PlantStruxure™
Process Automation System
Your challenges

- Reduce engineering, operations and maintenance costs
- Maximise plant and production efficiency
- Improve production quality
- Protect people, plant assets and the environment
- Maximise return on investment
We understand your challenges

The challenges faced by today’s process industries have been multiplied by the volatile state of the global economy. In this type of environment the demands on the process control system are increased, going beyond simple regulatory functions. It becomes a tool to manage the plant, decrease energy consumption, reduce costs, cut emissions and provide quick and precise information from the field to support production and business decisions.

What does it mean for you?

For plant managers
- Ensure the safety of people, plant and the environment
- Optimise asset utilisation
- Improve the plant profitability
- Reduce environmental impact
- Optimise energy efficiency.

For operations managers
- Improve plant availability
- Optimise costs while maintaining the right quality level
- Maximise production efficiencies.

For the engineering teams
- Implement standardisation and ensure standards are met
- Reduce engineering times to accelerate project schedules
- Manage local and remote engineering teams
- Administer the entire system from a single location.

For plant operators
- Ensure process stability
- Anticipate process disturbances
- Prioritise actions
- Act on important alarms or events.

For maintenance teams
- Implement effective maintenance programs
- Identify root cause of problems as quickly as possible
- Standardise maintenance procedures.

It is important to our business that we enter strategic partnerships with organisations that hold the same values that we do. Schneider Electric has a clear focus on solutions for operational excellence and energy efficiency and we challenge Schneider Electric to understand our business and offer solutions that helps drive its performance.
Our experience is your advantage

Solutions are not solely based on technology but also the expertise behind the technology. At Schneider Electric we have been delivering solutions for manufacturing and process industries for over 40 years. We understand what is needed to help you meet your goals in automation and energy management.

An history based on innovation

More than 40 years ago, we invented the first PLC and paved the way for companies to drive efficiency by replacing physical logic relays by programmable logic controllers. In 1979 we introduced Modbus to the market, a de facto communications standard, truly open and the most widely used industrial protocol in the world. In 1996 we introduced our first programmable automation controller (PAC) with embedded web server capabilities and onboard data logging. We have a history based on innovation and openness, and today we continue in the same spirit with the introduction of PlantStruxure™.

Delivering solutions across the enterprise

We have an unmatched automation offer from the sensor that measures your process and the automation system that controls your production to the historian and manufacturing execution system that helps you to improve your production efficiency and achieve operational excellence. All this coupled with the ability to provide integrated enterprise wide energy efficiency solutions and backed by a team of dedicated professionals focussed on delivering the solution you need.

A leader in process automation

We have come a long way since we installed our first PLC and today we are amongst a select few as a leader in process automation, delivering solutions for all types of applications. We understand that each application is unique and that is why we offer a system that can be tailored to meet the needs of all types of processes including discrete, batch, continuous, safety or a combination.

A leader in energy efficiency

Not only are we a leader in process automation, but we are number one in energy efficiency. Every day we help companies to identify and implement ways to reduce their energy consumption and decrease their environmental footprint.

EcoStruxure™

EcoStruxure™ is the solution ecosystem based upon active energy management architectures, from Power Plant to plug, offering guaranteed compatibility across data, power, security, cooling and automation and leveraging open standards across both Schneider Electric and third party offers. This approach will enable customers to create intelligent energy management systems that are simplified, save on Capex and Opex, and most importantly, reduce waste, delivering up to 30% savings in energy efficiency. PlantStruxure™ is a building block of EcoStruxure™.
PlantStruxure™ is a collaborative system that allows industrial and infrastructure companies meet their automation needs and at the same time deliver on growing energy management requirements. In a single environment, measured energy and process data can be analyzed and used to yield a holistically optimised plant.

Scalable
for changing times
From tens of I/O to hundreds of thousands, the scalability of our system means that you can start out small and grow as your requirements change.

Integrated
to reduce risk
The system is integrated inside, from devices to MES all of the system components are designed to work together with each other and with our chosen technology partners.

Flexible
because your process is unique
Our system supports the architectures that you need for your application. Single site, multiple sites, distributed control, local control, discrete, process, safety, batch all within the one system.

Collaborative
to increase efficiency
Our system is open to exchange information with other plant and business software, and fosters an environment of collaboration by delivering the process information you need in the way that you like to see it.
In order to meet your challenges you require a control system that is not only easy to engineer and simple to maintain, but that delivers a clear picture about what is happening in your process. You need a control system that can easily integrate with third party devices and that provides added value in the form of Historian and Manufacturing Execution System functionality. In short, you need a system that drives increased return on assets and meets the needs of your application.

The unique features such as Global Data access, high availability and distributed architectures along with hot-standby redundancy and more, means that our system offers everything you need to meet your process automation requirements.

**Energy Management**
- iPMCC to optimise energy consumption
- Smart power and energy meters
- Variable speed drives for better energy efficiency
- Energy management software to measure and analyse

**Manufacturing Execution System**
- Real-time access to plant and business information allowing key personnel to identify and act on opportunities to maximize plant and process efficiency and to correct problems before they impact on supply chain, regulatory compliance and production.
A system for process and energy management

Engineer and modify your entire system from a single location
Flexible engineering tools in order to support your efforts to be more efficient
Reusable and extensible object libraries for standardisation
Off-line simulation to reduce testing and commissioning.

Control
> Scaleable family of programmable automation controllers to meet all control requirements
> Integrated SIL2 safety
> Hot-swappable processors, I/O and communications modules and power supplies
> Advanced process control functionality
> Configuration based on IEC61131-3 standard.

Operation
> The link between the operator and the process
> Easy system navigation
> Powerful alarm management
> Advanced trending and process visualisation
> A range of client options including web clients, PDAs, smart phones.

Historian
> Collects all process, quality, energy and other data from across your site and generates detailed reports to help the decision-making process
> Based on industry standard technologies
> Data security to prevent unauthorised viewing or tampering.

Transparent Ready Networking
> Transparent communication between all system components
> Standard Ethernet technology and industrial protocols
> Dedicated device network support including Modbus TCP, EtherNet/IP, Profibus, CANopen, AS-Interface
> Support for dedicated instrumentation buses such as Profibus PA, Foundation Fieldbus & HART.
Transparent information access from your plant floor to your enterprise
Transparent Ready networking allows the establishment of transparent communication between field, process, plant and enterprise. Network technologies and web services guarantee the efficient sharing and distribution of information between sensors, instrumentation, devices, controllers, operator workstations and other third party systems.

**Standards based communication**

Based on standard Ethernet technology and industrial protocols Transparent Ready protects your system investment as technology evolves. It offers significant savings in the design, installation and maintenance of your system and reduces training requirements.

**Real-time data access**

Modbus TCP and EtherNet/IP, the most proven and reliable industrial protocols available today, facilitate the real-time data exchange between system components such as controllers and devices, guaranteeing robust communication for your system.

Because the communication backbone is Ethernet, it seamlessly communicates to all third party devices via a range of standard industrial protocols. It is also easy to connect and manage your field instrumentation via Profibus, Foundation Fieldbus or HART, to reduce installation costs and support predictive maintenance programs.

**Time-synchronization system-wide**

The system features automatic time synchronization between all components, with the option to integrate hot-standby time servers. This ensures that all alarms, events and other information are stored and displayed in the order that they occurred to provide a clear picture of the status of your operations.

**Advanced features**

Transparent Ready offers all of the standard features above and more, including:

- Faulty device replacement technology to automatically configure replacement devices in the system and cut maintenance time
- Event notification via email directly from the device
- Inbuilt web servers with onboard data logging to reduce maintenance and increase system flexibility.

The advanced features of Transparent Ready offer you the flexibility to choose the right architecture and level of features to meet your process requirements.

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Ethernet – fastest growing technology in industrial networks **+27% CAGR of Ethernet devices to 2012**

*Source ARC Report 2008*
Accelerating your engineering workflow

We offer flexible system engineering tools in order to support your efforts to be more efficient. These tools are focussed on helping you to accelerate your control system configuration, significantly reducing your engineering time and minimising your project risk.

Reduced project schedules
A combination of single data entry, feature-rich object libraries, collaboration with third party process design software and the ability to standardize and reuse your engineering best-practises helps to dramatically decrease the time it takes to design, engineer, install and commission your system.

Standardise, reuse and extend
Our system delivers an object-based approach to your configuration and includes feature-rich application libraries specifically focused on the process industry. Engineers can use the libraries as they are or take advantage of their extensible nature in order to augment the library to meet specific standards. Once created, user defined objects are available for reuse in the same application or on subsequent applications, cutting development time and reducing project risk.
Integration with process design software

Our system provides you with the option to structure and organise your application according to the process functional diagram of your plant and offers an open interface to provide easy access for a large number of process design systems. This open interface can be used to exchange process and system design data with third party applications and remote engineering teams, removing the need to configure the system from scratch.

Off-line simulation

The simulation function built into the system enables engineers to replicate the functionality of the application in a PC environment. This helps to identify any errors in the application programming and decreases testing and commissioning time.

Our expertise

- Single data entry to avoid errors during configuration
- Reusable and extensible object libraries
- Open interface to process and electrical design tools
- Change tracking and documentation

30% reduction in project schedules
Access to real-time information for efficient process operation
The system operation environment-delivers operators with all the data they need along with the customisation features they require to operate the process in the manner that suits them.

The whole picture
Unify any number of control systems, or process units into a single, “clustered” system. Using this functionality each local site can view their own process and use global control clients to view across the entire plant. Complete with unified alarm lists and the ability to compare trended data across multiple areas, clustering provides a balance between stand-alone reliability and centralised maintenance.

Built for control rooms and the plant floor

The ability to extend your plant operations from the control room to the plant floor is important and that is why we offer dedicated plant floor HMIs built to withstand the rigours of these types of environments. The ruggedised features of this range make them perfect for use in plant floor cabinets and other dedicated applications.

Getting to the cause of the problem
To diagnose the cause of a disturbance and to rectify the situation it is important to understand the circumstances surrounding the incident. The alarm list feature provides operations staff with a highly flexible method for filtering and sorting both active and historical alarms, supporting both alarm grouping and hierarchical suppression. Coupled with this is the process analyst which integrates alarm and trend information with operator comments in a single view in order to quickly identify when and where an incident occurred, helping to facilitate a swift resolution and prevent such occurrences in future.

Understanding the data
Key to driving efficiency during plant operation is the ability to provide operators with clear information about the process. That is why the system provides, not only a state-of-the-art graphical interface, but also advanced alarm and trend acquisition features. The acquisition systems are designed to support both time-stamped (for example from RTUs) and real time data in a single operations environment.

Accessing information from outside the plant
Access plant and process data from outside the plant via dedicated web clients and smart mobile devices such as PDAs, or mobile phones. This type of functionality is designed for people who need access to real-time plant and process information from remote locations.
A family of controllers to meet your unique processing needs

A family of programmable automation controllers to meet your unique processing requirements.
Built for process applications

Our programmable automation controllers are built for the needs of the process industry, the hardware is modular and scalable and supports a full range of input/output modules along with dedicated communications and fieldbus modules for connection to smart devices and instrumentation.

The controllers support high density options to reduce cabinet space and system cost and offer conformal coating for harsh environments and high isolation levels for immunity to noise in difficult electrical environments.

Our system also offers the ability to distribute the system IO into the field and install it close to the process, helping to cut wiring and installation costs.

Regulatory and advanced process control

Each processor is multitasking meaning that you get the fastest and most efficient processing of your control algorithm, communication and IO processing and all controllers support all of the five IEC 61131-3 programming languages without restriction to provide a broad range of configuration flexibility.

- Function Block Diagram (FBD)
- Structured Text (ST)
- Sequential Function Chart (SFC)
- Ladder Diagram (LD)
- Instruction List (IL)

The prebuilt object libraries provide all of the functionality needed for continuous or regulatory control and additional libraries are available for those applications that need advanced process control functionality, including

- Fuzzy logic
- Multivariable Predictive Control
- Statistical Process Control.

Easy maintenance

Each controller features hot-swap capabilities for power supplies, input/output modules and processors as well as automatic configuration on insertion meaning that you can perform maintenance without the need to shut down or stop your process.
Protecting your people, plant and processes
In order to protect your people and the environment, to ensure that your process is safer and more efficient, and to meet safety best practice as defined in the IEC 61511 standard, we offer a solution for your safety system requirements based on a worldwide recognized offer and proven technology.

Our Collaborative Control system delivers the flexibility to combine both safety and process applications in the one system.

Safety in harmony with the process

So that you can design your safety applications more simply, the SIS (Safety Instrumented System) offer is a direct extension of the standard process automation offer. The hardware architecture, communication networks and configuration environment are identical to the ones you already know, helping to minimize the training required.

This commonality between the SIS and process control system allows for easy maintenance and seamless integration into the operating environment of the control system. The safety system features hot-swap functionality: hot-swap IO communication modules CPUs and power supplies reducing both the operating and maintenance costs of the system.

With the hot-standby 1oo2 hot repair configuration, when the SIS detects a fault, the process control continues to operate. And more, with an option of full redundancy the system offers the ability to repair any fault without interrupting the safety system. This avoids spurious trips and guarantees that the system is brought to a safe state only when an unsafe situation is detected.

Protect Your Investment

With this common integrated safety offer, you capitalize on your development know-how and you integrate the safety functions within your existing installations more simply.

By preserving the availability of your plant and optimizing your asset costs without compromising safety, the Safety Instrumented System improves the return on your production assets.

Our expertise

- TÜV certified for use in SIL2 or SIL3 applications
- IEC 61508/61511 functional safety
- Hot-standby 1oo2 hot repair functionality
- Based on standard networks and open software systems
- Integration of safety and process control in a single platform

MTTF up to 2,000 years when implementing a hot-standby solution
For 24 x 7 operation of your process

Our system offers the flexibility to choose the level of availability to meet your particular application and provides high availability options at all levels of the system architecture including operator stations, data servers, controllers and networks. So for those applications that need to be operational 24 hours per day, 7 days per week and where a stoppage to the process can not be tolerated – the answer is here.
Don’t change your habits

Configure your redundant system in the same way that you would for a non-redundant system. There is no need for specific application programming at the controller level and network and data server redundancy is managed in a few seconds with the help of a simple setup wizard.

Online changes

To ensure uninterrupted processing we offer online change functions for the controllers in order to update your application simply and securely without interrupting your process. When employing a redundant data server configuration you have the option to make changes to the configuration and role-back these changes if they do not operate as expected, all without disturbing production.

In order to ensure easy maintenance the system controllers feature hot swap capability for processors, cables, input/output modules and power supplies.

Automatic and bumpless

The hot-standby nature of the controllers, data servers and networks means that a failure of the primary component results in the automatic and bumpless switch to the standby. This switch is transparent to the operator and the process continues to operate as normal. The redundancy features are integrated into the alarm system, meaning that the operator will be automatically notified in the case of any failure.

99.99996% availability

Our expertise

> Automated IP address management between primary and secondary controllers
> Transparent operator client switching in the case where the primary data server fails - without loss of data
> Integrated system alarm management
> Scalable, redundant HIPER ring network technology
Smart instrumentation and web-enabled devices to reduce your maintenance costs
The combination of smart instrumentation, web-enabled devices and Ethernet as the system communication backbone provides users with access to device data and configuration information that was previously only accessible locally, or within specific process areas. This global access to data cuts maintenance costs, eases configuration and reduces commissioning time.

Fieldbus and device networks

Many of the efficiency improvements in your process come from the ability to predict problems and prevent failures. Process fieldbuses and open device networks make it easy for you to realise significant savings in the maintenance of your plant assets and process equipment by delivering the advanced information that you need to perform maintenance tasks before a break-down occurs.

Web-enabled devices

Our range of smart web-enabled motor control devices and drives allow you to configure and save parameters from anywhere in the system, and what’s more they support Faulty Device Replacement (FDR) technology to automatically reload the configuration into a new device in the case of a failure. Helping to cut maintenance time and reduce system related process downtime.

Reduce installation costs

Along with this are the cost-savings offered during the design and installation of your system. Thanks to the features of these smart networks you use less wiring, meaning less cabinet space and fewer system design drawings.

Open fieldbus policy

Our system brings you all of these benefits thanks to our open fieldbus policy.

Smart field instrumentation:
- HART
- Profibus PA
- Foundation Fieldbus

Major device networks to integrate sensors, drives and motor control:
- EtherNet/IP
- Profibus DP
- Modbus TCP
- CANopen
- AS-Interface

Support for FDT/DTM

FDT/DTM technology is device manufacturer independent and fieldbus communication protocol independent and provides a single environment for field device configuration, field device commissioning, and the ongoing management of field devices. Our system supports FDT/DTM in order to help you minimise maintenance and preserve your investment in existing field devices.

Improve your asset utilisation

Further leverage the benefits of smart instrumentation and devices by transparently integrating the data into dashboards and smart analytics using our Manufacturing Execution System, thereby providing a complete picture of your maintenance information, downtime information and performance metrics in a single location.
In the past power and control were two separate worlds. However, today, companies understand that in order to optimise their processes and reduce operating costs they need to implement strategies that include both.

Combine process information and energy information in the one system providing a single interface for all your process and energy needs.

**Process control and energy efficiency go hand in hand**

Our smart power and energy meters allow you to collect data from all of your energy sources, such as water, air, gas, electricity and steam, and make this available in the system. Combining this information with other process related data provides a clear picture on your per unit energy consumption and helps to pinpoint areas for improvement within your process.

- Reduce peak demand surcharges
- Implement dynamic load-shedding strategies within the control system
- Reduce power factor penalties
- Leverage existing infrastructure capacity and avoid unnecessary capital outlay
- Support proactive maintenance to prolong asset life.

**Up to 60%**

of energy consumption in a plant is from motors
With proper process control and monitoring capabilities, you can ensure a high quality finished product while optimising your energy consumption.

Electric motors, a critical target for energy efficiency

Our variable speed drives are an excellent way to optimise the energy efficiency of the electric motors in your plant, like those used for fans, pumps and conveyors throughout the plant.

Your benefits are immediate:

> Significant energy savings from reduced energy consumption
> Optimised process control thanks to transparent integration with the system
> Longer motor life and reduced maintenance costs.

iPMCC a valuable ally in energy savings

Our iPMCC (Intelligent Power and Motor Control Center) solutions seamlessly integrate through use of the the best network architectures, motor protection devices and variable speed drives.

iPMCC brings intelligence to motor control:

> System availability based on networks with fewer potential failure points
> Fewer shutdowns thanks to remote access and advanced problem identification
> More information available to aid effective decision-making
> Energy savings by use of high-performance variable speed drives
> Flexibility of solutions based on multiple networks.
Daily, weekly and monthly production figures at your fingertips
The Historian collects your process, quality, energy and other data from across your site and generates detailed reports to help the decision-making process.

Information anywhere, anytime

Seamlessly connect to your production and business systems to ensure that the right people have access to any information that they need. This is made possible by our ability to bring together high speed and real-time production data with the universal accessibility of a business database within our historian offer.

A range of clients for a range of users

> Maintenance engineers need a fast way to analyse trend and event data. The Historian Web Client delivers a flexible way for them to compare real-time and historical data in the one interface.
> For many process engineers, Microsoft Excel is the tool of choice for data analysis. It provides them with all the calculation tools that they need to model and analyse production. The Historian Excel Client adds value to these models by integrating data directly from the control system.
> Managers prefer their data presented graphically with the ability to drill-in for more detail. By utilising industry standard reporting tools, such as Microsoft Reporting Services, the Historian provides a highly customisable reporting system that can be easily integrated with the overall reporting needs of the business.
> For other applications such as business systems integration, or data analysis the historian provides data though open standard interfaces (OLE-DB, XML, Web services) enabling your plant to react and interact with most business systems.

Data collection & management

> Your data collection is secured via support for redundant and the ability of the Historian to backfill data in the event of network or Historian failure.
> The data collected includes any tags, alarms and events from within the system as well as event or tag comments in order to provide a rich source of information for data analysis.
> Utilising data from your control system, or by directly connecting to external data sources, such as Laboratory Information Management Systems (LIMS), the Historian provides a centralised location for all of your process data storage needs.

Know that your information is safe

The combination of industry standard technologies and single sign-on for valid system users ensures that any sensitive data stored within the Historian is safe from unauthorised viewing or tampering.

Mr Tarun Khulbe
VP & Chief Cold Rolling Division: Jindal Stainless – India

“This was one of my dream projects where we wanted to establish an information bridge between shop floor and top floor in terms of real-time process information. We wanted to equip our managers in such a way that they have visibility and control of the processes all the time, across the plant.”
Total traceability from raw materials to finished product
In many industries having full control over batch processes is key to productivity and quality.

Our batch management offer is a fully integrated batch management and tracking software compliant with the latest version of both the S95 and the S88 standards. It provides you the agility and control to respond to increasing production demands in real-time. It helps you to reducing lifecycle costs and production downtime as well as to keep track of batch history and data for regulatory compliance. In other words, it enables you to achieve and sustain a competitive advantage in the marketplace.

Flexible manufacturing

Batch management enables manufacturers to manufacture a variety of products, to react quickly to changing customer schedules or unexpected plant-floor events and to easily introduce new products.

Each product is based on a flexible recipe consisting of a procedure and a formula and can be easily created or modified by the process engineers or the production operators without any specific automation background.

During operation, the production team schedule production orders indicating the order size, the master recipe to use and the specific parameter, the system will automatically create the number of batches required according to the equipment capabilities. Scheduled orders are displayed on a Gantt type display giving a clear overview of the production planning and allowing simple changes in priorities.

During a production batch, the operator has access to the current status of the phases being executed along with an overview of the whole procedure and the main control parameters of the batch.

Faster time to market

Our batch management offer is based on a S88/S95 object oriented plant model to reduce the development and validation costs through a simple procedure: develop and test once, reuse everywhere.

Phase logic objects are available to provide standard interface for both operator and batch management software managing all the types of interaction in respect with security and traceability. As a result, our system empowers engineers to design complex and flexible production strategies.

Keep track of batch information

Automatically record all information required for the generation of comprehensive batch reports. The data is stored locally in a secure database for reporting purposes and connects with the Historian and Manufacturing Execution System to provide you with a total picture of your plant operations.

Ease regulatory compliance

For processes subject to licensing by regulatory bodies such as the Food and Drug Administration (FDA), our system provides the tools you need to achieve compliance. Security, audit trail, change management, electronic signature, automated reporting, archival and retrieval are integral to all operations and system applications. Our batch management offer automates, monitors, controls, and documents cGMP (current Good Manufacturing Practices) compliance of your manufacturing processes.
Make prioritised decisions about your process and operations

Vince Aurora
Plant Manager,
Angaston - Adelaide
Brighton Cement

“Our challenge was to replace multiple, disparate downtime reporting systems with a single system that was automated, easy to use, and enabled the real-time collection of stoppage data across our operations. Ampla (Schneider MES solution) Downtime was chosen as a best-of-breed solution because it met these criteria, and since its commissioning, ABC Angaston has reduced plant stoppages by more than 50%.”
Our Manufacturing Execution System delivers real-time access to operational and production information enabling organisations to improve their competitiveness in global markets, increase shareholder returns, increase operational efficiencies and reduce energy consumption.

It is a powerful and dynamic suit of manufacturing operational software used to overhaul business processes and particularly look at manufacturing costs, production efficiencies and quality.

In addition, it empowers manufacturers to:

- Reduce operating costs
- Optimise production
- Increase first-pass quality
- Decrease waste and reject
- Gain visibility of real-time data directly from plant floor
- Make decisions based on reliable manufacturing data.

Connecting to plant and business systems

Our Manufacturing Execution System connects to multiple plant and business systems, collects the relevant data and presents it as easy-to-understand, real-time intelligence for productivity analysis, data mining, querying and reporting.

It is used to identify bottlenecks, analyse production downtime causes, calculate key performance indicators, deliver accurate views of production inputs and outputs, understand your work-in-process, track the real costs of production and many more operational performance issues.

Sustainable architecture

The MES system has been built to meet the needs of complex and evolving IT requirements by integrating leading edge technologies, sustainable architecture and strong web services capabilities.

It supports easy integration to all major ERP vendors, is highly configurable and flexible and easy to integrate.

Up to 25%

Improve performance up to 25% by increasing visibility and management of daily operations
We have you covered through every stage of your system lifecycle

We support you throughout the life of your plant, from the design, through operation and modernisation. We offer expert services available in all countries. Our network of project and service centres combined with our unparalleled partner network is at your disposal to deliver the solution you need.

Project Management and Project Engineering
You can count on the experience and involvement of our teams.
Schneider Electric has global and local project teams to manage your automation, energy management and electrical distribution projects. With worldwide references in across all industries and with strategic presence in major countries, Schneider Electric is the right partner for your project and engineering challenges. Our tools, standards and proven processes allow us to apply these best practices in your project with the confidence, safety and quality you want.

Consultancy
Our experts and consultants help you to analyse your existing situation and work together with you to define and deploy specific solutions to meet your particular requirements.

> For operation
We support you to get more from your plant. For example, as process automation specialists, we provide consultation services and audits to understand, evaluate and propose solutions and strategies to improve the bottom line of your business, optimise your process efficiency and achieve energy savings.

> For pre-project phase
Our consultants can help you to integrate your process with your business and offer solutions on the best process control architectures, intelligent motor control centres philosophy, energy management networks and electrical distribution solutions according to your requirements and budget objectives.

Alliance Partners
For specialty process know how, Schneider Electric has a strong worldwide network of solution partners that comprise the major EPCs, OEMs and System Integrators in the industry.
Within this collaboration environment, you have the access to a strong combination of the best process providers and Schneider Electric, delivering a powerful and complete solution.
Training

We can help you identify your training requirements by systematic analysis of levels and functions of your teams, propose training modules covering your installed automation equipment, follow up acquisitions by ongoing training, offer training modules designed to suit your timing and locations.

We have over 50 training centres worldwide complete with high technology learning tools, professional trainers expert in both industry needs and education and can offer standard or customised courses on your site or at our premises.

Replacement Parts and Repairs

Does your competitiveness depend on your reactivity to breakdowns and malfunctions? We can help you limit downtime periods.

> From our stock we can supply you with tested and certified replacement parts compatible with your installed equipment
> By contract, we offer to store in your warehouse replacement parts for the system that remain as our remote stock until required
> Finally, you also have access to a strong distribution channel network, present worldwide, with which to have fast access to our products.

Maintenance & Support Contracts

We offer a range of flexible and customised service contracts to meet your needs including.

> Telephone support for priority access to our expert support centre
> Web access to benefit from the latest software versions
> Stock of our approved replacement parts on your site or in our warehouse
> Assurance of on-site assistance within a guaranteed time

We help you anticipate technical risks and perform essential modernizations by taking account of equipment obsolescence, in order to avoid costly production shutdowns.

900

More than 900 Alliance System Integrators

25

More than 25 Automation Solution Centres Worldwide

Our offers help you to

> Anticipate risks
> Improve your performance
> Keep control of your investments
Make the most of your energy