## PERFORM™ VMAX 1000 MIXING AND INJECTION SYSTEM

# Providing enhanced chemical and water efficiency for pulp and paper systems



- Reduced fresh water consumption
- Reduced energy use
- Improved chemical efficiency
- Improved retention/clarification
- Improved formation and other quality parameters



#### PerForm<sup>™</sup> VMax 1000

Paper manufacturers around the globe rely on Solenis' PerForm<sup>™</sup> retention and drainage aids to help them achieve high levels of retention, drainage and formation. Perfecting the application and optimization of these specialty chemistries has been a key focus for Solenis for many decades. With an understanding of the interrelationships of paper machine system dynamics and water and polymer chemistries, the PerForm<sup>™</sup> VMax 1000 mixing and injection system was developed to provide improved polymer and water efficiencies for paper manufacturing operations.

Today, the use of the PerForm VMAX 1000 has expanded beyond its successful retention applications to deliver

significant reduction in consumption and improve performance of chemicals such as defoamer, sizing, and wet/dry strength resins.

Post-dilution of chemicals with high volumes of water at maximum velocity into the machine system has demonstrated the best chemical distribution, yielding more consistent product quality and lower chemical usage. However, use of fresh water is not always practical or even possible. To allow pulp and paper manufacturers to use white water for post-dilution, Solenis now employs a novel and proprietary nozzle as a key element of the mixing and injection system.

#### **Ultimate Mixing Performance**

Key to this mixing and injection system is the proprietary nozzle. The unique design of the nozzle generates very high mixing energy while minimizing shearing of the polymers. The turbulent flow is injected at maximum velocity into the process stream to enable maximum chemical distribution while preserving chemical properties and performance. This results in more consistent chemical performance, increased productivity and reduced chemical usage. In addition, the PerForm VMAX 1000 enables the use of white water in place of fresh water which provides a number of benefits, most notably substantial fresh water and energy cost savings.



Proprietary nozzle design creates high energy mixing and allows the efficient use of white water for polymer post-dilution.



Dilution module controls white water and polymer flows.



Mixing and injection assembly installed on post-screen piping.

### More Information

To learn more, contact your technical sales representative or visit us online.





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