

October 1, 2019

## The ABC of the spray nozzle’s characteristics



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### A glossary of the fundamentals for selecting spray nozzle

Nozzle manufacturers and resellers use different terms when it comes to explaining the characteristics of a nozzle: spray capacity, capacity water, flow rate, liquid distribution, fan shape pattern, etc.

Therefore, it can become a bit confusing when trying to compare different nozzles manufacturers.

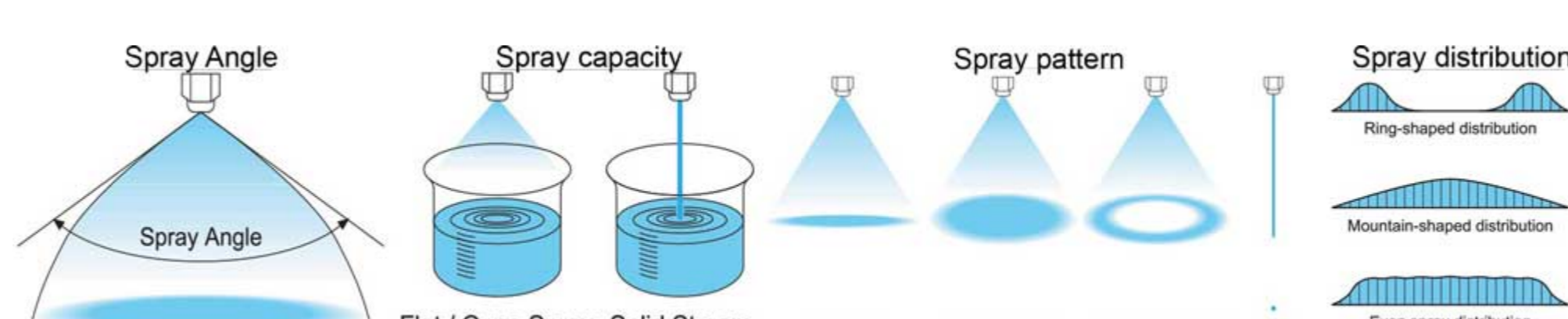
So, how can you be sure you are selecting the correct nozzle? Based on which characteristics?

That is why today we are sharing with you this glossary to help you find your way with any nozzle manufacturer.

In our [fundamentals for selecting spray nozzles](#), we mention that you can base your selection on the performance of a nozzle.

For example :

- the **spray angle**,
- the **spray capacity**,
- an optimum **spray pattern**,
- and the **spray distribution**.



In addition, we categorize each spray pattern in 4 different shapes:

- Flat spray
- Hollow cone spray
- Full cone spray
- Solid stream jet



In short, here is a list of the characteristics and similar terms you can find when searching for a nozzle.

- **Spray angle:**
  - Definition: it is the angle of spray near the nozzle orifice, measured at the top of the pattern.
  - Similar terms: Ø
- **Spray capacity:**
  - Definition: it is the amount of liquid sprayed at a defined pressure. As a result, is often determined in  $\ell/\text{min}$  or  $\ell/\text{hr}$ .
  - Similar terms: Flow rate, Capacity water
- **Spray pattern:**
  - Definition: it is the figure seen on the cross-sectional shape of the spray.
  - Similar terms: Ø
- **Spray distribution:**
  - Definition: it means the distribution of spray flow in the direction of spray width.
  - Similar terms: Spray coverage, Liquid distribution
- **Flat spray pattern:**
  - Definition: it is a flat sheet of spray representing a delimited line on the spray impact area.
  - Similar terms: Flat fan, Fan nozzle, Flat jet
- **Hollow cone spray pattern:**
  - Definition: it is a ring of spray pattern representing an empty circle on the spray impact area.
  - Similar terms: Ø
- **Full cone spray pattern:**
  - Definition: it is a conical shape spray representing a full circle pattern on the spray impact area.
  - Similar terms: Ø
- **Solid stream jet pattern:**
  - Definition: it is a straight jet which is represented by a dot on the spray impact area.
  - Similar terms: Solid stream, Primary jet
- **Hydraulic nozzle:**
  - Definition: a one-fluid nozzle generally using water or other liquid to spray.
  - Similar terms: Single-fluid atomization
- **Pneumatic nozzle:**
  - Definition: a two-fluid nozzle generally using air and liquid to generate finer water droplets usually defined as fog.
  - Similar terms: Pneumatic atomization, Air atomizing, Two-fluid, Atomizing

As a nozzle manufacturer, we [guarantee the performance of our hydraulic nozzles](#) in terms of spray capacity and spray angle.

Moreover, it is crucial to understand the different terms and what it represents.

In addition, in previous articles, we explained the importance of the difference between our high-quality products and copy products:

- [High-quality VS. cheap production](#)
- [Nozzle: Expectations VS. Reality](#)

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