

Misting system



Specifications

Brand	Hortimat
Code	20439
Suitable for	Different surfaces
Pressure	Adjustable from 80 to 120 bar
Material	Stainless steel

20439-V21120301-EN

**Renewed
Quality
Machines and
Materials**



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High pressure misting system

About 80 to 90 percent of any plant consists of nothing but water. In addition to building material and transportation, cooling plants by means of evaporation is a key function of this water. Evaporation requires the so-called stomata.

The speed at which transpiration occurs is determined by heat, carbon dioxide levels, light and water. Inside the leaves of each plant, the atmospheric humidity is a 100%.

The extent to which the stomata open up is to a certain degree determined by the RH differences between the air surrounding the leaves and the RH levels

inside. Having significant differences means that the stomata will open up further, accelerating the level of transpiration. If the stomata are extremely open and the surrounding cells are no longer able to make up for water lost due to evaporation, water stress will occur.

High-pressure mist cooling systems (also known as fog systems) improve the air humidity but they also make sure space temperatures remain low, dropping by 4 to 7 degrees Celsius. By inserting mist into greenhouses, it will evaporate in a hot environment. The evaporation of water requires energy, which is withdrawn from its environment because of the evaporating mist. It is how the ambient temperature inside the greenhouse is allowed to go down significantly.

High-pressure mist serves not only the quality of your crops, but it also pushes down the energy costs. In addition, it helps improve daylight in many greenhouses. For instance, a chalk layer on the greenhouse roof is no longer necessary.

High pressure pumps

High-pressure pumping sets by Hortimat are designed to guarantee reliability at all times. It is why they are provided with the SPECK plunger pumps. Combined with a low-speed electric motor, these pumps come with a long life and are less noisy (decibel).

The control system of the high-pressure pumping is provided with a PLC, designed especially by Hortimat. It has all the necessary controls and safety devices.

For instance, if the first filters are polluted, the control system will report on time to the control and your process computer.

It means you can replace the first filters without the high-pressure pumping set going into the alarm mode. Ignoring this notification means that the alarm will sound.

The main benefit of our high-pressure pumping sets:

- The system uses "Pulse-pause" or valve system so that only one pump per installation is needed.
- Manufactured using our own facilities
- Made to measure
- High-quality stainless steel frame
- Brass or stainless steel pump houses (medium)
- Low speed
- Frequency or soft starter
- Adjustable from 70 to 120 bar
- Long life
- Easy to maintain

Hortimat customizing work

Hortimat can design the offered machine to exact the customer requirements. Optionally we constructively adjust the machine or we install new operating systems. We also deliver tailor made solutions in the form of logistic conveyor belt systems and we think along with the customer for custom made solutions.

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Why Hortimat

- + Adapting / modifying of used machines to desired specifications of the customer
- + Applying of new 2021 operating systems on used machines
- + New Hortimat range of products
- + Service and warranty by own technical specialists
- + Solid revision; guarantees a long lifetime
- + Individual advice about logistics matters, such as: grading machines, processing areas