



DR  
SERIES

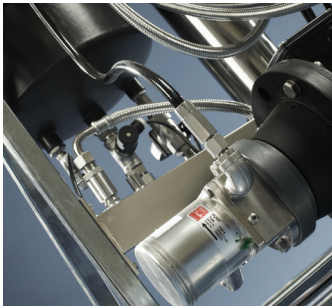


## Direct Room Humidifiers



Humidification and Evaporative Cooling

 **nortec**



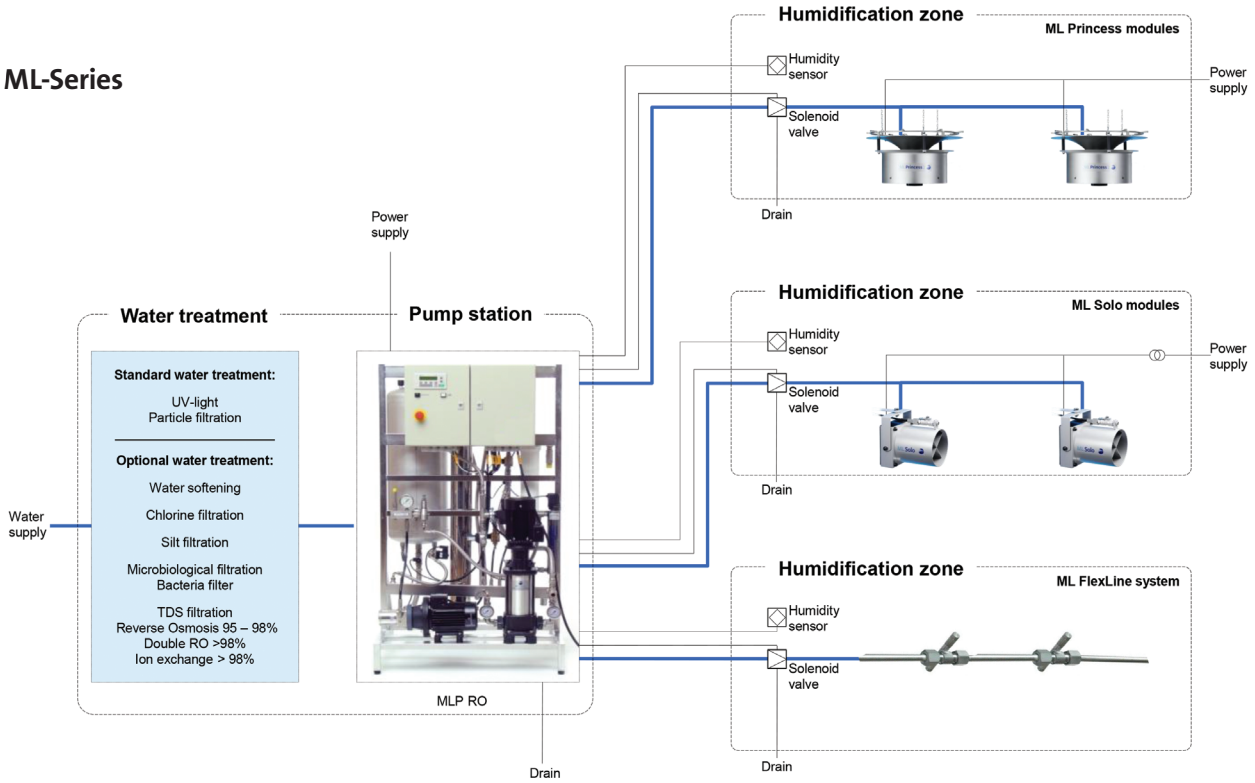
## Nortec DR-Series – when you need direct room humidification

Nortec specializes in the design and production of superior humidification systems and cooling. Our future depends on our ability to understand the needs of all our customers. We create the most appropriate solutions to their specific needs in the most efficient way. To this end, we draw upon our extensive experience to develop an ever-growing range of products that will provide our customers with maximum reliability, minimum maintenance and a choice of energy sources.

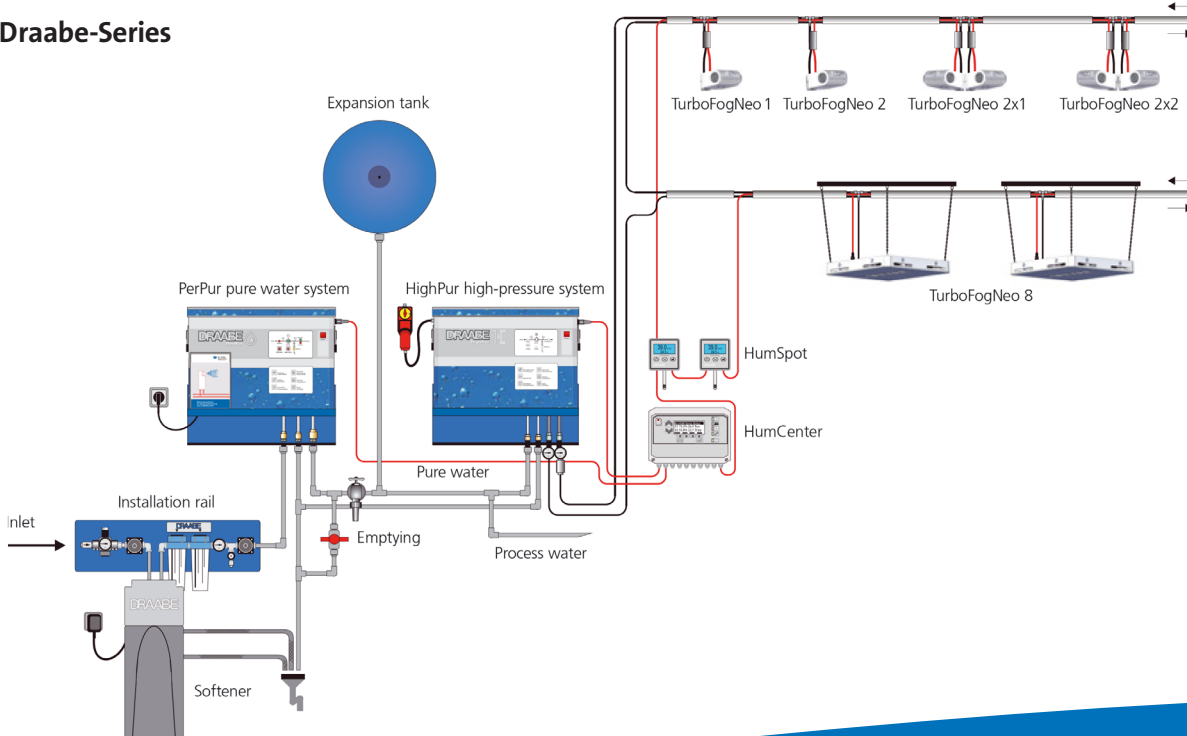
The Nortec DR-Series product line is no exception. Direct room humidification offers low operating costs, reduced cooling costs and requires minimal maintenance. Suitable for a wide range of applications – from production facilities to office environments – direct room humidifiers efficiently maintain consistent relative humidity levels.

printing  
electronics  
offices  
call centers  
produce  
textile  
woodworking  
data centers  
life sciences

## ML-Series



## Draabe-Series



# ML-Series Humidification Modules

All ML-Series humidification modules can be combined in one or more rooms or halls depending on space, room configuration, type of production and similar factors.

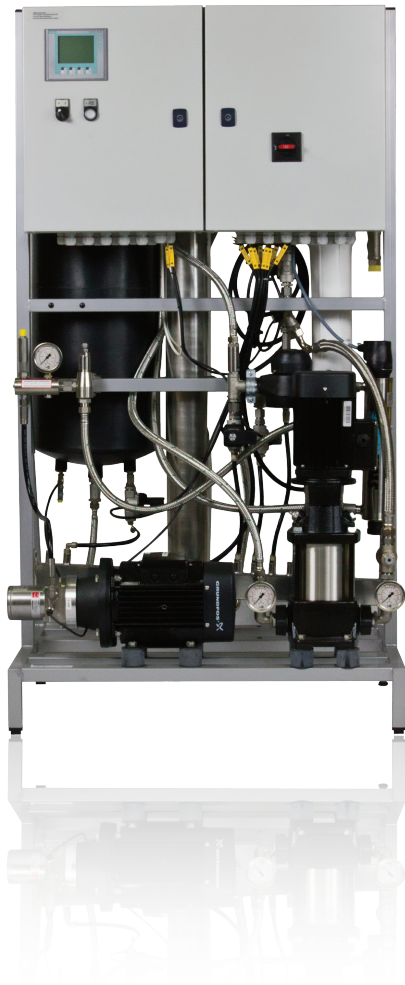
The ML Princess 2 is supplied in an elegant design and is recommended for humidification production areas within all industries. For applications in production areas with high ceilings as well as the horticulture sector, the ML Princess 3 is the ideal solution. ML Solo Series is used in applications with small moisture requirements such as the fruit and vegetable departments, or rooms with low ceilings.

The ML Flex System is used in the textile industry, for duct binding in rooms with high dust exposure, or for explosion-proof rooms. The system is ideal for adiabatic cooling of items, or in zones where a significant cooling effect is required.



SPECIFICATION	ML PRINCESS 2	ML PRINCESS 3	ML SOLO 1	ML SOLO 2	ML FLEX SYSTEM
Nozzles	8 stainless steel nozzles	12 stainless steel nozzles	One stainless steel nozzle with adjustable vaporization angles	Two stainless steel nozzles with adjustable vaporization angles	Customized nozzle and stainless steel pipe system with two stainless steel nozzle designs for full evaporation
Capacity – lbs/hr (kg/hr)	Up to 80 (36) with full evaporation	Up to 120 (54) with full evaporation	5.5 (2.5) - 10 (4.5)	11 (5) - 20 (9)	5.5 (2.5) - 10 (4.5) per nozzle
Built-in Distribution Fan	Even humidification at 55 dBa and 100W	Even humidification at 59 dBa and 160W	Low noise for even humidification at 34 dBa	Low noise for even humidification at 37 dBa	N/A
Ceiling Heights – ft (m)	As low as 12 (3.6)	23 (7) or higher	As low as 8 (2.4)	As low as 8 (2.4)	24 (7.3) or higher
Mount	Ceiling or wall	Ceiling or wall	Ceiling or wall	Ceiling or wall	Suspended, ceiling, or wall
Recommended Use	Humidification and cooling in large manufacturing and production areas in all industries	Humidification and cooling in large manufacturing and production areas in all industries with high ceilings	Small work areas and offices	Small work areas and offices	High racking, explosion-proof and very dusty environments. Customized array construction for induct or plenum spaces.





## ML High Pressure Pumpstation and Control: Standard Components

- Consistent high pressure 1000 psi for fine atomization
- High-clean water filtration
- Temperature and pressure pump safety protection
- Water meter
- Hour meter
- UV sterilization of water
- MLDM 35 or Siemens PLC humidity zone controllers with auto flush feature
- Corrosion resistant materials
- Water lubricated stainless steel Danfoss pump
- Turn-key assembly on self-contained single skid frame
- Available capacity from 264 - 5,280 lbs/hr (120 - 2,395 kg/hr)
- Redundant systems capable
- Low energy consumption

## ML Humidity and Temperature Sensor

- Electronic sensor for measuring temperature and humidity in atmospheric air
- Humidity sensor is ideal in combination with electronic controls and for indication of actual humidity
- Reading of the humidity sensor is a 0 VDC – 10 VDC signal corresponding to 0% RH – 100% RH

## Reverse Osmosis Systems

- Ultra-clean de-mineralized water filtration
- Stand-alone or pumpstation integrated
- Low energy consumption, high-flow membranes
- 5 micron sediment pre-filter
- Full system control and gauges
- Processes normal tap water
- Fully compatible with ML high pressure systems
- Nozzle clogging protection

# Draabe-Series Humidification Modules

Draabe-Series humidification solutions are for applications with both high or low humidification requirements. The Draabe direct room humidification system can be individually positioned and, in combination with the integrated water treatment unit, is easy to maintain and a completely hygienic solution.



NanoFog



TurboFog Neo1



TurboFog Neo 2x2



TurboFog Neo8

SPECIFICATION	NANOFOG	TURBOFOG NEO1	TURBOFOG NEO	TURBOFOG NEO2X1	TURBOFOG NEO2X2	TURBOFOG NEO8
Nozzles	Single atomizer with one stainless steel nozzle	Single atomizer with one stainless steel nozzle	Single atomizer with two stainless steel nozzles	Dual atomizer with two stainless steel nozzles	Dual atomizer with four stainless steel nozzles	Single atomizer with eight stainless steel nozzles
Capacity – lbs/hr (kg/hr)	Up to 7 (3)	Up to 8 (3.5)	Up to 17 (7.7)	Up to 17 (7.7)	Up to 35 (15.8)	Up to 70 (31.7)
Built-in Distribution Fan	Virtually silent operation	34 dBa	37 dBa	37 dBa	37 dBa	55 dBa
Ceiling Heights – ft (m)	As low as 8 (2.4)	As low as 8 (2.4)	As low as 12 (3.6)	As low as 12 (3.6)	As low as 16 (4.9)	As low as 18 (5.5)
Mount	Wall mounted swiveling atomizer for adjustable distribution of humidity and full evaporation					Ceiling
Recommended Use	Small work areas and offices		Low ceiling work areas and small operations environments		Production work areas and operations environments	Production work areas with higher ceilings

## Compressed Air Humidifier

### BioSafe

The Draabe-Series BS10 air humidification system is reliable and has sophisticated technology that is guaranteed to impress. Its straightforward installation and the ease with which it can be expanded makes this system extremely flexible and convenient to use. Recommended for small capacity applications, production and storage facilities.



- Maintenance-free
- Guaranteed not to drip
- Stainless steel nozzles
- Regular automatic flushing of lines
- Convenient and reliable
- Capacity: Up to 22 lbs/hr (9.9 kg/hr)
- Compressed air required: 2.119 CFM+
- Water quality: tap water (reverse osmosis optional but recommended)
- Hygrostat: Internal  $\pm$  3% RH

## High Pressure Pump Systems



### HighPur

- Consistent 1000 psi operation for fine atomization
- UV-C water sterilization
- 100% evaporation of feed water
- Automatic self-flushing with cyclical exchange of water in stand-by mode
- Electronic safety check with pump monitor and inlet/outlet pressure monitoring
- Fully integrated small unit design
- Capacity of 440 lbs/hr (200 kg/hr)

## Reverse Osmosis Systems



### PerPur

- Demineralization of standard tap water
- Up to 80% high yield efficiency
- Pure water hygiene with automatic flushing function
- Optimization of consumables
- Capacity of 440 lbs/hr (200 kg/hr)



### SynPur

- Ultra-clean deionized water for critical applications
- Cyclical flushing function with additional UV-C sterilization
- Capacity of 880 lbs/hr (400 kg/hr)

## Controls

HumCenter



HumSpot



### HumCenter

- Central control and coordination of entire humidification system
- Monitors, controls and analyzes all humidification zones and all water treatment/pump systems
- Displays service messages
- Analysis system functions with long-term data storage

### HumSpot

- Monitors and controls humidification zones
- Relative humidity and temperature read-out
- Maintains desired humidity levels
- Displays status of relative humidity and temperature levels

# Service

Having your humidification equipment serviced regularly will ensure reliability, maximize performance, prolong life and improve moisture stability.

Nortec has the expertise to provide complete service for the life of your humidification system. From initial design and engineering through comprehensive installation, startup and on-going maintenance, Nortec has you covered. We provide:

- Complete on-site training on the operation and maintenance of your equipment
- Comprehensive preventive maintenance program
- BQ bacteria testing on-site to ensure optimum water quality
- Installation and repair service by factory trained technicians

Nortec knows your equipment the best. Contact us first for all of your service and support needs.



As the leading manufacturer of commercial/industrial humidification systems for more than 40 years, Nortec has the technology and application expertise to meet the needs of any application.

**Contact us today and ensure you have the best humidification solution for your application.**

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