

Introducing Symphony™ Plus

Total plant automation for the power generation and water industries

MARK BITTO – Symphony™ Plus is the latest generation of ABB's hugely successful Symphony family of control systems. It is designed specifically to meet the present and future needs of the power generation and water industries.



Originally introduced in 1980, the Symphony family has gone through several stages of evolution over the years. Through ABB's "Evolution without obsolescence" life-cycle policy, each generation builds on and enhances its predecessors, adding new technologies and new functionalities that improve plant performance while protecting the customer's previous control-system investments.

There are now more than 6,000 systems installed worldwide, making Symphony one of the largest installed bases of any process automation system in the world. Symphony Plus opens a new era of total plant automation that is simple, scalable, seamless and secure → 1.

Defining great performance

Symphony Plus balances performance objectives such as asset availability, operational reliability and production efficiency with business goals such as asset life extension, carbon reduction and regulatory compliance → 2.

In so doing, it provides plant owners with an essential tool for achieving sustainable profitable growth. Its defining features include the following:

Total plant automation

Symphony Plus provides users with a comprehensive view of the plant by integrating data from all plant areas and systems, including turbine control, electrical balance of plant, and remote SCADA systems. Through its open architecture, Symphony Plus seamlessly consolidates and rationalizes plant data to improve operator response to changing conditions, thereby improving plant safety and uptime.

Transforms data into actionable business decisions

Information is the key to successful business performance. Historical, process and business data are collected from across the plant and stored securely. Symphony Plus presents pertinent, easy-to-understand information in intuitive desktop displays to all levels of the organization.

Unified engineering workbench

Time to production is the measure of engineering efficiency. Symphony Plus' engineering environment, S+ Engineering, is an integrated engineering tool with the functionality to engineer, configure, administrate, secure, commission and maintain any Symphony Plus component – from field devices, electrical devices, control and I/O to operator workplace and gateway configuration.

Embedded ABB know-how

Each Symphony Plus solution builds on ABB's more than 125 years of power and water expertise, combining in-depth process knowledge with extensive electrical and automation know-how to provide a best-in-class solution for each plant requirement.

Single control and I/O platform

Symphony Plus provides total plant automation from a single control and I/O platform that encompasses dedicated interface modules and devices for all turbine types, OEMs and sizes, as well as an

1 Symphony™ Plus at a glance

Simple

Symphony Plus is easily adapted to meet the broad spectrum of plant configurations and applications in the power and water industries.

Scalable

Symphony Plus' unique system architecture provides flexible and scalable configurations, from the small and server-less to large multi-system, multi-server architectures.

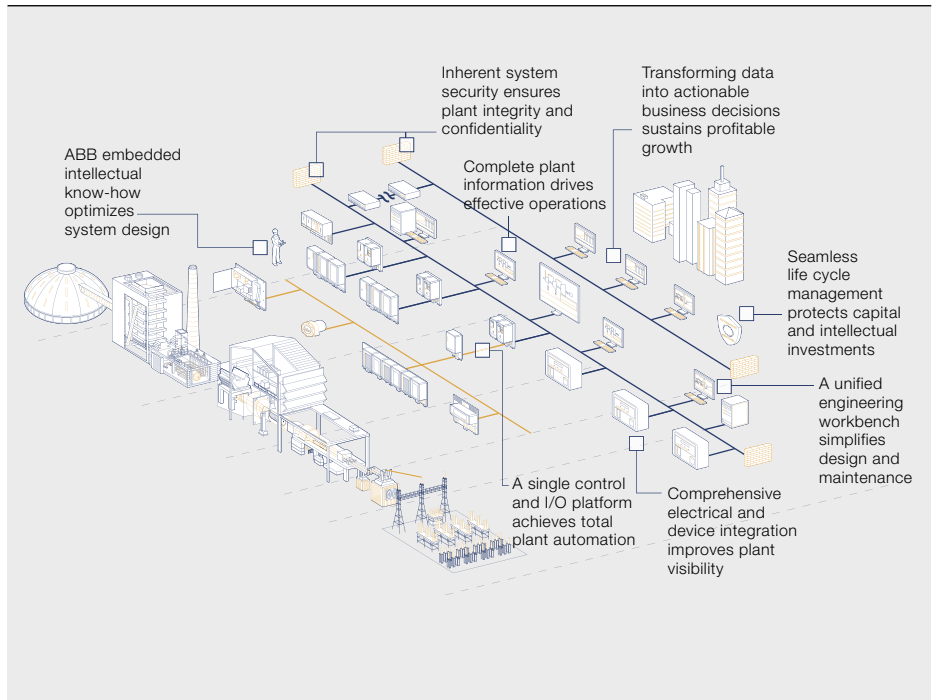
Seamless

Symphony Plus enables the seamless integration of field devices, process and turbine automation systems, electrical and SCADA systems, and business and maintenance systems.

Secure

Symphony Plus provides users with a secure and reliable control environment with built-in security features that prevent unauthorized control system access.

2 Symphony Plus system architecture



unparalleled selection of combustion instruments.

Electrical and device integration

Symphony Plus provides process and electrical control from a single platform. Using open-standard protocols such as IEC 61850 and Modbus TCP, Symphony Plus integrates electrical devices with process control and plant operations. It provides full integration of just about every type of device, and enables the monitoring and management of all plant assets at all levels of the plant.

Inherent system security

ABB understands the need to maintain a secure, reliable control environment while expending minimal time and effort.

In addition to the many security features built into Symphony Plus, ABB actively participates in several major control system security standards committees.

The guidance provided by these committees is designed to increase the integrity and confidentiality of all system functions and help prevent unauthorized control system access.

Seamless life-cycle management

Evolution and investment protection are the cornerstones of ABB's product life cycle strategy. The company's "Evolution without obsolescence" policy helps cus-

tomers find a balance between upgrading with new technologies and maximizing the return on asset investments already made. Plant owners have the ability to extend the useful life of their systems through evolution and avoid the costly and high-risk rip-and-replace approach.

to commissioning, operation and decommissioning.

With unparalleled process, application and technology expertise, ABB is uniquely positioned to support changing needs and industry requirements.

To learn more about Symphony Plus contact your local ABB sales office or download a brochure at: www.abb.com/powergeneration

There are now more than 6,000 systems installed worldwide, making Symphony one of the largest installed bases of any process automation system in the world.

Life-cycle services

ABB offers a complete portfolio of services, from repairs and spare parts to Full Service® contracts and complete plant upgrades and equipment retrofits. ABB services are available to enhance every phase of the plant life cycle, from first concept and front-end engineering

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