

# ABB Remote Service for paper drive systems DriveScan

Remote Service for ABB drive systems combines remote monitoring with DriveScan software. DriveScan enables the retrieval of drive system performance data to identify and diagnose, determine root cause, and resolve performance issues.

DriveScan allows site engineers to collaborate with ABB experts on a continuous basis to achieve optimal machine availability and improved performance. DriveScan special purpose process monitors, engineering and maintenance tools, quickly identify sources of disturbance.

An important aspect of drive system monitoring is the observation of changes over extended periods of time. The observation of these changes, in correlation with feedback regarding product quality, provides a solid base for keeping the process at peak performance.

Remote Service with DriveScan includes three components: remote connectivity, the DriveScan monitoring and diagnostic solution and ABB's technical experts available 24/7.

## Levels of Remote Service Support

DriveScan is offered with the following levels of Remote Service.

- **Remote Troubleshooting** On-demand, 24x7 technical support and visibility allow ABB specialists to connect to the system and investigate machine run-ability issues as they arise, diagnose, and support the implementation of corrective actions.
- **Remote Periodic Maintenance** Scheduled quarterly analysis of archived data against established performance benchmarks identify potential performance improvement opportunities. Some corrective actions can be implemented utilizing the remote session. Associated reports are provided to summarize intervention and recommendations.



## Features

- Access to high level ABB expertise
- Automated diagnostic tools
- Enhance commissioning, startup and warranty support
- Data logging and event driven data capture
- Remote access to on-site system engineering and maintenance tools
- Machine specific process modeling to detect abnormal operations

## Benefits

- Improved production throughput
- Reduced maintenance costs
- Reduced time to recover from off-spec production
- Reduced time to recover from system downtime
- Improved grade change efficiency
- Faster response time

## ABB site audit

ABB's drive system process monitoring takes a "holistic" approach to determine the best solution for each site. ABB engineers complete a comprehensive site audit to prepare for installation of DriveScan. They will coordinate with site engineers to evaluate every element from the point of view of its influence on the operation of the entire system and its consequence on the quality of the paper making process.

The site audit evaluation employs various methods, techniques and indices to diagnose if the process is within optimal boundaries.

## Architecture

Remote Service with DriveScan relies on high speed data acquisition designed to address the specific monitoring needs of the complex drive systems, like paper machines and winders. This solution includes data processing capabilities to detect production disturbances and help in the identification of the associated root cause(s).

The main data acquisition port for process signals collects the data over the industry standard communication protocols. With Modbus TCP protocol the supported sampling times start from 10 ms (executed with the real time precision) and up to 1,000 analog process signals can be captured by one sub-system into various forms of historical data files. With a separate DAS sub-system for high speed analog signals the supported sampling times start from 1µs/channel and the number of channels is only limited by the selected hardware.

## Summary

With an installed base of more than 100 billion USD of automation products and systems worldwide, ABB is constantly working on ways to improve how these products are supported. Remote service developments are a direct result of clients' changing needs.

Remote Service with DriveScan provides real-time access to high-level technical resources, reducing the cost to our customers due to emergency field service deployment, drive system down time, and less than optimal system performance. The end result ensures that the best knowledge is in the right place, at the right time, to support the installed assets and ensure process performance improvements.

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