

ANDRITZ Resource Management System

For the efficient use of energy and resources



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Integrated automation for the efficient use of energy and resources

ANDRITZ AUTOMATION enables efficient energy and resource management using the latest achievements in monitoring and measurement system integration.



Through integration of the ANDRITZ AUTOMATION Resource Management System (RMS), industries are enabled to undergo a revolution of energy and resource efficiency.

Energy intensive industries are now served by monitoring systems that simplify their processes with regard to the increasing global pressure from strong competitive requirements, or statutory regulations (e.g. directive 2012/27/EU: energy audits or energy management systems for non-

SMEs until 05.12.2015 according to ISO 50001). To ensure optimal production at highest efficiency, the ANDRITZ Resource Management System (RMS) turns energy flows, as well as resource consumption, into potential for improvement. By reporting, monitoring and engaging in real-time production information, impacts of production processes and cost drivers become transparent, providing operators with support for making optimization adaptations. RMS therefore performs automated analysis of all significant energy and resource processes in a mill, making it easier for operators to improve their mill's performance whilst staying competitive.

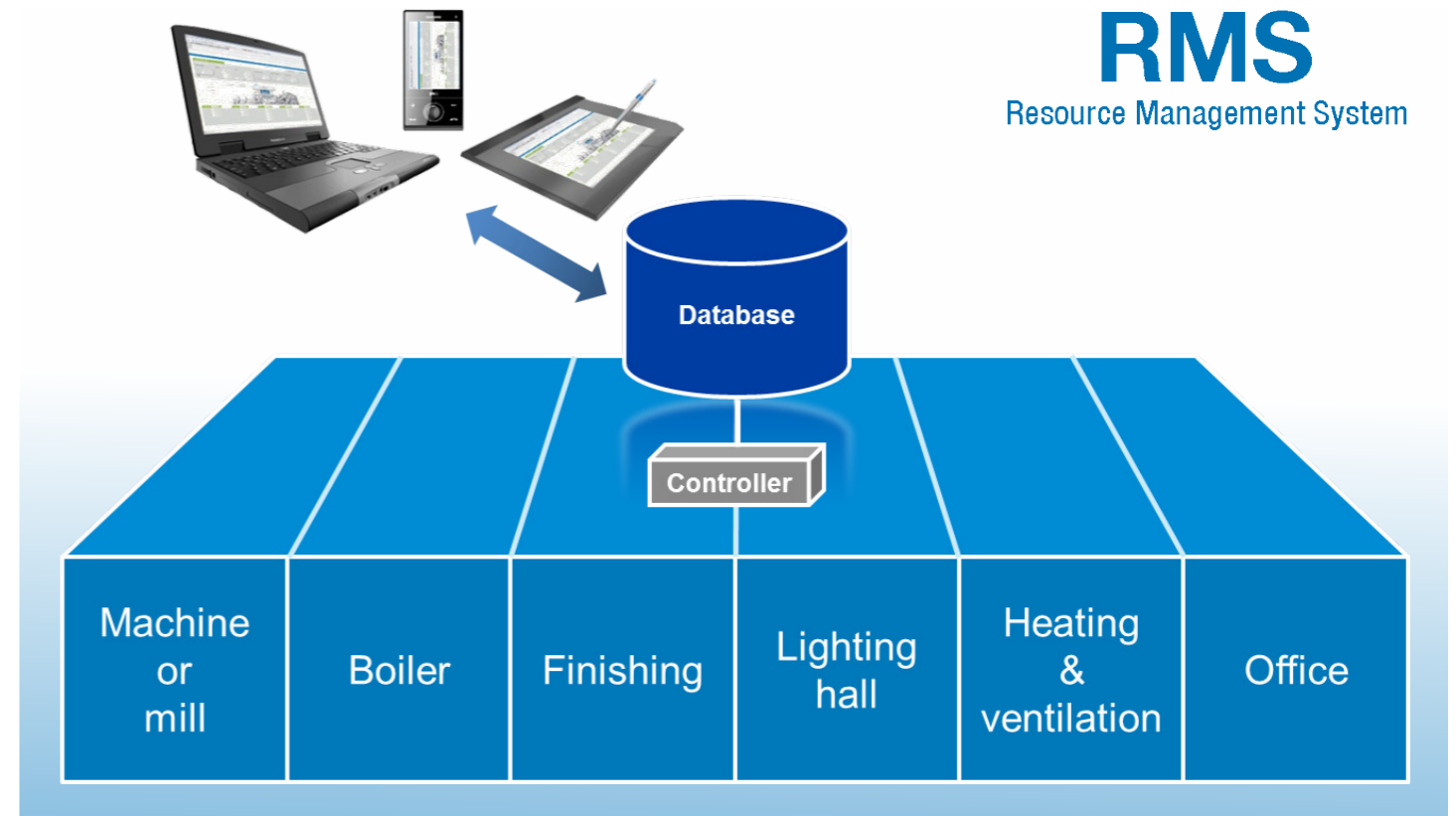
Specifications

ANDRITZ RMS offers a broad range of monitoring, advisory, control and load shedding functionality. It is capable of measuring energy and mass streams, utilizing open inter-

faces to energy metering and standard process instrumentation. Scalability, from a single measurement, up to a DCS system-like monitoring, enables easy installation into existing systems as well as the ability to adjust to (future) growing needs.

Special characteristics

The ANDRITZ RMS is highly flexible with low engineering effort. Any requested component can be integrated, meaning the dynamic system offers investment protection, as it is able to grow with the customers' processes. Resources are individually definable and enable a complete range of possibilities for reporting and management. For customer convenience, the whole system is delivered fully configured. The operator only enters tariffs and rates, and the system is ready to start optimizing the mill. Data can then be retrieved from any device (e.g. PC, operator stations, mobile devices etc.)



ANDRITZ Resource Management System (RMS)

RMS	Included
Resource management according to ISO 50001	✓
Configuration with ANDRITZ EnMON library	✓
Dashboard for intelligent resource management	✓
Individual and collective consumption rate and cost reporting	✓
Smart and long-term analysis tools	✓
Individually tailored interfaces	✓
Scalability from micro- to macro-solutions	✓
Cost calculation tool with scenario function	✓
Data storage for different time frames	✓
Alarm and trend system	✓
Autotuning functions	✓
Compatibility for mobile devices	✓

▲ Tailored components and implementation with regard to individual needs



RMS technology

The RMS server, located in a control cabinet, includes the complete system with all necessary software and receives data from all mill areas. In addition to the engineering and operator software, the central component of the Resource Management System (RMS) – a database with an SQL interface – runs on a SUSE Linux Enterprise Server Operating System. At least one RMS controller is necessary to provide the communication to the bus controllers of the different mill subsystems, and to read and process the data from the I/O modules. Different communication paths to the server are supported e.g. Ethernet/IP, Profibus etc.

Benefits

- Maximized resource efficiency
- Overall optimization by correlation of energy and manufacturing cost analysis
- Consumption based cost allocation, for immediate optimization possibilities
- Environmental improvements, due to resource and energy saving
- Prevention of unplanned shutdowns
- Control of consumption based on "lowest cost" constraints
- Reporting and statistics consistent with ISO 50001
- Resource data management with one single system for all-encompassing overview
- Real-time measurement and visualization of resource consumption
- Replacement of pneumatic technology
- Prevention of oscillating control loops via auto-tuning functions

ANDRITZ AUTOMATION

The right click for your plant



Your reliable partner!

With 110 sites worldwide ANDRITZ AUTOMATION has developed to be a competence center for plant design and plant control systems.

ANDRITZ AUTOMATION supports interaction between process, mechanical design, and automation. Therefore, customers obtain an overall package of competence and experience with

the automation system. Our products and services have helped operations achieve record start-ups, increase capacity, improve efficiency, and save money.

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