



HUMIDIFICATION AND COOLING

ESD protection and satisfied employees

For HELLA's electronics plant in the German city of Recklinghausen, the most important benefits of controlled humidity are protection of ESD components against electrostatic damage, additional cooling and higher levels of employee satisfaction.

For quality assurance, the automotive supplier uses direct room humidification in the Recklinghausen production halls. The installed TurboFog high-pressure nozzle humidifiers spray a micro-fine mist as required, which is immediately absorbed into the air and distributed evenly through the room.



Quality assurance and employee satisfaction are crucial for Martin Ennemann (Facility Management, right)

Air humidification, dehumidification
and evaporative cooling

 **condair**

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ESD PROTECTION AND SATISFIED EMPLOYEES

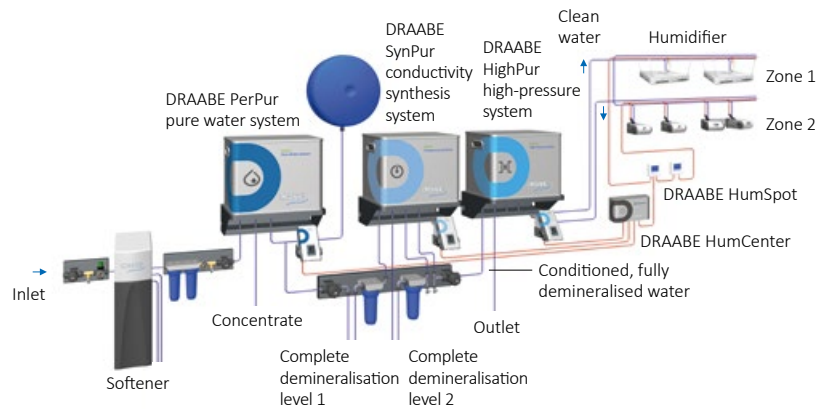
Electrostatic protection

For SMD and THT printed circuit boards, error-free machine runs and precise assembly are decisive in terms of their performance. Constant optimal humidity has a positive impact on the accuracy and speed of the assembly process. The controlled humidity protects against electrostatic charging and is a key factor for HELLA in ensuring trouble-free production.

Adding power to your air

To ensure an optimum target of around 50 percent relative humidity, a direct room humidification system from Condair Systems was first installed in 2011 and has since been expanded and updated several times. For Thomas Hering, this technology has a positive side effect: "Complete absorption of the micro-fine atomised water droplets removes heat from the hall air and has a very positive impact on our employee satisfaction levels in summer." It makes it possible to reduce the temperature in the production halls by up to 2°C very cost-effectively, leading to an appreciable improvement in well-being: "Air humidification has become a stable factor in our quality assurance, in terms of both ESD protection of our production and how satisfied our employees are with our indoor climate," says Martin Ennemann (Facility Management), summarising the double benefit for HELLA in Recklinghausen.

Schematic diagram



Fact file	
Humidification system:	Production hall 1: 13 humidifier, model DRAABE TurboFogNeo 2x2 7 humidifier, model DRAABE TurboFog 32 2 humidifier, model DRAABE TurboFogNeo 8 Production hall 2: 14 humidifier, model DRAABE TurboFogNeo 2x2 6 humidifier, model DRAABE TurboFog 32 4 humidifier, model DRAABE TurboFogNeo 8 Laboratory: 5 humidifier, model DRAABE NanoFog
Pure water/high-pressure system:	3 PerPur 200 pure water systems 3 HighPur 200 high-pressure systems 3 SynPur 200 high-pressure systems
Spaces:	2 production halls, 1 laboratory
Target humidity:	45–49% relative humidity
In-service date:	2011/2012, expanded 2021



Multi-stage water treatment for high-pressure humidification



The TurboFog humidifier spray a micro-fine mist as required