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PUMPS: Vacuum system enabled Energy savings of 30-70% compared to traditional Vacuum systems

RunEco vacuum system with EP500-D2 Turbo Blower, EcoDrop water separator and EcoFlow dewatering measurement with seven measurement points has started up at Smurfit Kappa Bento PM1 in Brazil. RunEco system replaced four liquid ring pumps at mill, making the vacuum system water free. The energy consumption is now approximately half of the old system, depending on the grade produced.

This project is aligned with Smurfit Kappa's purposes of producing sustainably and preserving the environment project. It has increased its capacity and vacuum control and the first results were very good. The consistency in the head box was reduced with improved paper formation and increased the dryness by 1.5% points, enabling an increase in machine speed, reducing the power consumption and without using water. Switching to EP Turbo Blowers is a game-changer in energy efficiency. In numerous rebuild projects, energy savings of 30-70% have been achieved when compared to traditional vacuum systems. Energy efficiency, a key feature of the solution, comes from both turbo technology itself, and the ability to measure water removal with EcoFlows and adjust the vacuum to the optimal level.