

# Atomiser or nebuliser: what are the differences?

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posted on 25/05/2022

**Atomisers and nebulisers** are agricultural machines used in **pesticide, fungicide and disinfectant treatments** on both arboreal and herbaceous crops, in particular vineyards, orchards, olive groves, but also nurseries, greenhouses and horticultural crops in general.

They are both **sprayers**, as they distribute crop protection products in liquid form. And they are **essential for farmers** who need machines that **spray the chemical and water mixture** and allow them **to treat their crops** and protect them **quickly and precisely**.

The main difference between atomisers and nebulisers is in **the way the liquid solution is sprayed** and distributed.

## Atomisers

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**Atomisers** are the most common for tree crops and for **medium-high volume treatments**.



The **liquid solution** is sprayed by means of the **pressure** with which it reaches the dispensing point, the **nozzle**, located on the fan. The range produced is then transported towards the plants thanks to the thrust that comes from the **powerful volume of air** developed by the fan.

The **amount of liquid to be sprayed** is dictated by the **type of nozzle** used, while the distance reached by the same depends on the **power of the fan**.

The configuration of atomisers makes them ideal for medium and high volume treatments. However, they also allow for **targeted treatments** if they are equipped with specific air conveyors. An example is turret fans, which allow the sprayed solution to be directed directly towards the vegetation.



Atomisers are suitable for different forms of cultivation and meet a number of needs. Their use ensures a **complete and even coverage** of the vegetation and **optimises treatment times** with low costs, guaranteeing the **best treatment yield** of both orchards and vineyards.

## Nebulisers

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Nebulisers are designed to **micronise the liquid solution into very fine parts** and are therefore more suitable for **low-volume treatments**.



Each nebuliser is equipped with a centrifugal fan connected to a bar equipped with various **diffusers**. The fan generates a powerful **volume of air** that reaches the dispensing points at very high speed, where it crosses the liquid solution and micronises it. In this way, it **works with lower volumes, saving water and resources**, with an even coverage as the very small size of the drops helps to keep them on the foliage.

Not only that, the **air flow** allows the foliage to move, ensuring a **homogeneous and even distribution of the plant protection product** even in the most hidden parts of the plants.

This makes nebulisers the ideal solution for **targeted and precise treatments**, which allow for a rational use of resources, especially water and plant protection products, with **economic and environmental benefits**.



## What plant protection treatments are used for

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Treatments with plant protection products are **necessary to protect crops from diseases and pests** and to preserve the integrity and quality of the crop.

The **effectiveness of the distribution** is determined by several factors, such as the **capacity** of the sprayer which, together with other external factors, allow to **obtain excellent results**.

**Inaccurate or poorly calibrated sprayers** are **less effective** in controlling pathogens. And often this leads to **excessive treatments** that can cause **phytotoxicity** or **residues** above the permitted limits. In addition to the **drift** and **dispersion of crop protection products in the environment** responsible for **pollution** and **contamination**.

## Ideal solutions for crop protection

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At **Ideal** we have been committed since 1947 to the production of **machines and equipment for the protection of crops** that are increasingly efficient and at the forefront of the latest technical innovations.

We produce **pneumatic nebulisers** specifically designed to work in an optimised manner and combine **very high performance** with **minimum environmental impact** and **great savings in resources**.

Our nebulisers ensure **better and even coverage** and **reduce the dispersion of the product** into the environment. The micronisation of the solution allows **greater adherence to vegetation** and a **better treatment result**. Not only that, the possibility of

equipping them with bars that can treat **up to 3 rows** simultaneously, allows for further optimisation of treatments, both for the proximity of the diffusers to the vegetation, and for the reduction of treatment times.



In addition to this, we produce **nebulisers with a recovery system** that use anti-drift panels to **counteract product dispersion phenomena** and recover the part of the sprayed liquid that does not settle on the plant.

We use the same pneumatic spraying system on **cannon head nebulisers** be used in greenhouses or for tree crops that are difficult to access and have effective and optimised treatments even in critical situations.



**Atomisers and nebulisers** are essential devices that can cover all the needs of **pesticide or pest control treatments** in tree and herbaceous crops.

All our machines **for the agricultural crop protection** are available in mounted and trailed versions, with different tank capacities and can be customised with many accessories, in order to meet farmers' needs all over the world.

Ideal agricultural machines are the result of **continuous research and study**. The result is the development of **innovative solutions** that solve problems and meet farmers' needs.

With a focus on the **optimised use of resources** to meet the **most efficient and sustainable** processing needs and methods and capable of providing increasingly **efficient** performance.