
**TMEIC Develops and Launches Paper Machine Version
of the TMoptimizer Production Support System
– Digitalizes Operational Management across the Entire Papermaking Process,
Contributing to Optimal Plant Operations –**

TMEIC Corporation (President & CEO Akira Kawaguchi; hereinafter, “TMEIC” or “the Company”) has developed a version of its papermaking production support system, TMoptimizer, tailored to the paper machine process, which is the core of papermaking plants, and will begin sales in October 2025. With this development, together with the winder version¹ of TMoptimizer, which was launched in October 2023, the Company will promote digital transformation (DX) across the entire papermaking process² and contribute to optimal plant operations.

The papermaking industry is currently facing urgent management challenges due to declining paper demand, including the need to improve operational efficiency and reduce operating costs at existing plants. In addition, workforce-related issues, such as the difficulty of transferring skills amid the aging of experienced operators, have become increasingly apparent. To address these challenges, there is a growing demand for DX solutions that integrate operational information on equipment, personnel and energy, enabling quantitative monitoring of plant operations.

The newly developed TMoptimizer (paper machine version) can be used in combination with the existing winder version, enabling not only improvements in the paper machine process but also overall operational enhancements across the entire papermaking workflow. By integrating data across both processes, the system helps reduce inter-process losses and contributes to more efficient plant operations.

Key features of the system follow.

1. Visualizes operational status and paper break causes, contributing to overall plant productivity

By quantitatively visualizing machine operating conditions, the system allows operators to monitor whether equipment is running, idle or stopped, enabling detailed production efficiency analysis. In addition, it records and analyzes data related to paper breaks, such as location, frequency and conditions, supporting the development of targeted measures to reduce break occurrences and thereby enhancing overall plant productivity.

2. Contributes to plant energy savings through monitoring and management of power consumption

The system visualizes operating conditions and power consumption for each process relative to

production output, enabling analysis of the balance between energy use and productivity. By identifying and reducing unnecessary energy consumption, it promotes improvements toward more efficient operating conditions.

3. Monitors equipment condition, contributing to stable plant operations

The system manages data on the usage and wear of consumables used in the paper machine, providing notifications for replacement or renewal timing to help prevent unexpected shutdowns. In addition, it enables early detection of signs that could affect quality such as deterioration of the paper machine wire, which directly impacts dewatering efficiency, by monitoring fluctuations in machine load. This supports consistent product quality and contributes to stable plant operations.

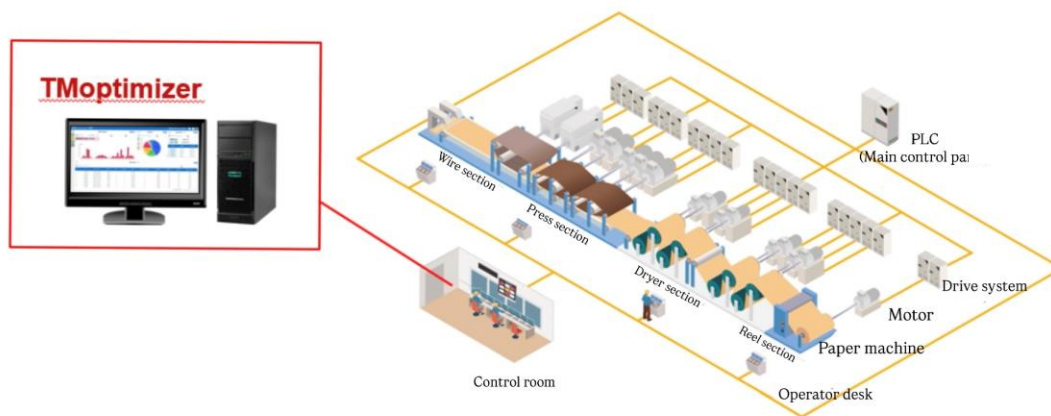


Figure 1: Overview of the Paper Machine

Comments from Kazuhiro Nishitani,

Deputy Vice President, Industrial & Energy Systems Division 2:

“Following the winder version, we have now developed and released the paper machine version of TMoptimizer. By visualizing operational key performance indicators (KPIs) from papermaking through finishing, it contributes to improved operational efficiency and cost optimization. It also addresses challenges related to skill transfer, supporting users in strengthening their competitiveness. TMEiC will continue to provide robust support for our customers’ digital transformation initiatives.”

*1 Press release (Japanese Only):

https://www.tmeic.co.jp/news_event/pressrelease/2023/20231002.pdf

*2 Papermaking: The process of forming paper from raw materials (pulp) to produce finished paper

Media inquiries:

For further information, please contact the Corporate Communication Department,
Corporate Planning Division, TMEIC.

Tokyo Square Garden, 1-1, Kyobashi 3-chome, Chuo-ku, Tokyo 104-0031, Japan

Tel: +81-3-3277-4319; Fax: +81-3-3277-4578

<https://www.tmeic.co.jp/>

In order to respond to the needs of manufacturing sites that serve as a foundation for supporting society, TMEIC always sets its eyes on the future of industry, society and the environment as an industrial systems integrator striking a balance between the sustainable development of society and the global environment. TMEIC will contribute to manufacturing and environmental management through leading-edge technologies based on its core technologies of rotating machinery, power electronics and engineering.