One Source

ECS® Sub Control Systems

FLSmidth

Enhance profits by easing fault finding and faster commissioning using ECS® Sub Control Systems

Definition

A Sub Control System is a platform using dedicated Programmable Logic Controllers (PLC) to operate equipment, while providing an open interface and being optionally integrated with the Central Control System.

The difference

A Sub Control System differs from a traditional local control panel as it integrates with the machine control, uses modern Ethernet based communication, is based on uniform engineering standards and optionally provides access on a plant-wide control system level.

The benefits

- **Faster and flexible commissioning**
- **Rapid trouble-shooting**

Introduction

Based on more than 40 years of experience in automation, FLSmidth has designed a flexible and powerful solution for local control panels. FLSmidth has brought machine control to the next level by leveraging the power of FLSmidths proven Expert Control and Supervision (ECS), a SCADA system to provide new features in a solution called ECS Sub Control System.

ECS Sub Control Systems are already the standard employed for most equipment supplied from FLSmidth, including:

- Traylor Primary Gyratory Crushers
- Raptor Secondary Cone and Pebble Crushers
- Traylor & Vecor Gear Driven Grinding Mills
- Eimco, Schriver and Pneumapress Filter Equipment
- FLSmidth Rahco Materials Handling Equipment
- FLSmidth Koch MVT Materials Handling Equipment

The ECS Sub Control System solution includes well known features from ECS systems such as trending, alarm management and data logging, thus resulting in a complete full-featured control system, available locally in selected departments.

Increased flexibility

Being based on a full featured SCADA system, ECS Sub Control Systems accommodate for a wider degree of flexibility. Advanced features leveraged from the ECS platform ensures efficient access to comprehensive information that makes fault finding easier and faster. Reference materials, such as wiring diagrams, operation instructions etc. can be stored directly at the Sub Control System, ensuring all documentation is available for troubleshooting.

Hardware independence

The ECS Sub Control System from FLSmidth is designed for easy integration with numerous hardware products such as PLCs and IO modules, thus permitting individual configuration specific to a project. Hardware independence is a powerful asset, as it greatly simplifies upgrading systems in the future, as one is not dependent on a particular supplier of hardware.

The ECS platform supports a wide range of hardware, where the major brands include ABB, Siemens, Schneider and Rockwell Automation. In addition, the industry standard communication protocol OPC is fully supported to allow integration with other SCADA systems.

A ECS Sub Control System can optionally be integrated with the central control system, to provide operators with critical alarms and status indications.

System openness

The ECS platform is built using proven technologies in an open architecture. The architecture accommodates a wide range of customizations available in intuitive user interfaces and since the actual control logic is vested in the chosen PLC brand, site changes can be made using standard tools.
In line with FLSmidths focus on client support, remote programming assistance by experts is alternatively available to assist with any programming modifications.

Standardisation

Systems engineered on the Sub Control System platform follow industry best practices to deliver standards compliant and consistent engineering.

Being engineered for FLSmidth equipment, ECS Sub Control Systems include the extensive knowledge of its engineers, field experience and feedback from operators. ECS Sub Control Systems is thus a proven and reliable design that reuses knowledge to the greatest extent possible.

Factory Programmed and Tested

The configuration of an ECS Sub Control System are factory programmed and requires only minor customizations at site during commissioning, resulting in reduced commissioning time and increased flexibility. In addition, ECS Sub Control Systems are factory tested to ensure they comply with specifications, also reducing commissioning time and risk of damaging equipment.

Commissioning control solutions involves extensive testing and troubleshooting during initial start-up.

Using ECS Sub Control Systems, engineers have advanced tools available that provide assistance during commissioning, thus resulting in faster installation and equipment start-up.

When faults occur, it is critical to establish root cause as fast as possible.
ECS Sub Control Systems provide advanced tools developed from full-blown control systems to support trouble-shooting efforts,
minimizing down-time.

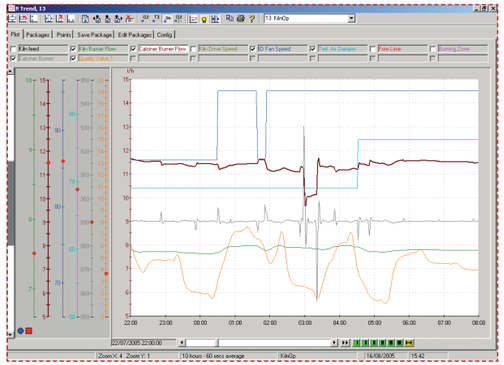
Benefits

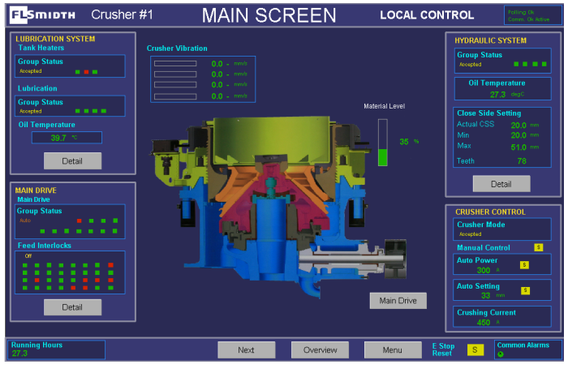
Using ECS Sub Control Systems results in two significant benefits:

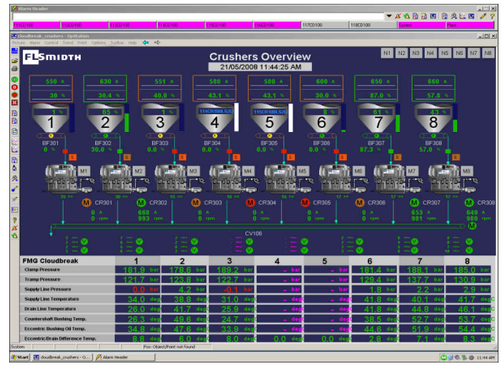
- Faster and flexible commissioning
- Rapid trouble-shooting

More Information

Additional information on
ECS Sub Control Systems can be found at:
www.flsmidth.com/ecs







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