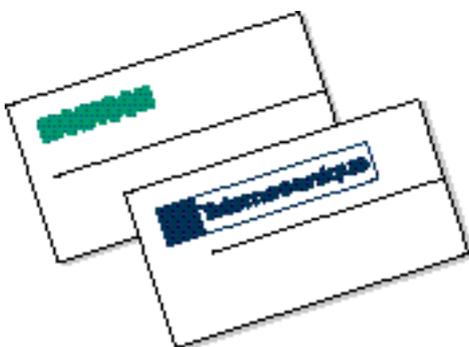
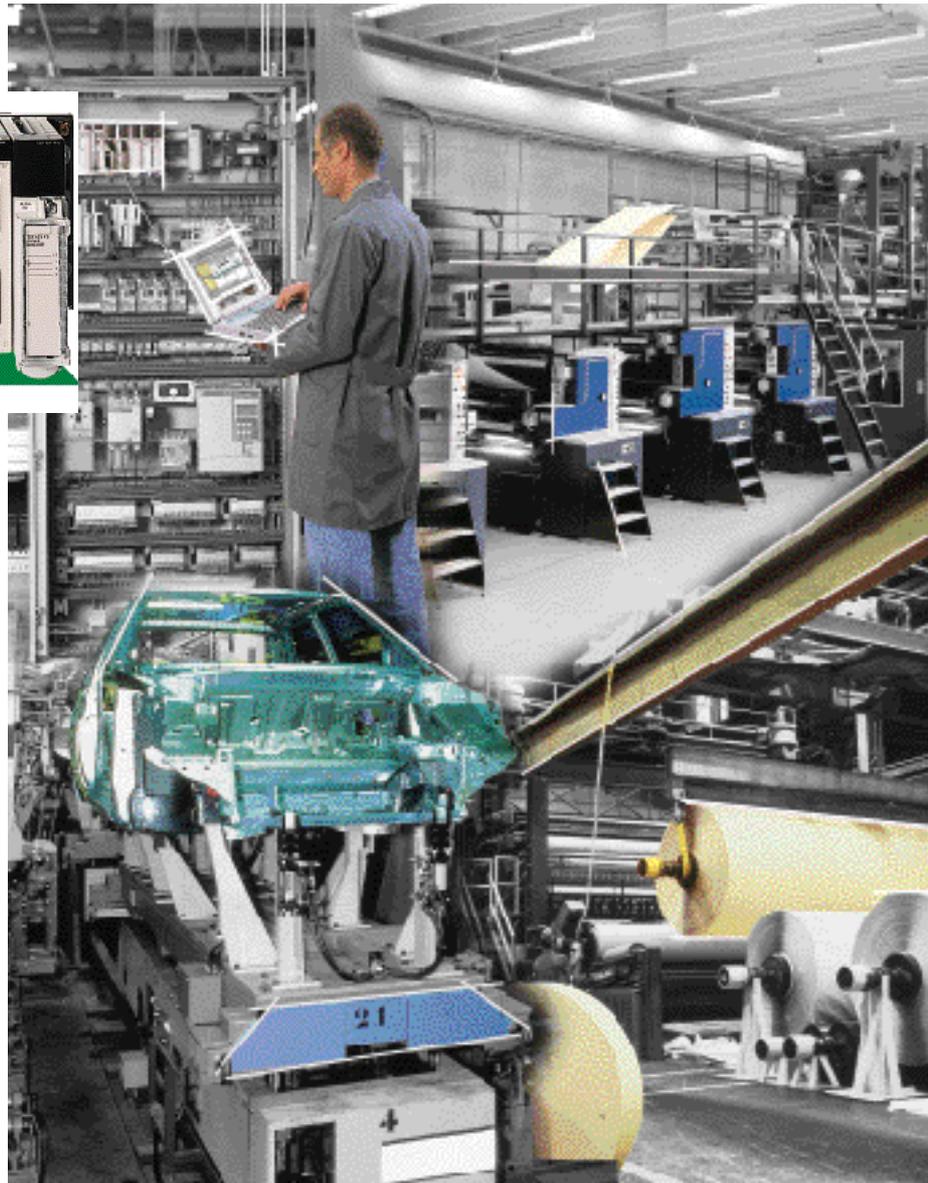
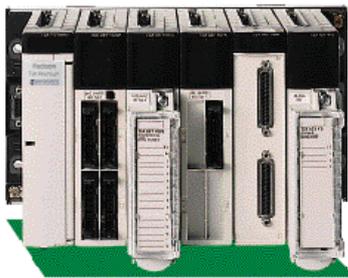
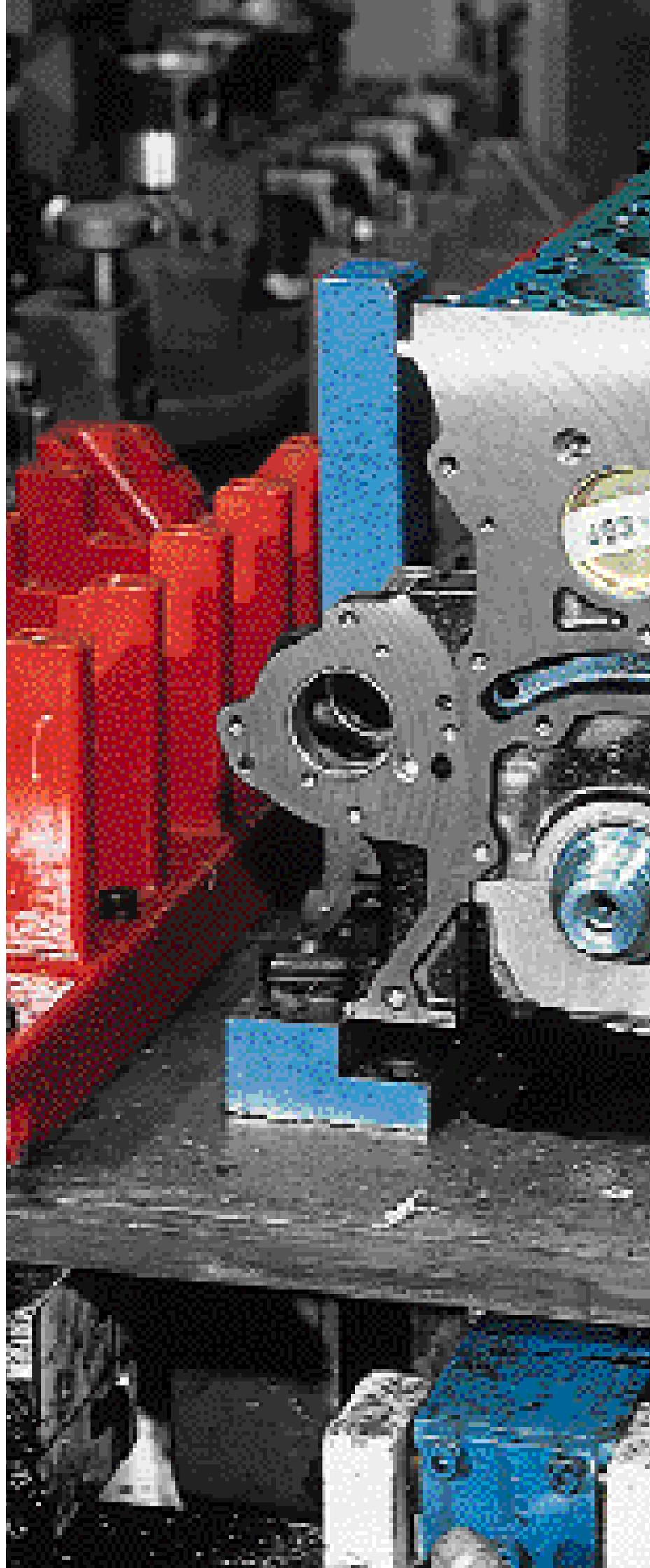


Automation control platform **Premium** integrating your applications



GRUPE SCHNEIDER

■ Merlin Gerin ■ Modicon ■ Square D ■ Telemecanique



Modicon TSX Premium

integrating
your applications

Competitiveness

The need to remain competitive imposes ever greater constraints in terms of performance, reliability and modularity. Within this context of global cost-cutting Schneider offers you integrated solutions for all your applications.

Integration

In each of the totally transparent architectures Schneider puts forward an immediate constraint-free association of automation system components. The integration of complex regulation, weighing and axis command functions within the automation control system and user dialogue remove the need to use specialist external components.

Standards

Through systems based on the information processing values of today and tomorrow, Schneider is putting the transparent factory into operation and already offers you benefits in the workshop, skills and resources of the standards of the future.





The distribution of input/output as close as possible to the operating element responds to the ever increasing need to reduce installation and maintenance costs. Schneider offers a variety of solutions to ensure response to distribution, whether by real-time X bus, standardized field bus or local standards, or by receiver/actuator bus.

Modicon TSX Premium

distributed platform

Distribute in order to economize

The guiding axis which pulls towards distributed systems is constant cost-reduction in automated installations. A better distribution of inputs/outputs means a simpler cable layout, optimizing connection costs, simplified maintenance, and limiting floor-space usage by reducing the number of cabinets.

X Bus distribution

The heart of the TSX Premium architecture, the X Bus, makes it possible to distribute all the offered functions whilst maintaining real-time operation. Without the need for repeaters, without performance degradation, with the need to install modules,

the X Bus distributes the intelligence of your application over 100 metres.

Application development

Whatever the distribution solution installed, the software tools offer a single language vision of all the inputs/outputs centred on geographic addressing. Coupled to the ease with which the software is installed (Microsoft ergonomics), the functional approach simplifies application development, set-up and maintenance.

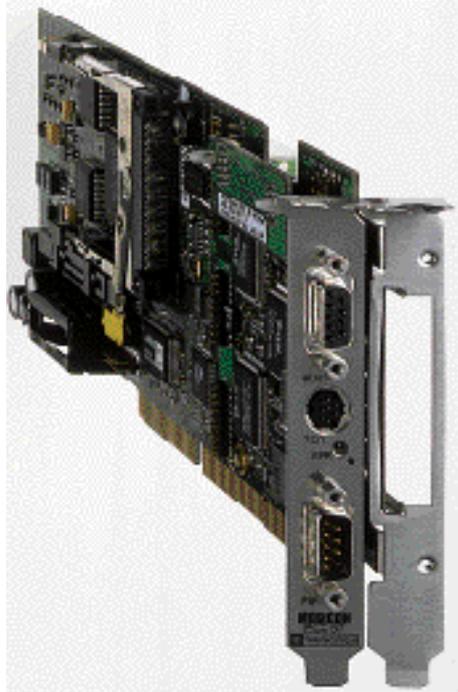
A wealth of solutions

Schneider offers distribution solutions which, thanks to the X Bus, allow the whole TSX Premium range to be physically spread out without any performance degradation whatsoever. In the same way, the WorldFip field bus, supporting the TSX Momentum range, and the AS-i receiver/actuator bus, also support distribution. All architecture solutions are mixable within the same automation control application.

Telefast

The use of Telefast 2 precabling terminals reduces the cost of automation control systems by reducing cabling time.





Schneider offers dual solutions for automation control applications based on either traditional modular automation control technology or an automation coprocessor for inclusion in a PC. However, whatever solution is adopted by the customer, Schneider guarantees the same use values and operational modes.

Modicon TSX Premium

PC integration :
a new approach

Openness

The technology adopted by Schneider, using a PC format automation control system processor, offers the advantage of being able to carry out applications such as supervision, data acquisition, voice recognition, etc. by adding extra PC cards compatible with market-wide standards for computer equipment.

PLC/PC solution

Modular or coprocessor automation control system architectures are completely dual. Choosing a coprocessor has no influence on the development and the capacities of the application. Indeed, the portability of TSX applications to PCX makes it possible to delay adoption of this solution.

Computing standards

The PCX 57 coprocessor fits inside the PC without its modifying the PC's characteristics. It is not influenced by the host computer and it benefits from all the dynamism of the PC environment (power of microprocessors, operating systems, etc.)

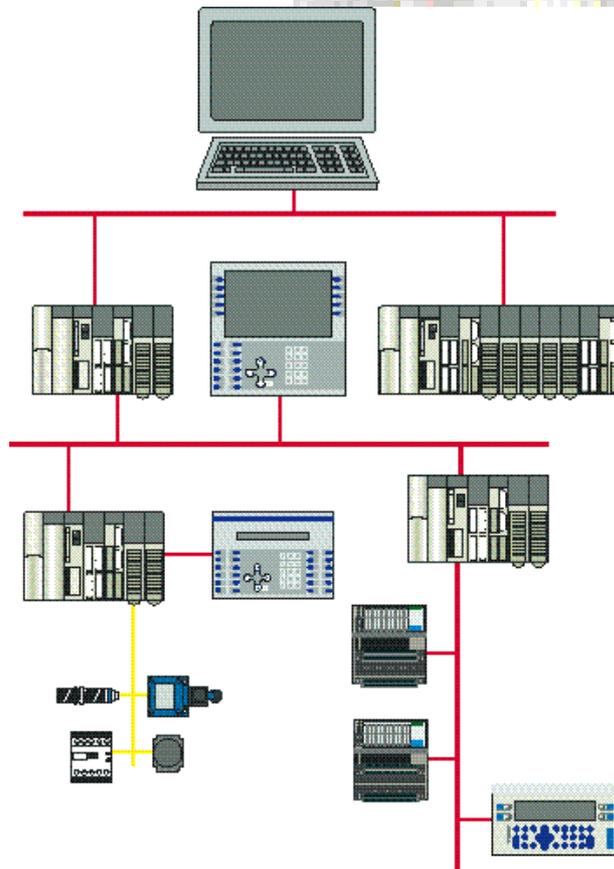
High-performance communications

The high capacity and performance of data interchange between the coprocessor(s) and the application PC are delivered by the ISA bus. Schneider has adopted the OLE/OPC standards for the access interface to the bit and word objects managed by the coprocessor. The processed data may be displayed graphically in any Microsoft spreadsheet.

Compactness and distribution

Integrated in a PC-based man-machine interface this combined solution is ideal for distributed automation control architectures using a field bus. Optimal in both cost and performance, this solution is also physically compact.





Backed up by the latest technological advances, Schneider has adopted recognized computer standards so the office and shop floor can communicate freely.

Modicon TSX Premium

transparent
communications

Transparent communications

Network transparency, a comparative advantage already acquired by our preceding ranges, comes into its own today with distributed architectures thanks to the emergence of the Intranet. Access to all input/output objects is transparent whatever the mode of connection (ground bus, receiver bus, rack mounted module).

Ethernet TCP/IP

Today all automation control systems are connected using this protocol for both horizontal and vertical communication, with supervision systems and production management systems. Different application layers are supported to ensure communication between

the different ranges of Schneider automation control systems.

In the case of the Modicon TSX Premium, a 'Plug and Play' design has been used for Ethernet connection.

Simple communications

Whatever the communication protocol used, a functional block exists to which the designer can assign the data he wishes to transfer, apart from that set aside for the management of the support protocol used.

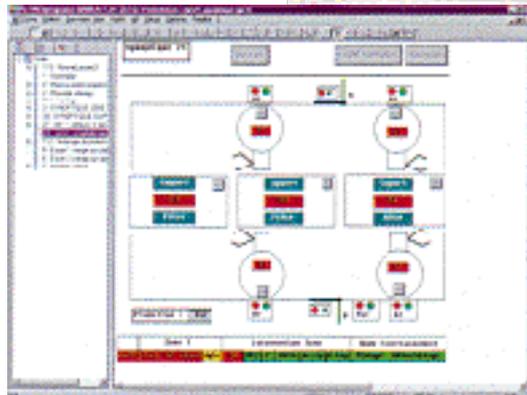
Local and global standards

The Premium range has been designed to be compatible with world-wide computing standards (Ethernet, TCP/IP, OLE/OPC, World FIP). These are closely bound to the existing installed equipment (Modbus, Modbus Plus) and to local requirements, in particular in the domain of field buses.

FIP openness

The FipConnect programme has been set up to undertake the joint development of the Fipio partner product connection (the WorldFip field buses) and will give you the benefit of an economical and high-performance integrated solution.





Schneider proposes high level integration solutions to :

- control design and set up times;
- ensure improved levels of quality in execution;
- make available services enabling application maintainability and ability to evolve.

Modicon TSX Premium

integrating ready-made functions

Economy

Integration allows the concept of reducing installation development and set up time, thus offering important benefits in terms of competitiveness. Integration simplifies, optimizes, rationalizes development, and concentrates the developer's attention on important features of his work.

Integration

Software integration sets out to make complex functions commonplace and make a wide range of functions available to a large number of users so as to reduce learning, set up and operating times.

Set up

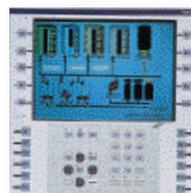
The operator dedicates his time to setting up of common-task functions, making the necessary adjustments, without it being necessary for him to take into account the details of communication between the automation control system processor and the task processor.

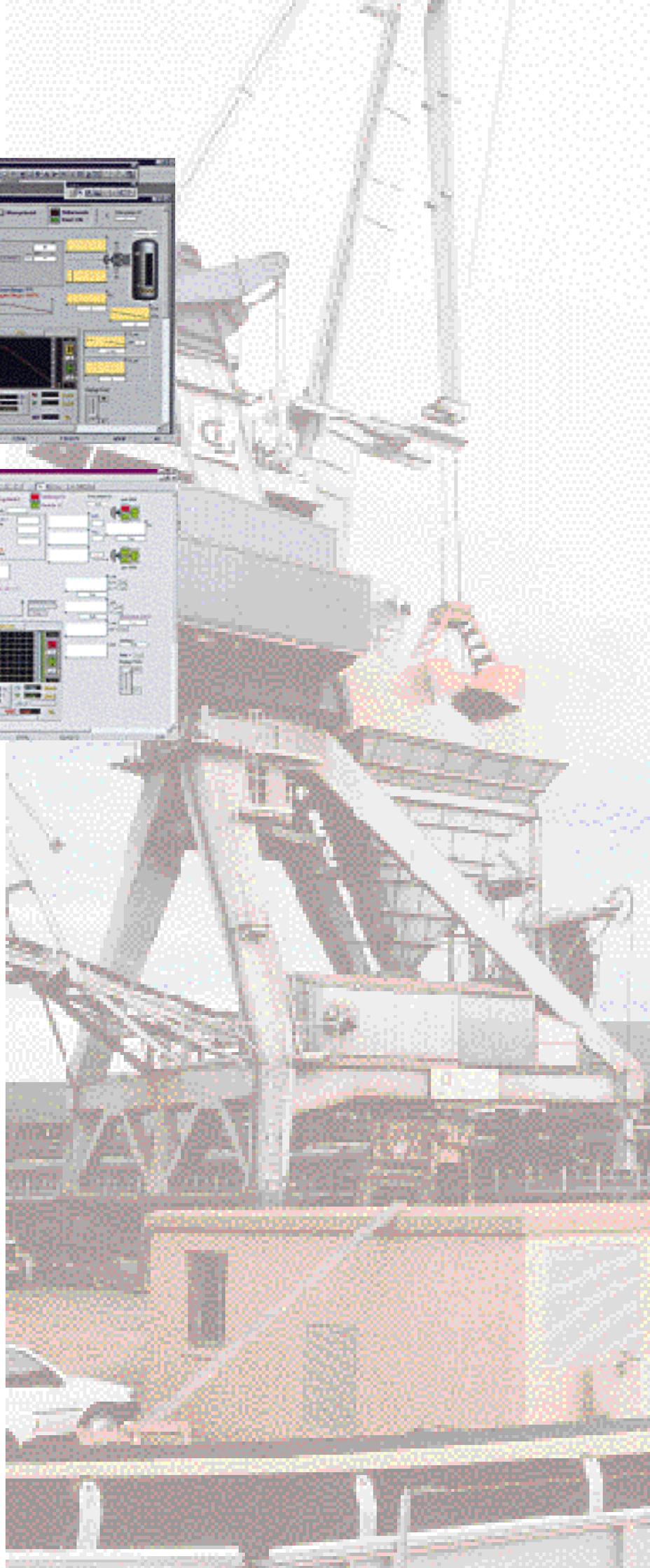
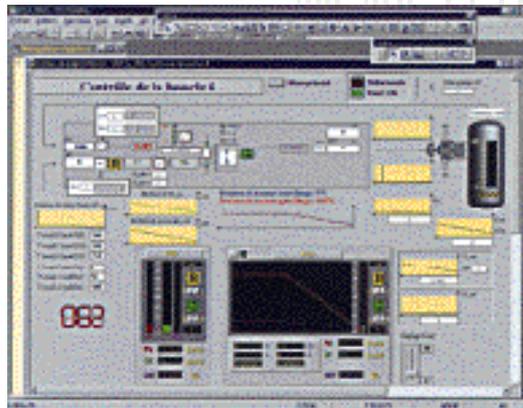
Control and guarantee

This integration of common-task functions is the guarantee of their correct operation and demonstrates Schneider's mastery of setting up tasks such as weighing, movement commands, safety, regulation, communication, etc. For the user, a common-task function obeys the 'plug and play' philosophy.

Use values

All the use values of the range, such as console transparency, access to all functions from a single connection point, uniform and consistent application documentation for all common-task functions, etc. is found in the case of all such functions and is the guarantee of a uniform approach to customers.





Schneider offers equipment and software designed to deliver the right information at the right time and reduce user-intervention time during the development and maintenance phases to a minimum.

Modicon TSX Premium

the maintainability
of your applications

Equipment

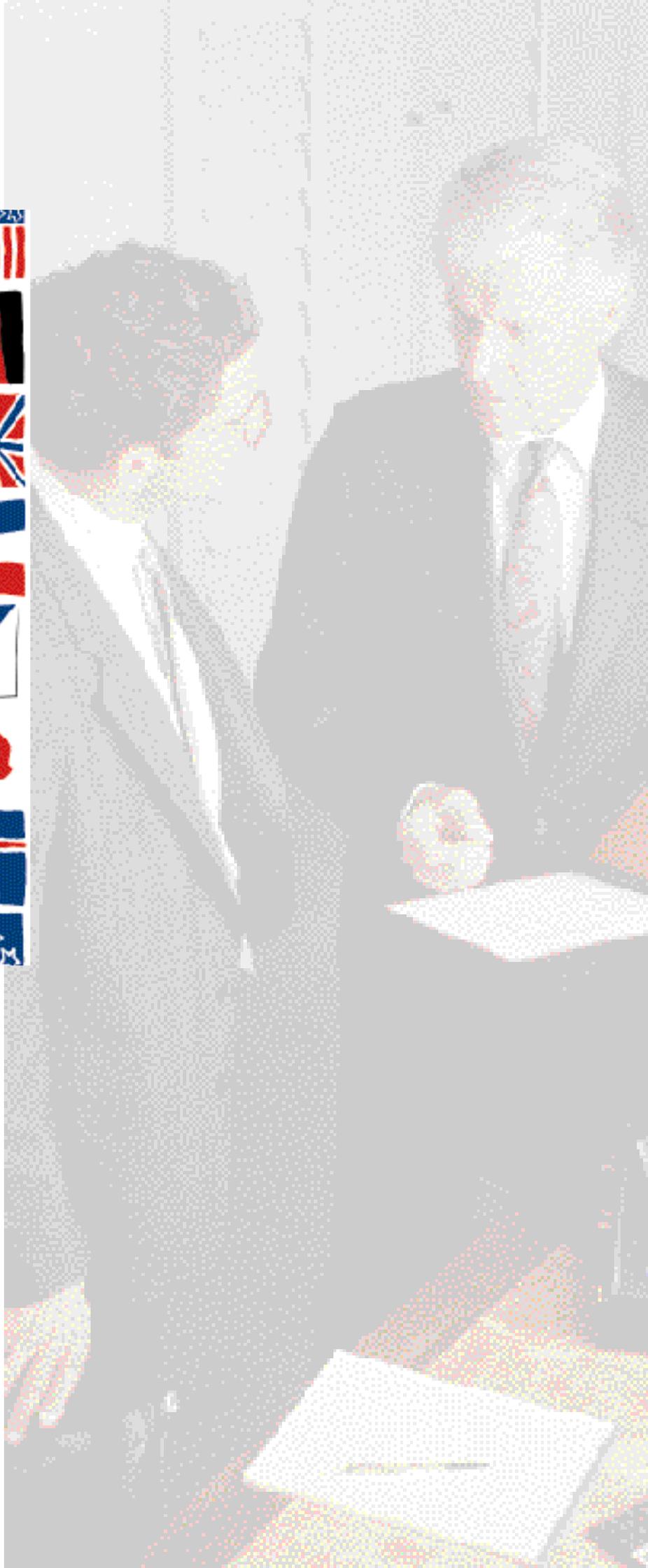
During the design of its products Schneider takes special notice of your productivity needs. Thanks to its highly integrated technology the Modicon TSX Premium automation control system makes it possible to intervene at any point in your installation without risk of destruction, and without stopping production. The ease of disconnection of powered modules, the Telefast precabbling terminals and the guide mechanisms, will all save you precious time each time user action is required by your production equipment and ensure the safety of people and machinery.

Software

Intended specifically for Schneider automation control systems, the PL7 programs are based on off-the-shelf operating systems (Windows 95 and NT4.0) whilst integrating the features needed for your automation control application. PL7 Pro graphical updating and the simulation of the operational part in the design office considerably reduce the steps needed in order to get an application

underway. Automation control system operation is greatly simplified by the use of diagnostic tools such as common-task functions, animation tables and operation screens. User-friendly man-machine interface tools give easy access to default lists. These diagnostic features, associated with the PL7 PRO DYN program, ensure the operator has a graphic and verbal overview of his installation, as well as making it possible to display execution dynamically.





With over 150 "Schneider service" centres, Schneider demonstrates its ambition to be present close to its customers world-wide. At any stage in a project, from drawing up the specification through to commissioning, maintenance and training, you can count on a "Schneider services" expert. Thanks to him, wherever you are in the world, you can benefit from the entire range of products, services and know-how of a manufacturer who is eager to help.

At your service

all around the world

Partnership

Developing a genuine partnership between customer and supplier requires a real effort to be made on both sides. Schneider sets out to build this special relationship with you on the basis of its comprehensive catalogue aimed to meet all your automation needs.

Competitiveness

As a leader in its field, Schneider has the capacity to regularly overhaul its range so as to retain its competitive edge. Today over 80% of the products in our catalogue are latest generation (less than two years old).

Long-lasting

With thirty years of experience and on-going relationships with our customers, you can be sure our control systems solutions will be long-lasting. To this end, 30% of our development effort is devoted to ensuring compatibility and continuity with your installed base. Moreover, Schneider guarantees to continue supply of products 10 years after withdrawal from the market.

Local and international

Schneider has an international network of over 8000 correspondents, 2000 automation specialists and 20,000 distribution outlets, a unique structure in our profession. Wherever you are, you can count on the support of a specialist. As a priority contact, he knows your needs and understands your constraints. He has access to the Schneider network and will help you in your relations with your equipment manufacturers and suppliers.



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