

**VOITH**

OnQ ModulePro  
Nozzle Moisturizer  
Optimal moisturizing results



- 1 OnQ ModulePro service openings
- 2 Nozzles
- 3 Water station
- 4 Stainless steel spray beam with precision nozzles
- 5 OnQ ModulePro valves

# An optimal result for every application

For years, nozzle moisturizers from Voith have helped to ensure the best paper quality and highest cost-effectiveness of systems. The OnQ ModulePro product line meets the requirements of all paper machines.

## Versatile application

While the original OnQ ModulePro nozzle moisturizer is mainly aimed at large and fast machines, the strength of OnQ ModulePro compact lies in its space-saving design and lower investment costs.

## Highly precise valve technology

The OnQ ModulePro product line uses the innovative spider valve technology (resolution > 1,000 control steps). The flow quantity is controlled by means of pulse width modulation. The high precision of the valve results from the predefined “open” and “closed” states. Due to the consistently large valve opening, even with the smallest flow quantities, the valve is insensitive to contamination and thus completely maintenance-free.

## Intelligent control

Together with the OnQ Profilmatic software, the nozzle moisturizers allow high-resolution adaptive control. Auto-mapping ensu-

res an exact assignment of the nozzle to the error profile. The optional calibration function measures the characteristic of each control valve during a shutdown. In addition, valve failures are automatically detected. Both functions ensure maximum performance of the system over the entire service life.

## Optimal spray water preparation

The water station with stainless steel reserve tank takes over the provision of properly conditioned spray water. The available condensate is continuously filtered, tempered and provided to the spray beam with the required pressure or in the desired quantity.

## Continuous provision of air

Provision of the filtered atomization air for the nozzles is done via the air station. The air pressure is controlled by a frequency converter for optimal values. A noise reduction cover and a stand-by blower are optionally available.

---

**Info V30 upgrade nozzle for machines from third-party manufacturers** Many paper makers know about the advantages of a new OnQ ModulePro nozzle moisturizer, but shy away from investing in an entire system. Voith has developed a simple

but innovative solution for these cases: the V30 upgrade nozzle for machines from third-party manufacturers. It was adapted from the L30/L50 nozzles of the OnQ ModulePro series and offers excellent spray results and easy installation.

---



## **OnQ ModulePro**

### **The nozzle moisturizer for the highest requirements**

Optimal moisturizing results, especially in large and fast machines, presuppose outstanding spray quality and exact spray quantity monitoring. OnQ ModulePro with its precise technology meets these high requirements.

### **Optimal solution**

An optimal spray angle and extremely fine water drops provide for even water absorption over the entire web. With OnQ ModulePro, a finely atomizing air-atomizing nozzle with a very large spray quantity range provides for this.

### **Better quality**

Due to the uniformly fine remoistening and the optimal moisture cross profile, OnQ ModulePro meets the highest quality requirements. A homogeneous moisture distribution in the paper and reduced curling tendency are the attainable result.

### **High cost-effectiveness**

The higher paper quality improves winding, reduces breaks, allows a lower dry content at the reel or higher speeds. Redundant systems and optimal accessibility of the system components make OnQ ModulePro extremely reliable. All this increases the cost-effectiveness and runnability of the paper machine.

### **Exact spray application**

The pneumatic atomizer nozzle covers a large spray quantity range with high spray quality (drop size of 10–60 µm with spray quantities up to 24 l/h per nozzle). Depending on the application, two nozzle types are available: the L30 nozzle with extremely narrow spray angle allows the smallest profiling zones; the L50 nozzle with large angle is used for profiling wider zones and uniform remoistening. Both nozzles are very effective due to their high jet impulse and are not sensitive to contamination.

### **Rugged spray beam**

The stainless steel spray beam has an atomized spray exhaust and a seal for the spray area. The two to six nozzle rows are divided into zone widths between 15 and 75 mm. Furthermore, the spray beam has a lifting device for optimal accessibility. Besides, cleaning and maintenance are greatly facilitated by the service openings, while the nozzle mouthpieces, which are mounted from outside, can be replaced in a very quick and uncomplicated fashion.

### **Clean surroundings**

An exhaust fan is used for extensive removal of excess mist coming from the spray area of the OnQ ModulePro spray beam.



### **OnQ ModulePro compact**

#### **The compact nozzle moisturizer**

OnQ ModulePro compact is the compact moisturizing solution for paper machines with a maximum speed of 1,500 m/min and a paper web width of up to 9,000 mm. Like OnQ ModulePro, the compact variant also ensures an optimal moisture cross profile over the entire paper web.

#### **Low investment costs**

OnQ ModulePro compact is characterized by low investment costs and at the same time optimal moisture cross profile results. This is achieved by doing without a spray exhaust, redundant components and the optional pivoting device. All key components such as nozzles, control valves and control software are identical to those of the standard OnQ ModulePro.

#### **Better quality**

Due to the fine spray application and the optimized moisture cross profile, OnQ ModulePro compact meets the highest quality requirements of paper production. Optimal moisturizing results presuppose outstanding spray quality and exact spray quantity monitoring. The OnQ ModulePro compact spray beam with its innovative nozzle and valve technology meets these high requirements.

#### **High cost-effectiveness**

Due to the increased paper quality, the winding at the reel is improved, the number of breaks is reduced and for the most part a higher level of moisture at the reel is facilitated or higher web speeds are achieved. The outlay for maintenance is considerably reduced due to the optimal accessibility of the system components. All this ensures that the ongoing operating costs are kept as low as possible and at the same time the cost-effectiveness and profitability of the paper machine are increased.

#### **Large spray angle**

The powerful L30/50 nozzles (1–24 l/h; 10–60 µm drop size) have already impressed in numerous applications due to their high spray quality over a large spray range. Perfect profiling results and uniform moisture cross profiles can be achieved with them.

#### **Compact spray beam**

The stainless steel spray beam is equipped with two rows of nozzles and is delivered with zone widths of 50–100 mm. The valves are directly integrated in the spray beam. If necessary, a lifting device can be provided for the spray beam. Cleaning and maintenance are greatly facilitated by the service openings, while the nozzle mouthpieces mounted from outside can be replaced in a quick and uncomplicated fashion.



# Typical applications

In order to achieve a perfect moisture cross profile, exact control of moisturizing is crucial. OnQ ModulePro and OnQ ModulePro compact can be used in a variety of ways, all depending on the requirements of the system.

## OnQ ModulePro P and OnQ ModulePro compact

OnQ ModulePro for moisture cross-profiling has zone widths of 30–100 mm. The extremely small spray angles of the nozzles allow outstanding improvements in the moisture cross profile. In addition, the high-resolution valves allow extremely precise control of zonal moisture.

## OnQ ModulePro C

OnQ ModulePro C is used for even remoistening in the dryer section. The main application is reduction of the curling tendency by dissolving frozen stresses. In order to achieve this, the web is remoistened on one side. The total number of spray nozzles is controlled in the process.

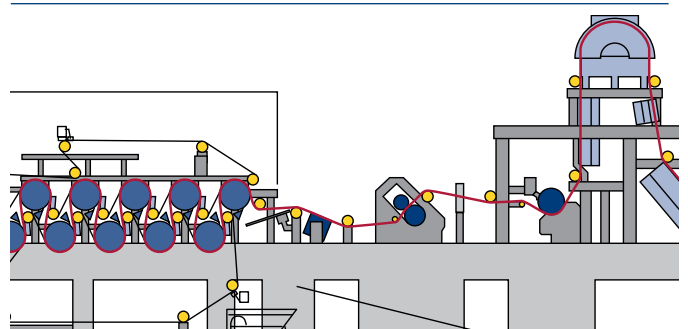
## OnQ ModulePro R

OnQ ModulePro R is used for one-sided or two-sided remoistening in the open draw, e.g., before a calender. It works very uniformly and with high quality of the spray application. The very fine spray drops are a plus, even at large flow quantities. Zone widths of 15 or 25 mm are used for remoistening.

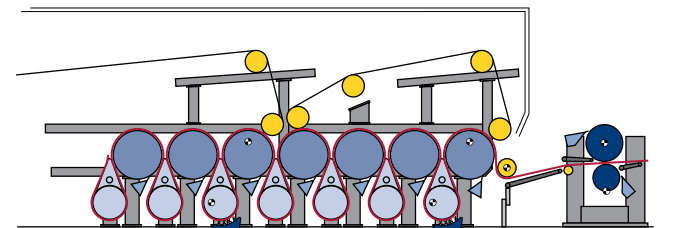
## OnQ ModulePro for special applications

Along with the standard applications, OnQ ModulePro can be adapted to various customized requirements. Please contact your sales representative for further information.

## Installation examples OnQ ModulePro R, P and C



OnQ ModulePro R



OnQ ModulePro P OnQ ModulePro C

## Headquarters

Voith Paper Holding GmbH & Co. KG  
St. Poeltener Str. 43  
89522 Heidenheim, Germany

[paper@voith.com](mailto:paper@voith.com)  
[www.voith.com/paper](http://www.voith.com/paper)

## Regional Contacts

Asia  
Voith Paper in Kunshan, China  
Tel: +86 512 5799 3600

Europe  
Voith Paper in Heidenheim, Germany  
Tel: +49 7321 37 2487

North America  
Voith Paper in Wilson (NC), USA  
Tel: +1 252 265 4405

South America  
Voith Paper in São Paulo, Brazil  
Tel: +55 11 3944 4966

**VOITH**  
Engineered Reliability