultivation and horticulture, utilizes AKIMist® for a number of their projects.”





Ikeuchi is a Japanese company with branches all over the world. It was founded in 1954 in Osaka and has since then expanded across Asia, North America and Europe.

For inquiries / information requests / quotations related to this product, please contact us



# Ikeuchi Europe

The fog engineers

"Taking the path less traveled"

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