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Boyuan Spraying

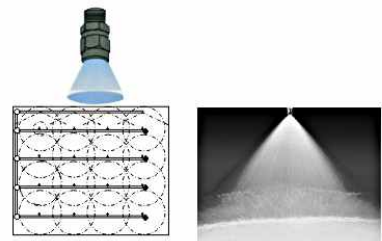## The Nozzle Distribution Scheme

· Hollow Cone Nozzle

In the case of the same spray pressure, spray flow, spray Angle, the average particle size of the hollow cone nozzle is the smallest, and the average particle diameter is small, so that the surface area of the workpiece is increased, and the processing is more delicate. It has a great impact on the movement of substances, and the hollow cone nozzle can produce good results in gas cooling, air humidification, metal treatment, dust control, gas cleaning and chemical reactions.
In the hollow conical nozzle, because the liquid is sprayed through a single hole several times by centrifugal action, there is the largest unimpeded diameter, which is an ideal choice for the liquid that is easy to produce precipitation, which can minimize the generation of blockage. Customers can choose the appropriate use method according to the general distribution map.
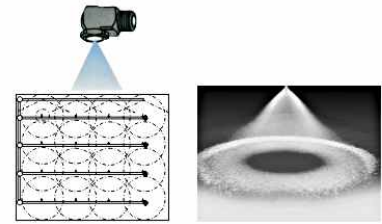
Hollow cone nozzle distribution diagram

· Full Cone Nozzle

There are generally two types of full cone nozzles, the ordinary type has a built-in swirl blade, the special type has no built-in swirl blade, the full cone nozzle produces a uniform distribution, the droplet size is medium to large spray, the spray area is uniform round, suitable for washing and rinsing dust removal, fire extinguishing, etching and cleaning of electronic circuit board.
Customers can choose the appropriate use method according to the general distribution map.

Full cone nozzle distribution diagram

· Flat Fan Nozzle

The impact force of the flat fan nozzle is larger than that of the hollow cone and the full cone. In order to obtain a more equal flow distribution when several flat fan nozzles are installed, the distribution is generally designed as a mountain distribution. In the flow distribution, spray height, installation position spacing, spray pressure and liquid properties are different, if there are errors in the performance of multiple nozzles, the design value and the actual value will be inconsistent.

(1) When there is a performance error and the flow distribution is uneven.
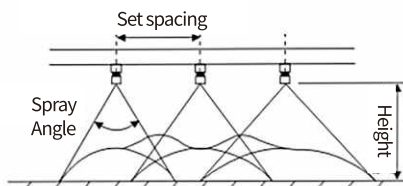
(2) An example of nozzle distribution with guaranteed accuracy has an equal fan distribution when the performance is concentrated.
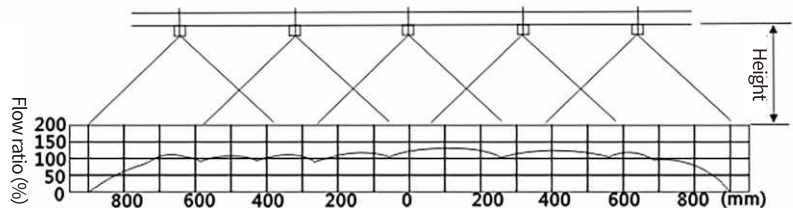
· Filter selection

The nozzle generally selects different filters according to the use of the situation, the choice of large particle size is larger than the coarse filter particle size small color selection of fine filters, filters are determined according to the number of mesh specifications.
Please see the chart below:
The filter in the nozzle is composed of the main body, the cap and the filter screen.

Mesh Number	Mesh Distance (mm)	Particle Path (mm)
#200	0.07	0.2under
#150	0.10	0.3-0.4
#100	0.15	0.5-0.7
#50	0.30	0.8-0.9

Filter
Mesh Distance
Filter detail diagram