VarioJet® nozzles

Twin-fluid nozzles with low air consumption despite large outlet angle



Lechler VarioJet® nozzles

atomize according to the principle of internal mixing. With this twin-fluid nozzle, the water is fed in axially via a bore hole.

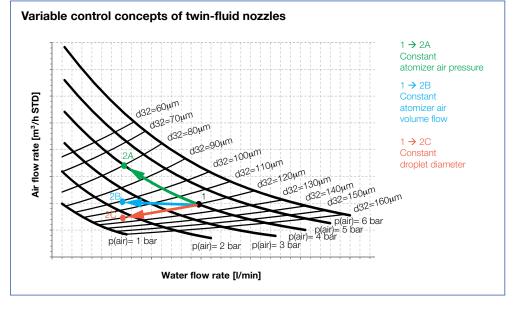
After arriving at the cone tip, the liquid is split up into a thin liquid film. This thin liquid film is split into finest droplets by the atomizing air in the mixing chamber. The resulting two-phase mixture is then atomized a second time when exiting via several bore holes arranged in a circular fashion.

Thanks to the innovative design of the nozzle, a spray with a large outlet angle is achieved. This is characterized by an even liquid distribution as well as a fine droplet spectrum with a low specific air consumption.

The fineness of the droplet spectrum is decisively influenced by the air/liquid ratio and by the pressure level of the two flow rates. As a general rule: the higher the air/liquid ratio and the higher the pressure level of atomizing air and liquid is, the finer the droplet spectrum.

The large free cross-sections in the nozzle keep the risk of clogging and the maintenance effort to a minimum.





Use:

 Gas cooling in gas cooling towers as well as gas-bearing pipes (ducts)

Properties



Large spray angle (60°, 90°) for good coverage of the cross-section of the duct



Adjustment of the droplet spectrum by changing the air/ fluid ratio



Clog-resistant thanks to large free cross-sections without internal

fittings



High turn-down ratio up to 20:1



Low air consumption



Typical pressure rangeLiquid 1-9 bar, g
Atomizing air 1-6 bar, g