

#### Ŧ

### Additional info & Downloads

- Application examples
- Replacement of air humidifiers in existing AHU
- Ł Air humidifiers for new installations 1
- Ł Air humidifiers for new installations 2

www.Lavair.com

# Advantages for recirculating water spray humidifiers

- > High control accuracy with low control effort
- > Air purification (wash-out effect!)
- Operation possible using municipal water or service water
- > Low-maintenance atomisation nozzles due to large flow cross-sections
- > Low-maintenance pump





The circulating water spray humidifier, also called an air washer, is a classic among humidification systems. The volume of water atomised within the air flow is several times greater than the water flow required for humidification. The water that is not evaporated is captured in a tank and recirculated to the nozzles.

The air washer remains the first choice for those who require very precise control accuracy in combination with high to very high humidification increases.

Compared to other systems such as steam or high-pressure humidifiers, the air washer is also preferable from an economic and energy standpoint, especially for larger airflows and higher humidification increases.

The cleaning effect of the air is characterised as a positive side effect of the operation. Solid and gaseous compounds like particulates, pollen, spores (allergens) as well as sulphur dioxides, nitrogen oxides and ozone are absorbed to a considerable degree by this. Thus, the air washer is not only used for scrubbing out NH3, but also as an AMC filtration stage in clean rooms for semiconductor production.

Depending on the application, the recirculating water spray humidifier differs in both its technical and constructional design.

Our focus is on individual design and adaptation to each customer's requirements. The hygienic innocuousness was tested by an independent third-party and confirmed through the issuance of the certificate for compliance with VDI 6022-1.



>10g/kg Humidification possible



### 200 -2,000,000 m<sup>3</sup>/h

Air flow can be individually adaptble



**0%** Water loss

# Areas of application for circulating water spray humidifiers

- > Air purification (wash-out effect!)
- > Operation using municipal water
- > Low-maintenance atomisation nozzles due to large flow cross-sections
- > Low-maintenance pump

## Feature variants for circulating water spray humidifiers

- Droplet separator and rectifier also available in PPTV, stainless steel or aluminium
- > Droplet separator and rectifier available in an optional cassette version
- > Automatic level control
- > Automatic drainage with hygienic flushing
- > Automatic elutriation with conductometry
- > Water meter for measuring consumption
- > Immersion heater for frost protection
- Physical sterilisation (UV immersion lamps, UV reactor)
- Chemical sterilisation (hydrogen peroxide, chlorine dioxide)

Lavair AG Klimatechnik Im Aachtal 14 D-78267 Aach Tel.: +49 7774 93 11-0 Fax +49 7774 93 11-29 E-Mail: info@lavair.com