Transform process and quality data into real-time operations intelligence
Designed to transform operational data into actionable information

ECS/PlantDataManagement is specifically designed for the cement and minerals industry, ECS/PlantDataManagement supports decision-making processes at operational, management and executive levels. It operates from a single central database to gather data from process and quality control systems. This allows plant engineers, managers and other personnel to visualise the data they need in the format they require, and trend long-term historical data. Data can be automatically or manually collected and stored in the comprehensive system for up to 10 years for access by any user who is connected to the plant network. Data can be customised to suit the exact needs of each user, and the entire system can be tailored to give each plant specific features, such as automatic scheduled reports.

ECS/PlantDataManagement is part of the FLSmidth Expert Control and Supervision suite of products focused on the operation and optimisation of processes in cement and minerals plants.

ECS/PlantDataManagement

Specifically designed for the cement and minerals industry, ECS/PlantDataManagement supports decision-making processes at operational, management and executive levels.

ECS/PlantDataManagement is a comprehensive management information system that makes critical plant data available to the people who need it most. Real-time operational intelligence improves decision making, and improves profits.

The goal is to integrate all process and quality information islands, supporting the decision-making process at operational, management and executive levels, enabling smarter business decisions.
Delivers valuable insights that can boost productivity

The benefits of using ECS/PlantDataManagement

- Avoid human errors and wasting time through automatic, immediate and accurate data collection mechanisms
- Enable asset management through centralised and safe data storage for historical analysis and documentation of crucial information
- Move data efficiently from the plant floor to the control room for better data analysis and reporting
- Automatic generation of online Key Performance Indicators (KPIs)
- Provide plant managers, operators and engineers with the specific information they need, regardless of their location
- Promotes the communication and collaboration between the plant personnel by presenting and sharing information through the same dashboards and portal
- Provides insight into specific process problems through trending and analysis of operational data
- Improves plant productivity (energy, production, quality) by making available real-time and historical data

ECS/PlantDataManagement allows to intelligently transform vast amount of operational data into actionable information.

Why to choose ECS/PlantDataManagement?

- A system designed for the cement and minerals industry
- Standard process, quality and production reports
- Ensure all essential information is in the right place for up to ten years
- Open to any Microsoft reporting tool
- Open to any Business Intelligence system for data consolidation and visualization
- Data substitution for faulty or offset instrumentation
- Minimum setup and configuration time
- Automatic catch-up process to guarantee that no data is lost
Powerful data-driven dashboards

Real-time and historical user-friendly dashboards are available to any user through the ECS/PlantDataManagement Portal.

The dashboard summarises real-time and historical data, allowing users to identify opportunity areas and drive incremental continuous improvements. Users can track and monitor the performance and health of the plant by reporting on KPIs, and different plant metrics.

**Different types of dashboards**
Each user has different requirements when visualising and analysing data. For that reason, ECS/PlantDataManagement allows the dashboards to be customised for different applications, including:
- Performance
- Production
- Energy consumption
- Operation
- Emissions
- Stoppages
- Silo levels

**Continuous improvements**
ECS/PlantDataManagement dashboards enable plants to control the operation at all times. You can’t manage what you don’t measure.

Dashboards allows data transparency through the organization fostering a culture of incremental continuous improvements by consumption of the generated data and insights.

ECS/PlantDataManagement dashboards help you to manage your daily business decisions.
With ECS/PlantDataManagement, plant managers and engineers can produce all required reports with just one touch. Reports can be generated in standard formats, such as Microsoft Office Excel.

Automatic reports can be scheduled for defined times, from every minute to every hour, shift, day, week, month or year.

Reports can be customised to suit the needs of each plant. However, a number of standard reports are included with initial setup:
- Production
- Process
- Quality
- Downtime
- Alarms and Events

**Best practices and KPI analysis**
ECS/PlantDataManagement provides extended reporting for operational KPIs, downtime analysis and energy consumption, among others.

The system enables users to set and track KPIs in every aspect of the production process, such as energy and fuel consumption targets for the past day, week, month or year.

**Data export in several formats**
The system includes a variety of standard data export options. Data as running hours, production values, average process values, etc. can be exported in PDF, Word, Excel and XML formats to external systems.

**Open solution**
ECS/PlantDataManagement stores the data in an open SQL database. This means any standard and common reporting tool can be used to access the data.

Besides that, the system is capable of being integrated with any Business Intelligence solution for the purpose of data consolidation and visualisation.

---

**Office Workplace**
- Dashboard viewer
- Report viewer
- Trend viewer
- Data substitution UI

**Reports Scheduler**
- Scheduled process and production reports
- Scheduled quality Reports
- Microsoft reporting services
- Export reports in various formats

**Reporting and Visualization Tools**
- Microsoft Excel
- Standard SQL reporting tools
- Tableau Desktop (Optional)
- Any standard BI tool
**Customisable reports**

Every user needs very specific information to ensure each area of the plant works at optimal efficiency. ECS/PlantDataManagement provides customised reporting, covering the needs of all users.

**Easy to use**

The extensive and flexible report generation and graphic presentation tools provide:

- Configuration of standard reports
- Configuration of customer-specific reports
- Auto-generation and scheduling of reports

All the reporting tools are accessible through the same portal.

**Alarms and Events**

ECS/PlantDataManagement analyses all the process values for limit violations and draws statistical conclusions for the process department.

Armed with this overview, plant staff can make adjustments to the PLC programs and control systems to reduce the number of non-critical process alarms and gain a better overview of plant processes.
ECS/PlantDataManagement includes all necessary modules to gather, treat and store data, as well as to visualise, report and trend. Everything is included with the solution.

**Data Collectors**
At the very start of the process, ECS/PlantDataManagement collects the data from various data sources, such as the FLSmidth ECS/ControlCenter and QCX systems, or any other process control system or third-party solution supporting OPC connectivity through an ECS Gateway Server.

The automatic catch-up process ensures no data is lost from FLSmidth ECS/ControlCenter and QCX systems.

**Server**
The ECS/PlantDataManagement server aggregates and transforms the data, calculates automatic statistics, such as averages, and stores data for up to 10 years in one single database. Process, quality, alarms and events data is all stored in the same database.

**Components**
ECS/PlantDataManagement includes easy-to-use visualization, reporting and analytical tools. These allow for optimal insight to support effective decision making process.

Third party applications, such as Microsoft reporting tools or BI solutions can also be used to visualise and analyse the data.

**Connectivity and Security**
Any user in the plant network connected to the ECS/PlantDataManagement server can access the data. This empowers and enables users to make business decisions from any location.

Data security is paramount. When the system is setup, FLSmidth will verify and ensure that all hardware and software required to protect the integrity of the data is installed.
Easy to use, setup and configure

ECS/PlantDataManagement setup and configuration is quick and easy. Users can gather data and benefit from enhanced insights in a matter of days. Payback time is minimal.

The predefined components include the different reporting sections of the plant, such as operation, quality, performance, power and fuel consumption.

All that is required of the user is to map the respective tags for each piece of equipment and application.

The standard solution package bundles all required components, including predefined mimics, standard report templates, and dashboards, among others.

Ongoing remote support
The ECS/PlantDataManagement system is delivered with Go2FLS, the FLSmidth solution for remote support and engineering. If there is a need, FLSmidth engineers will connect remotely to the system to make any necessary configurations for rapid resolve.

All what is needed, it’s an internet connection to the system.
Customer support and services

FLSmidth offers a wide range of services to help you secure your investment in the ECS/PlantDataManagement system, providing maximum satisfaction and product efficiency by ensuring performance, utilisation and productivity.

Together with FLSmidth, you can define the best possible combination of training and service to fulfill your needs.

To support our customers in achieving the highest return on investment, FLSmidth has a number of services.

Training programs
One of the secrets of the success of FLSmidth is the course-development process. Best practices are continuously reviewed and training focuses on the latest knowledge and experience, both in a classroom setting and in practical exercises.

PlantLine service agreement
A service agreement is a prudent investment that gives top priority to emergency assistance. You are supported through on-site service visits and remotely through a telephone line and the Internet. The result is reduced system downtime and optimal plant performance.

FLSmidth’s remote services give unique possibilities for remote support, saving time and the travelling cost for specialist visits.