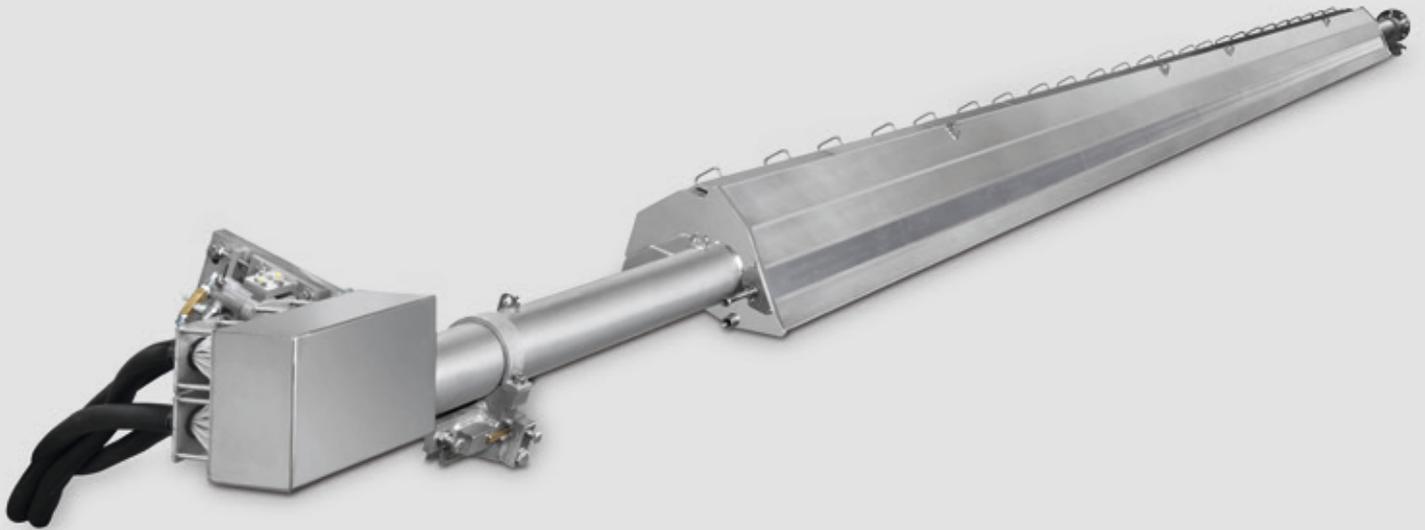


Increase in dry content and precise moisture cross-profiling OnQ ModuleSteam





Convincing effect and innovative design

The OnQ ModuleSteam steam box improves the quality, runnability and efficiency of the machine. It impresses with its compact design, giving the best possible access to all maintenance-related components.

The OnQ ModuleSteam steam box and the OnQ Profilmatic software deliver an optimal moisture cross profile and dry content after the press. By steaming the web with OnQ ModuleSteam, the viscosity of the water is reduced. The performance of the press is thereby improved, leading to a higher dry content. With a small investment, the steam box provides an extraordinary potential for profiling and to increase dry content.

Due to its small space requirements, OnQ ModuleSteam can be easily retrofitted in existing press sections. The design principle allows the smallest profiling zone widths.

Consistent concept

From steam processing to maintenance equipment and service, we offer our customers a coordinated and integrated solution. Robust actuators, control components with diagnostic function, exchangeable diffuser and an optionally available quick-change system are examples of this.

Efficiency increase

OnQ ModuleSteam offers a very high potential to save energy, increase production and achieve the desired product properties. With OnQ ModuleSteam the dry content increases after the press. This improves the tear strength of the web and reduces the number of web breaks. Steam consumption in the dryer section and thus energy costs are also reduced. As a result, higher machine speeds and corresponding production increases are possible with OnQ ModuleSteam. The precisely controlled steaming of the web results in a uniform moisture cross-profile as soon as it enters the dryer section. The optionally available quick-change system allows access for maintenance even during short downtimes.



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- 1 OnQ ModuleSteam for best increase in dry content and optimal control of the humidity cross profile
- 2 OnQ ModuleSteam control unit with pneumatic actuator
- 3 OnQ ModuleSteam actuator with integrated valve

OnQ Profilmatic software

This moisture cross profile control allows exact interventions for quality improvement. It quickly records all significant profile changes and calculates the optimal set point positions. The auto-mapping function continuously adapts the correlation between the scanner and the local reaction in the paper web.

Pneumatic actuator

A pneumatic actuator is available for precise control of the steam valves. It was developed specifically for the OnQ ModuleSteam steam box and features innovative stainless steel bellows seals. The actuator is non-wearing and has a long service life.

Benefits OnQ Profilmatic

- + Open interface with the quality control system
- + Own user interface for start-up and service
- + Controls, visualization and service can be implemented in one PC
- + Continuous control of each zone (no multiplex control)
- + Diagnostic function for the OnQ ModuleSteam actuators

Benefits pneumatic actuator

- + Very good control resolution
 - + Bellows seals and no diaphragms
 - + Optical position indicator
 - + Valve closes with depressurized activation
 - + Pneumatic position feedback signal
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4 OnQ ModuleSteam diffuser

Diffuser design

Depending on the installation position, steam blow boxes are exposed to heavy soiling. For this reason, OnQ ModuleSteam has drawable diffuser plates. These enable rapid cleaning of these and the zone chambers. In addition, the optionally available, electropolished surface reduces dirt deposits. An optimal diffuser design is used depending on the installation location and the type of paper / cardboard..

Service

Large hoods on OnQ ModuleSteam allow convenient inspection of the installed valves. Another benefit is the practical quick couplings for the pneumatic control lines on the steam blow box. They allow OnQ ModuleSteam to be dismantled extremely quickly and safely. The optionally available quick-retraction device allows cleaning and maintenance outside the machine even during short downtimes.

Benefits diffuser design

- + Optimum flow characteristics and high efficiency
- + Cleaning of the zone chambers and diffuser plates possible
- + Optional: Electropolished surface to prevent fibre adhesion
- + Integrated edge zone adjustment avoids disturbing dirt deposits

Benefits maintenance

- + Optimum accessibility to the actuators
 - + Quick and safe disassembly and assembly using quick couplings
 - + Optional: quick extension device for efficient service
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Application-specific installation solutions

Our many years of experience enable us to offer the best solution for different paper and board machine concepts. OnQ ModuleSteam offers optimal design variants for this.

Reliable OnQuality.Actuator system OnQ ModuleSteam

- Standard zone width of 75 mm, 100 mm or 200 mm; other widths upon request
- Rigid, deformation-resistant design, thermally balanced
- Heated surfaces for preventing condensate drops
- Flow-optimized outlets
- Easy cleaning of zone chambers
- Good accessibility to the control valves
- Control by means of proven Voith OnQ Profilmatic or external software
- Edge zone adjustment of the steaming width for protection of the press felt
- Optional quick rail-out system
- Very fast heating up
- Optimum design for tissue, press and long sieve applications
- Optional steam conditioning station with integrated pressure and temperature control
- Integrated edge zone adjustment avoids disturbing dirt deposits
- Profilmatic control software with integrated diagnostic function



Outstanding results in CD profile control

To achieve automation processes that are seamlessly coordinated with one another and optimum results, Voith actuators are connected to the proven system platform Voith ComCore. As a result, the system is perfectly tailored to the machine.

Voith ComCore provides comprehensive overview

To obtain optimum results in CD profiling, a diverse range of constellations and complex interactions have to be taken into consideration. Over time, the demands imposed on applications have grown steadily. Conventional systems often consist of several platforms, resulting in different user interfaces, longer startup times and also increased maintenance and servicing needs. Voith ComCore allows you to focus on what matters. Because just one click gives the platform access to all key information from your quality control system. An intuitive user interface and low maintenance requirement help to get the job done as easily and quickly as possible. The flexible, readily scalable system architecture can be extended at any time. Because it uses Microsoft Internet Explorer, standard PCs can also be used as operating stations, avoiding expensive software licenses and costs for special hardware. Likewise, the web browser also allows access from the company's intranet and via commercially available tablet computers. Via a tablet, the service technician has an overview of the entire process. This considerably simplifies the servicing job and ensures complete reliability. Thanks to the integrated information

system, Voith ComCore not only offers traditional QCS functions but also operating trends, reporting and extended analysis functions.

Profilmatic for optimum CD profile control

As a key component of Voith ComCore, Profilmatic includes numerous progressive control strategies with fast response times that deliver reliable, flat cross profiles. Because several process models and grade-specific target profiles are used, every paper grade gets the appropriate control setting. In the process, a dynamic algorithm ensures the correlation of the actuators to the profiles determined by the scanner at all times. Deviations due to paper shrinkage and wandering of the paper web are automatically compensated. The capabilities of Profilmatic are particularly demonstrated following web breaks and during grade changes: supported by statistical process control (SPC) algorithms and adaptive control parameters, the customary high-quality profiles are quickly restored. To save raw materials and energy, various modes of operation are available to optimize the economic efficiency of the production process.

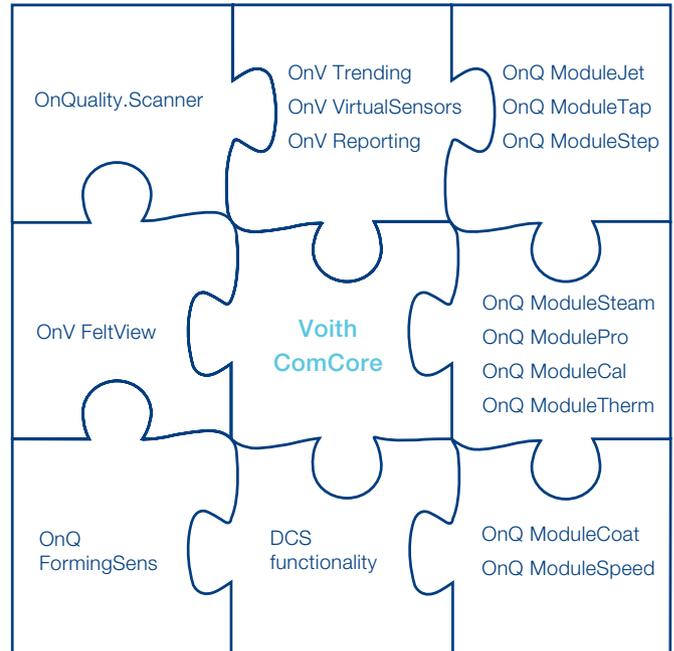


- 5 OnQ ModuleJet actuators with control unit
- 6 The clearly laid-out design of the user interface means it is easy to navigate and use

Benefits

- + Web-based operation
- + Easy to use, just like browsing the web
- + No complex client installation necessary
- + Mobile clients for maintenance activities in the field
- + Integrated alarm function and data history
- + Analysis functions (FFT, correlation etc.)
- + Fast and easy remote service and maintenance options
- + Scalable and flexible architecture for stand-alone products through to complete QCS
- + Reliable, easy to maintain and operate due to the use of industry standards
- + Time-saving and well organized thanks to platform solutions
- + Minimal servicing and tuning requirement
- + Fast and accurate CD profile control
- + No disruptive bump tests during operation
- + Two measured criterias in one actuator system
- + Networked control structures ensure optimum control behavior and decouple technologically linked control loops (feed forward control)

Know-how from a single source



Voith Group
St. Poeltener Str. 43
89522 Heidenheim, Germany

Contact:
Tel. +49 7321 37-0
paper@voith.com
www.voith.com/paper



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