



Advantage™
ViscoNip® Press

The new standard for wet pressing technology

Valmet 

A flexible tool for improved product properties

With a great number of Advantage ViscoNip press installations operating in production machines around the world, it has become the new standard for wet pressing in conventional Dry Crepe machines. Tissue producers everywhere are experiencing the list of benefits; from improved uniformity, major energy savings, increased product flexibility and quality in addition to savings through fiber conservation.

Main features



ENERGY SAVING

With Valmet's Advantage ViscoNip press significant energy savings greater than 20%, with a high press dryness has been recorded.



UNIFORMITY

Perfect nip profiles in cross machine directions and soft loading element, which is very adaptive to conditions of other machine components, allow for many positive product and production spin-offs effects such as quality and efficiency.



FLEXIBILITY

Possibility to expand customer portfolio development. Nip pressure curves can be changed in a very short time to meet different requirement needs.



A flexible liquid filled press body gives the Advantage ViscoNip press the unique ability to adapt to the Yankee dryer shell.

Pressure where it's needed

A flexible liquid filled press body gives Advantage ViscoNip press the unique ability to adapt to the Yankee dryer shell. This makes the nip load uniform during a wide range of linear loads. Normally Dry Crepe tissue machines use a nip pressure of 90-150 kN/m. The shape of the pressure profile is easily adjusted during operation, depending on product requirements. Independent of linear load and load ratio, the press body follows the shape of the Yankee dryer shell surface to create a uniform press load in the cross machine direction. Contrary to other pressing technologies, the Advantage ViscoNip press allows changing the load without encountering crowning issues.

Significant energy savings

The press dryness in a suction press roll machine, is typically around 40 percent, when producing 14-15 g/m² toilet paper. The Advantage ViscoNip press can be operated in the range of 47 percent press dryness and above, with the same conditions. Increasing press dryness by 7 percent means a 25 percent reduction of drying energy consumption. This can result in vast annual savings, depending on machine type and local energy prices.

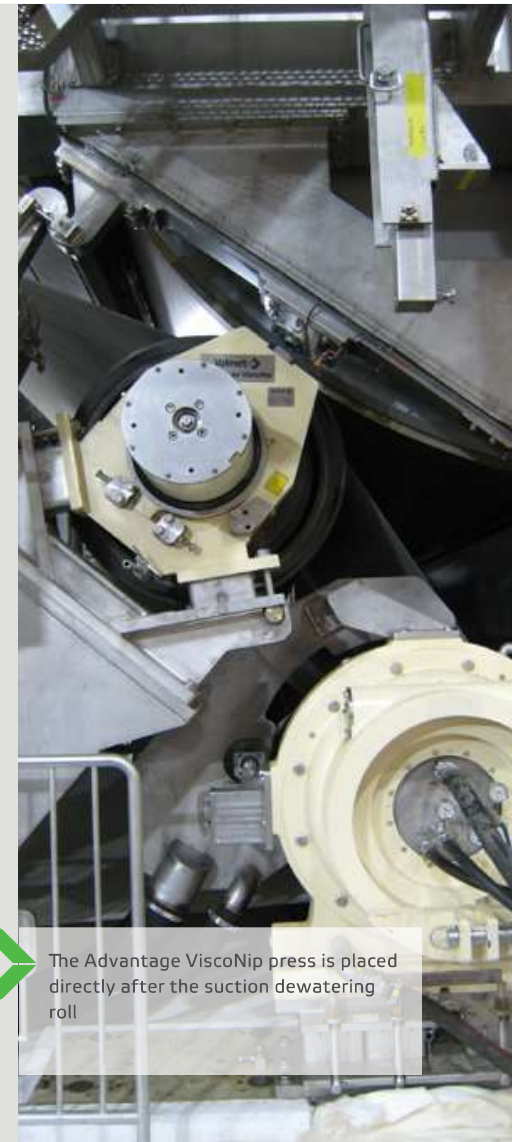
extensive possibilities for product development

changing loads without crowning issues

25% reduction of drying energy consumption

Product flexibility and fiber saving possibilities

More and more, tissue producers are demanding the capability to produce a wide range of products, from standard to premium quality offerings. Each specific product has its own requirements of sheet quality and cost-efficient production. Valmet's Advantage ViscoNip press, with its uniform cross machine direction loading, operates over a wide range of linear loads. This opens extensive possibilities for product development. Operating at low linear load provides the highest possible bulk and softness required for premium products. Low linear loading also allows for fiber savings. Operating at high linear loads is useful for improvement of energy efficiency and also increases softness for standard products.



The Advantage ViscoNip press is placed directly after the suction dewatering roll



25% energy savings can
be achieved at high linear load



➤ Uniform pressing conditions

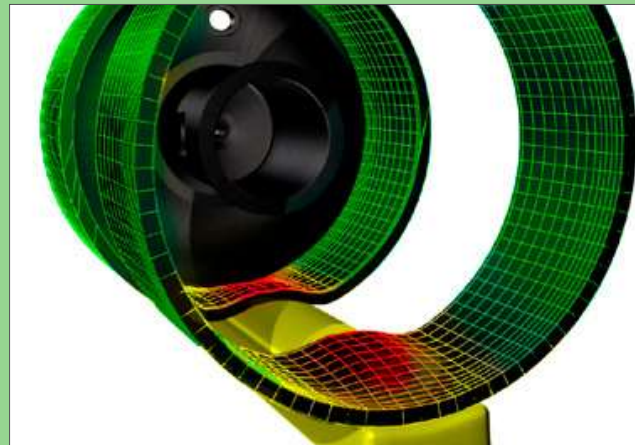
The uniformity in pressing conditions can be seen in the remarkably flat cross machine dryness profile generated which also is visible in the very even moisture profiles achieved in the parent roll. These even profiles also improve machine runnability and reduce the risk of chatter marks in the Yankee dryer.

Extremely long belt life

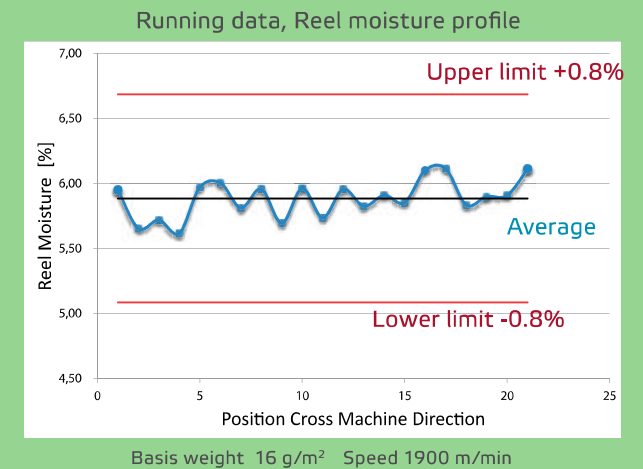
Uniform pressing conditions also contribute to extended life time for machine clothing. A number of installations have reported belt lives more than 400 days, with some even approaching 600 days! Today tissue producers are aiming for two years of operation - in high speed production lines.

Remarkable results for rebuilds

The patented Advantage ViscoNip technology is also an excellent option for tissue machine rebuilds, where the Yankee dryer might be limited to a nip load of 90 kN/m, which is common in many existing machines. A remarkable increase in dryness is achieved right away already at 90 kN/m compared to Suction press roll.



The liquid filled press body adapts to the shape of the Yankee dryer.



The global leader in tissue making

Valmet is constantly developing product offerings and can present a wide range from small and medium sized machines to large and fast machines as well as re-builds, service and automation.

With our industrial internet solutions, we provide support through the Valmet Performance Centers. The Tissue Technology Center is a unique resource for cultivating and realization of ideas, innovations and verifying new technology or machine configurations.

Our climate program includes ambitious CO2 emission reduction targets and concrete actions for the whole value chain. Safe working environment and products are essential and considered in every step of Valmet's technology development. We strive to ensure that tissue quality, knowledge and process technology, as well as our wide scope of service, continue to drive mutual success.

Over 150 years of experience within the pulp and paper industry has resulted in Valmet becoming the global leader in tissue making.

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