Non-wetting

Dry Fog Humidifiers = AKIMist® "E" =

The world's most compact, high-powered humidifiers

- **El humidificador industrial modelo AKIMist "E" está dotado de 1 a 4 boquillas por cada aparato, una versatilidad nunca vista.**
- **Tiene una capacidad de 14,4 litros de agua/hora, irrigados por una unidad de 4 boquillas; sólo con aire comprimido y agua.**
- **Este aparato sólo pesa un kilogramo. No posee ningún motor y toda la tecnología empleada es japonesa.**
- **La atomización del agua es de 5 micrón, hace una niebla imperceptible que no moja.**
- **El consumo energético es de 1,6Kw., con el motor del compresor instalado y para una unidad de 4 boquillas.**

Características:

1- Un diseño ultra compacto: el humidificador más compacto en el mundo con alta performance.

2- Alta performance en el rociado: las cuatro boquillas patentadas mundialmente (AKIJET), proveen un rociado de alta calidad, con alcance de cuatro metros, produciendo una efectiva humidificación.

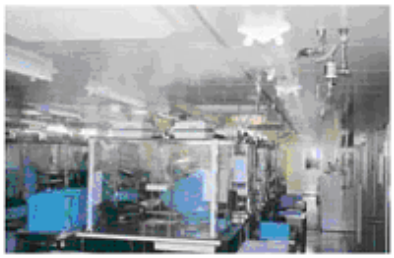
Features

- Dry Fog is sprayed over 4 meters horizontally to provide widespread humidification (*1)
- Consumes no electricity, runs on compressed air
- Compact water tank keeps free from bacteria
- Automatic humidity control available with timer or humidity controller

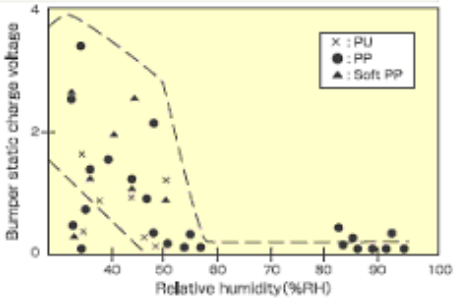
(*1) Spray length depends on the surrounding air temperature and humidity conditions.

Applications

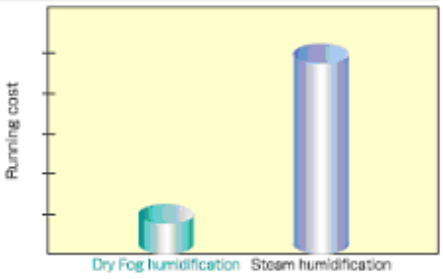
■ Humidification : Textile factory, Mushroom nursery, Poultry incubation, Fermentation room, Cold storage for food
■ Moisture control : Textile, Paper, Plywood, etc.
■ Static electricity control : Printing, Textile, Painting line, Plastic film, Plastic molding, Assembly line of electronics, Paper, etc.
■ Preventing dust adhesion : Plastic molding, Bag-making, Painting line, etc.
■ Dust suppression : Painting line, Foundry, Ceramic fabrication, etc.
■ Curing : Concrete, etc.



● Relation between humidity and static charge



● Comparison of the running cost of humidification methods



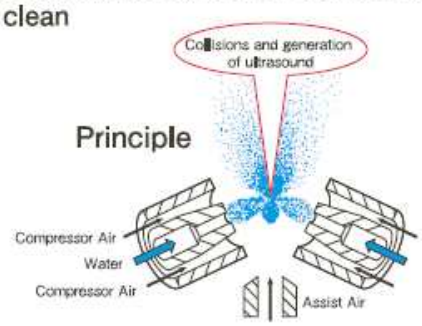
New Dry Fog Nozzle AKI03C

*compatible with AKIMist "D" body
(only nozzle can be replaced)

Easier to maintain and harder to clog

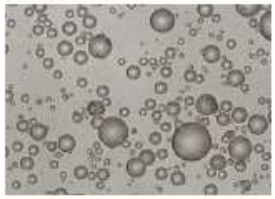
- Consumes less air
- Most clog-resistant nozzle created using new technology
- Plug and spray tip are combined, making it easier to disassemble and clean

By utilizing AKIJet®, AKIMist®"E" sprays Dry Fog; highly-uniform droplet fog with mean diameter of less than 10μm.(*)
It can humidify without wetting targets.
*AKI03B nozzle has a mean diameter of 12μm.

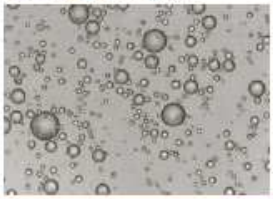


AKIMist."E"

Conventional pneumatic spray nozzle



Spinning disk type



Ultrasonic type

High Quality Fog AKI03C nozzle

Suitable for humidification without wetting your machines and products even within a room of limited space

■ Performance ■

Air Pressure MPa (psi)	Spray Volume ℓ/hr (GPH)	Air Consumption ℓ/min, Normal (SCFM)
0.2 (29)	1.3 (0.34)	22 (0.82)
0.3 (44)	2.4 (0.63)	29 (1.08)
0.4 (58)	3.1 (0.82)	36 (1.34)
0.5 (73)	3.6 (0.95)	43 (1.60)

Note: Use under the air pressure of between 0.2-0.5MPa (29-73psi)

■ Specifications ■

Model No.	Number of Nozzles	at air pressure of 0.3MPa (44psi)	
		Spray Volume ℓ/hr (GPH)	Air Consumption ℓ/min, Normal (SCFM)
AE-1(03C)	1	2.4 (0.63)	29 (1.08)
AE-2(03C)	2	4.8 (1.27)	58 (2.16)
AE-3(03C)	3	7.2 (1.90)	87 (3.24)
AE-4(03C)	4	9.6 (2.54)	116 (4.32)

Sauter mean droplet diameter measured by a laser analyzer: 7.5 μm

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Principales aplicaciones:

Humidificación en el trabajo textil, incubación de aves, recintos de fermentación, cámaras frigoríficas.

Prevención de cargas electroestáticas en impresión, electrónica y en producción plástica.

Principales industrias para su aplicación:

Textil / Gráfica / Alimentación / Electrónica / Automotriz / Pinturas / Agricultura / Química / Papelera y Maderera / Plástica / Cerámica / Sistemas de Refrigeración.

Akimist "E" Humidificador brinda extensivas aplicaciones en las principales y variadas industrias. Como es el caso de la industria textil:

- **El humidificador produce un cuantioso volumen de rocío con poca cantidad de aire. Aplicable para la humidificación en ambientes espaciosos y de considerables dimensiones.**

AKIMist "E" humidificador:

Por un mínimo mantenimiento y para toda la vida, aire limpio y agua purificada serán suministrados, controlados por años de experiencia.

Efectos en la industria:

- ✓ El humidificador no sólo previene la electroestática sino que además proporciona la mejor calidad de aire.
- ✓ Por acción directa del spray del humidificador, un efecto fresco y una energía salvada.
- ✓ Una condición de humedad en los hilos.

Customer Case Studies

1. Printing — Web Offset Printing Process

Humidity control suited to each printing press type and process has a big impact.

- AKIMist® has quickly gained acceptance as nozzle-type humidification systems are becoming popular in the printing industry.
- AKIMist® has the best track record in the Japanese printing industry, with over 15 years of strong experience.
- For sheet-fed printing, UV printing, Flexo printing and others, we have the best-suited solutions for all kinds of printing presses.

Improved productivity and quality, reduced waste paper

Paper jams, poor folds, etc. ➡ *Solved by controlling humidity to around 50%RH*

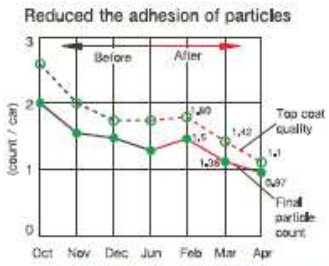
2. Electronics — SMT Process

A humidification method that can be counted on to save energy has become the strongest focus of attention.

- By maintaining humidity at an appropriate level, it is possible to prevent the various problems from static electricity.
- The dry fog cooling effect reduces the building cooling load.
- With the No. 1 track record as well as 15 years of remarkably good results, we have optimal solutions for a wide range of processes and environments.
- It is also well-suited for clean room humidification.

Adhesion error rate reduced 60%
Cooling load reduced 20%

Internal part damage ➡ *Solved by controlling humidity to around 45%RH*



3. Painting — Painting Process for Cars

Control ambient humidity to eliminate static electricity and limit airborne waste.

- By keeping appropriate humidity, dust is suppressed and static electricity is reduced.
- Humidification is the first step to reduce the adhesion of dust to products.
- Starting with the car industry, AKIMist® is now used in many kinds of industry as the solution for dust problems.
- We can find solutions to meet the needs of your factory.

Reduced the adhesion of dust by 20%
Maintaining Operators' health

Defective painting by adhesion of dust etc. ➡ *Solved by controlling humidity to about 50% RH*

Other Installations

Field	Goal	Concrete examples of results
Textiles	Improved productivity	• Thread breakage is prevented and productivity improved. • Prevented pass weft from sticking. • Prevented defects due to static electricity.
Chemicals	Safety precautions	• Reduced the risk of ignition in paint and ink mixing processes. • Allowed humidification for processes where it had been previously thought impossible. • Reduced risk of fire, which could lead to loss of life and loss of public trust.

We have numerous proven solutions for industries beyond the above cases. *These effects depend on factory conditions.

Contáctenos para más información:

Selltex - Humidificación

Ing. Roberto E. Seldes
Castillo 466 (1414) Buenos Aires – Argentina.
Tel/ Fax: 54-11-4772-7888 / 54-11-4773-0656. Celular: +549114538-6713.
E-mail: selltex@selltex.com.ar