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## ***Tissue Paper***

Today, tissue paper mills producing high-quality paper with ideal softness, strength and absorbency on machines are designed to achieve speeds of up to 2000 m/min.

### **Conventional Tissue Machines**

VIB Systems has developed a new generation of actuators, **VIB SteamTech steamshowers** and **SprayTech** spray-dampeners with particle size management (PSM). For conventional tissue machines the **VIB SteamTech<sup>SC</sup>**, a curved-type steam-shower, is installed on the press roll upstream of the Yankee Cylinder.

High-velocity steam and narrow-zone definition provide optimum steam condensation on the paper web and increase the sheet temperature. With high-resolution zones of 50 - 75 mm a reduction in cross-direction moisture variation (2-sigma) of 60% can be achieved. Sheet dryness measured after the press section will increase by up to 3%.

Fast and maximum return on the investment is guaranteed by an average production increase of 8%.

Teflon coating, removable diffuser plate, and sophisticated actuators, guarantee maintenance-free operation for many years. Due to the quality improvement the reject of cull rolls is typically reduced by up to 50%.

### **TAD (Through-Air Drying) Machines**

Through-air drying technology requires a perfect moisture profile upstream of the air dryers. In order to achieve these results VIB installs two **VIB SteamTech<sup>TAD</sup>** systems, one in the forming section, and the second one upstream of the first air dryer.

High steam consumption is needed to achieve maximum dewatering on the vacuum boxes.

State-of-the-art systems have high-resolution zones of 50 - 75 mm. A 2-sigma reduction of up to 80% can be achieved using this technology. The reduction in variation optimizes the efficiency of the production line and ensures a fast return on the capital invested.

### **VIB AirTech System**

The **VIB AirTech system**, in combination with the SteamTech system, is used to control the moisture profile. A 2-sigma reduction up to 65% can be achieved using this combination.

Due to the unique patented nozzle design and the individual flow control for each nozzle, special chemical additives can be applied to the paper web on-line or off-line to increase softness.

The high-resolution zone definition of a VIB AirTechplus 6 system is between 25 and 50 mm. Light weight sheets lighter than 25 g/m<sup>2</sup> require low air pressure and water particles sizes smaller than 50 µ.

The proprietary nozzle ensures concentric alignment of circular air and water jets which allows uniform spray pattern as well as accurate and discrete zone widths.

The complete chemical additive preparation and control is designed by VIB specialists.