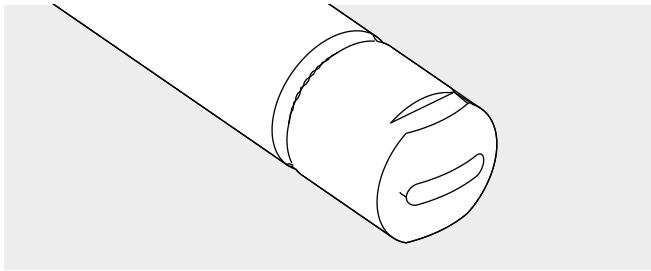


MasterNOx® for DeNOx processes

The Lechler MasterNOx® nozzles are usually used in the non-catalytic denitrification of flue gases (SNCR process). They are usually designed as flat fan nozzles and achieve a high spraying range to make the liquid penetrate as far as

possible into the boiler. The nozzle specially developed for the retrofitting of existing power plants is characterized by a small outer diameter, so that it can fit between the pipes of the boiler wall. It can also have a protective flow of barrier air around it without the need for the pipes to be bent aside.



Special properties



Spray angle
15°, 30°, 60°



Turn-down ratio
of over 50:1



Typical pressure range
Liquid 1-10 bar, g
Atomizing air 1-6 bar, g



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



Spray pattern of the MasterNOx nozzle 30°

1AW-nozzle

The Lechler 1AW nozzle works according to a newly developed and patented atomization principle. It divides the supplied atomizing air into a primary and secondary air flow. Thanks to the specific inflow geometry, the secondary air exits through an annular gap causing a very fine atomization in the edge region of the spray.

This twin-fluid nozzle enables finest droplet spectra and shortest evaporation distances while also allowing very good controllability of the flow rate. Cluster heads designed specifically for these nozzles multiply the flow rates and adapt the spray pattern to the requirements at the point of injection.

Special properties



Spray angle of the individual nozzle
15° as full cone



Particularly fine droplets thanks to tertiary atomization



Turn-down ratio
of 10:1



Design
as single or bundle nozzle lances



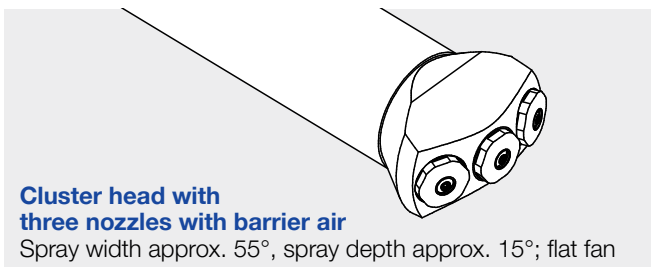
Typical pressure range
Liquid 1-5 bar, g
Atomizing air 1-5 bar, g



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



Single nozzle without barrier air
Spray angle 15°; full cone



Cluster head with three nozzles with barrier air
Spray width approx. 55°, spray depth approx. 15°; flat fan



Spray pattern of the 1AW nozzle