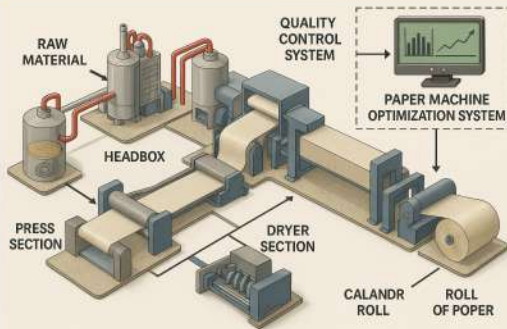


PMOPT-XXXX - PAPER MACHINE OPTIMIZATION SYSTEM



For the past 9 years, JSH Technologies has focused on optimizing paper manufacturing by addressing hidden barriers that affect efficiency and profitability. In response to market pressures, the paper industry is restructuring operations. To support this, JSH developed the PMOpt-1000—a system that enhances paper machine stability and product quality by optimizing control parameters through integration with QCS.

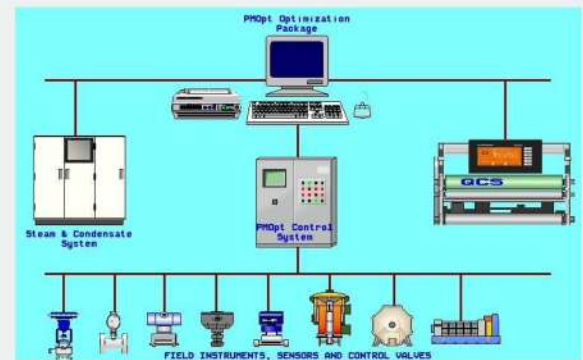


CONCEPT OF PMOPT-XXXX

- PMOpt-1000 monitors final product quality, feed parameters, and resource capacity.
- Requires field instruments for effective process monitoring and control.
- Must be integrated with a modern control system.
- Supports integration with third-party packages.
- Existing discrete controls should be merged into PMOpt-1000 and then removed.

SYSTEM ARCHITECTURE OF PMOPT-XXXX

The PMOpt-1000 package by JSH Technologies functions at the supervisory level, using real-time data and MPC algorithms to optimize paper production. It models various paper machine sections and integrates with existing or third-party control systems. No machine modifications are needed, as it enhances existing setups. The system can boost speed by 2 MPM per grade, ensuring rapid ROI. With periodic analysis and optimization band reviews, it enables improved quality and output without requiring capacity upgrades or structural changes.



BENIFITS OF PMOPT-XXXX

The implementation of the PMOpt-1000 based recipe management the quick grade change has been achieved. There is an increase in production from 832 MT to 871MT. The grade wise break-up is graphically shown in Fig-2. below. Total monetary gain is around Rs. 69 Lakhs. Also due to auto process control, operator's intervention has been reduce and it has provided the easy of operation.