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**DRIVES
AND PROCESSES**

DRIVES AND PROCESSES *KNOW-HOW*

● Iron and steel industry



● Food and beverage



● Wire drawing - Cable making



● Environment



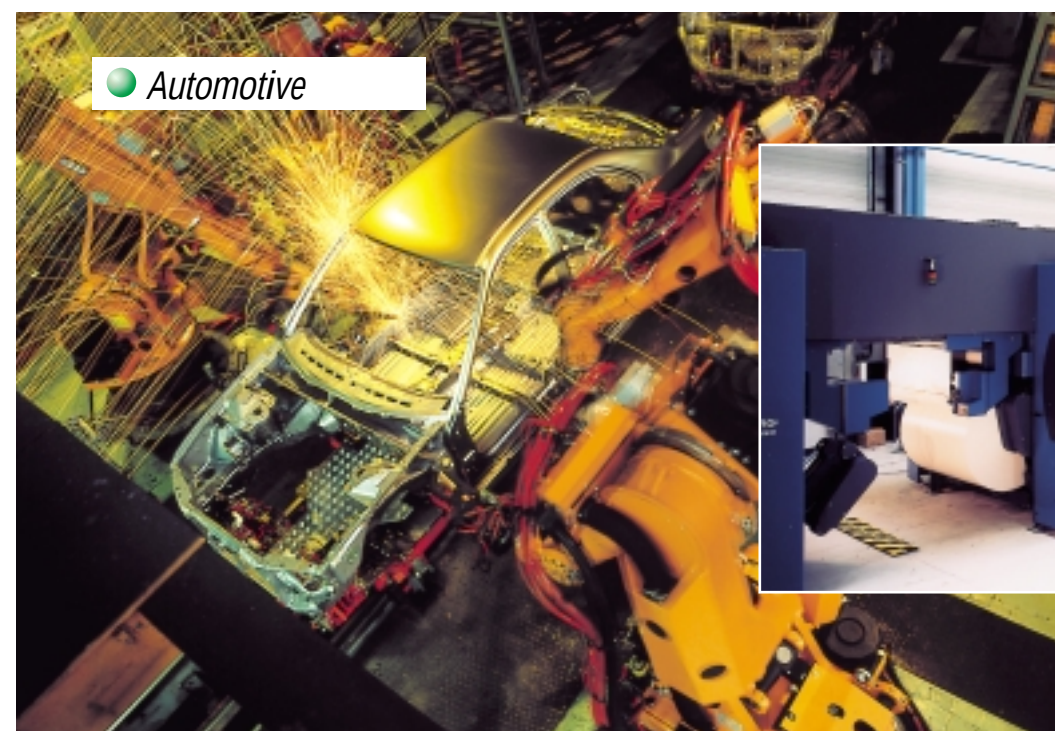
● Metallurgy



● Paper industry



● Automotive



● Printing



DRIVES AND PROCESSES

A GLOBAL OFFER

The selection of a drive system is based on precise criteria associated with the application and its environment. For components or complete drive systems, the LEROY-SOMER offer incorporates all the different motor, gearbox and drive technologies for controlling, monitoring and regulating processes.

A.C. motors
0.09 → 900 kW



Electronic soft starters
2.2 → 900 kW

Universal variable speed drives
0.18 → 500 kW



D.C. motors and drives
0.06 → 2400 kW



Perpendicular or axial output gearboxes
1 → 70000 Nm



Flux vector induction motors
0.18 → 500 kW



AC brushless motors
1 → 100 Nm

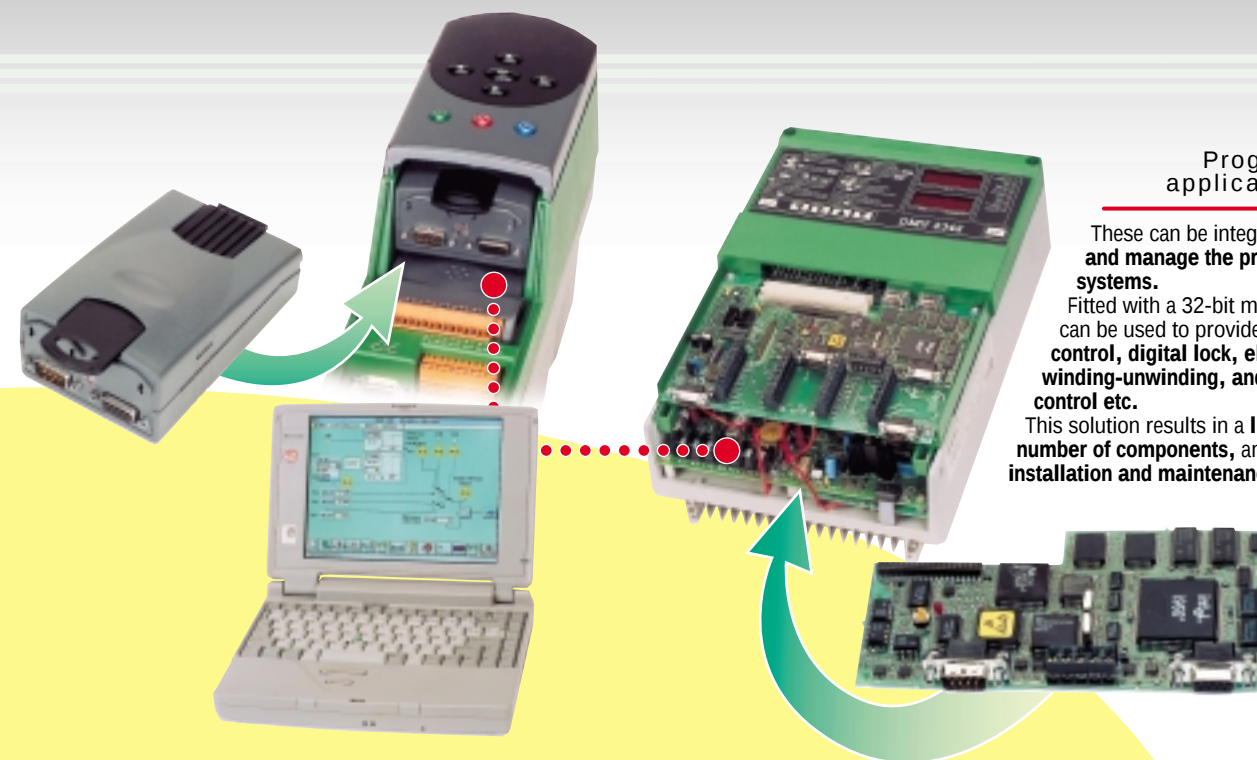


Programmable application modules

These can be integrated in the drives, and manage the process control systems.

Fitted with a 32-bit microprocessor, they can be used to provide simple position control, digital lock, electronic cam, winding-unwinding, and sophisticated PID control etc.

This solution results in a limited number of components, and reduced installation and maintenance costs.



Systems

As an extension to its product offer, LEROY-SOMER offers services from simple enclosure of power electronic components to total system design and construction.

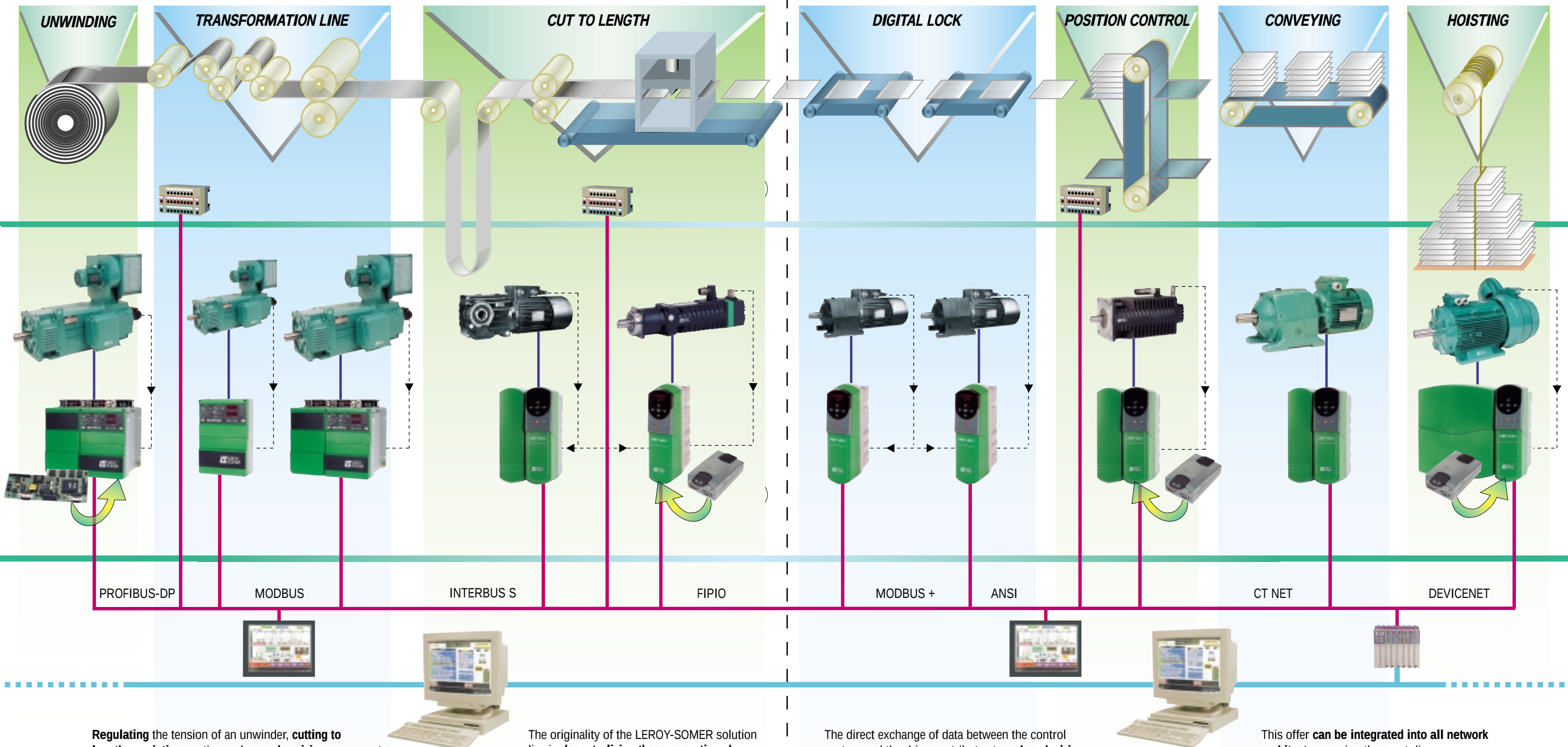


DRIVES AND PROCESSES

CONTROLLING THE PROCESS

Guaranteed performance of a machine or complete manufacturing line requires total control of the process and technologies employed. With more than 80 years' experience in all areas of industry, LEROY-SOMER gives the user the benefit of its expertise by employing the most up-to-date techniques in the area of process control.

This in-depth knowledge, at all levels of the industrial process, enables LEROY-SOMER to offer the most appropriate solution, combining performance with development potential.



Regulating the tension of an unwinder, cutting to length or printing continuously, synchronizing movements, positioning moving parts, ensuring safety on hoists, are all functions which rely heavily on control system resources.

The originality of the LEROY-SOMER solution lies in decentralizing these operations by integrating them into a programmable module used in conjunction with the drive. The system uses the drive or remote module I/O.

The direct exchange of data between the control system and the drive contributes to reduced wiring and improved processing time. This technical advance allows a compact central control unit to be used in situations where it is still required.

This offer can be integrated into all network architectures using the most diverse communication protocols. It can be enhanced with interfaces for operator dialogue, with supervisory control or with a data management system.

DRIVES AND PROCESSES

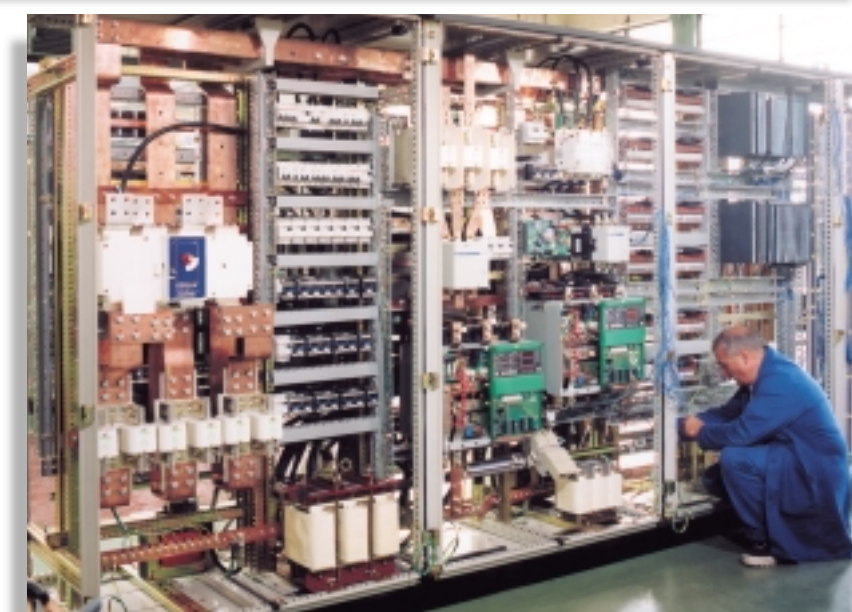
A PARTNER IN YOUR PROJECT

HELP WITH SETTING UP APPLICATION SPECIFICATIONS

- Participation in technical selection.
- Defining motors, gears and drives.



MANUFACTURING

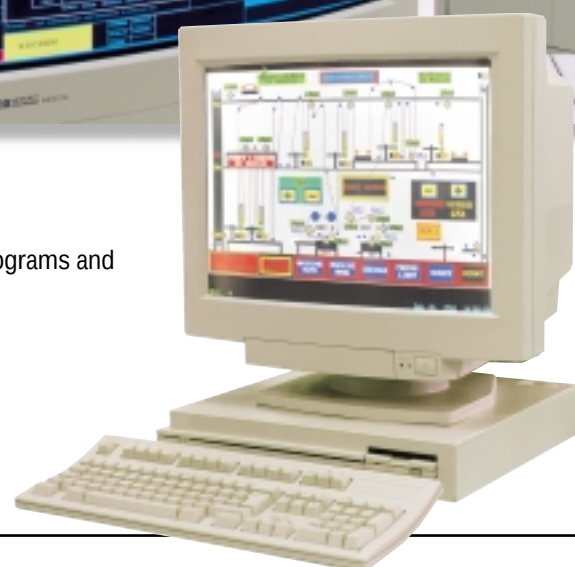


DESIGN AND CONSTRUCTION

- Complete electrical wiring files on CAD (Xelec, Autocad, etc).
- Development of integrated application software for drives.



- Design of PLC programs and supervision.



TESTS



- Systematic tests on test beds with process simulation.



- Loading benches up to 1000 kW



- High-speed test bed up to 12000 min⁻¹

DRIVES AND PROCESSES

CONTINUITY OF SERVICE

ON-SITE SUPPORT

At every stage of the project, our engineers and technicians will go **anywhere in the world** to get **installations up and running** in optimum conditions, using their vast experience in process control.



ADVANCED MAINTENANCE TECHNOLOGIES

Maintenance is a key task ensuring **continuity of production** in the factory. In this vital area, where it is essential for any **intervention** to be **anticipated** and **planned**, LEROY-SOMER offers products and services which integrate the most advanced maintenance technologies.

- Vibration analysis • Oil analysis • Infra-red thermal analysis
- Electric motor analysis • Balancing and precision alignment
- Continuous machine monitoring.



MOTORSTATUS

A standalone module for continuous monitoring and diagnostics of induction motors

Operation analysis

Operational

- load
- speed of rotation
- operating time
- number of starts

Log

- maintenance action planning



Alarms

Mechanical

- vibration analysis
- global level
- spectrum
- narrow band monitoring

Temperature

- machine overload
- cooling quality

Electrical

- rotor bar problems
- phase balance
- insulation problems

PRODUCT AVAILABILITY

Responding to urgent requirements calls for high-performance logistics.

This service is possible due to the following complementary factors :

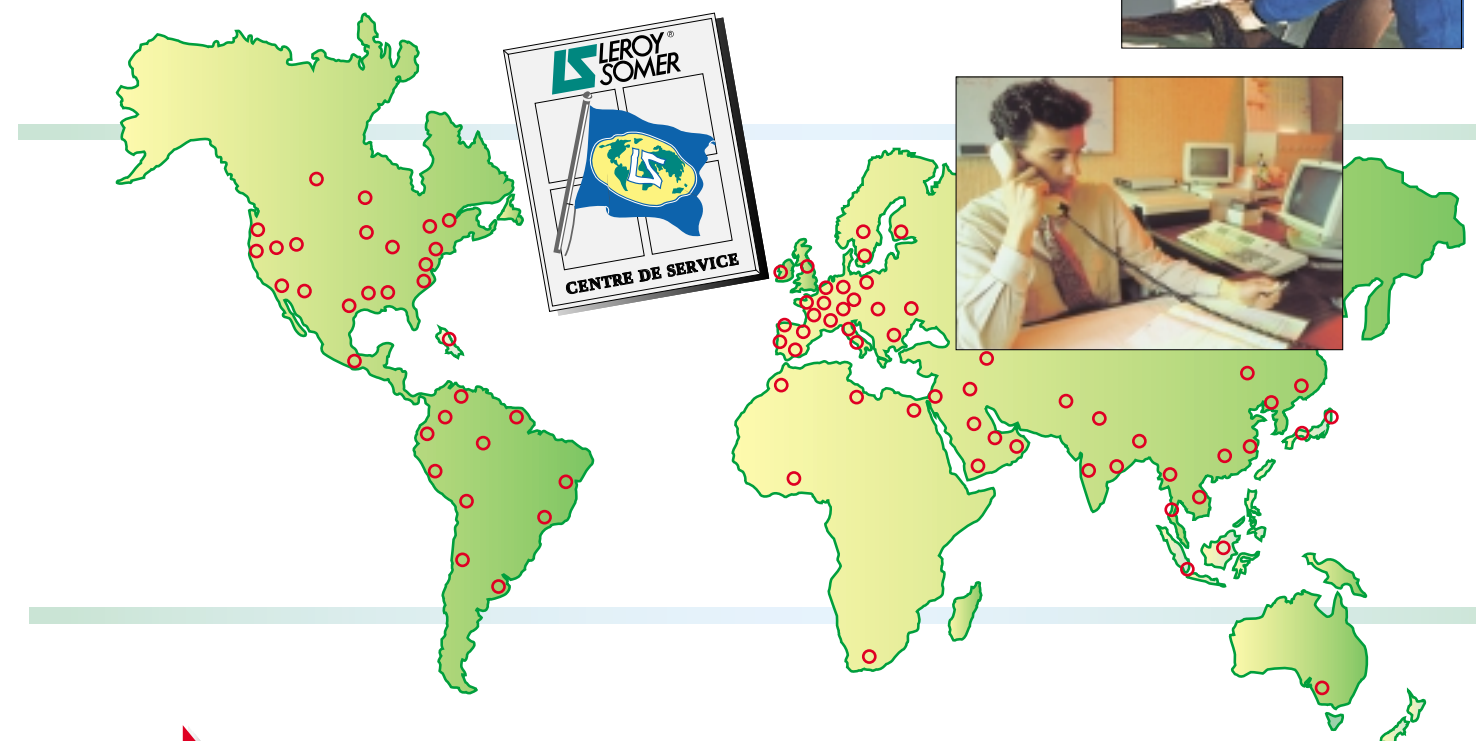
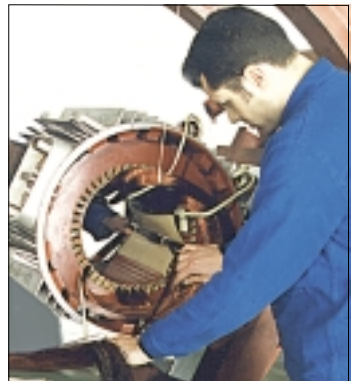
- the **stocks held locally** by LEROY-SOMER service centres and distributors.
- the **availability of more than 25000 references** at the LEROY-SOMER central order department.



PROXIMITY ON A WORLDWIDE SCALE

Throughout the world, **service centres specialising** in the repair and maintenance of equipment have been **performance-tested by LEROY-SOMER**. Based near to industrial users, they offer support :

- **internally** with system repair, technical support, adaptation and development.
- **on-site** for assisting with commissioning, maintenance and troubleshooting.



DRIVES AND PROCESSES

TRAINING



The **LEROY-SOMER training centre** offers the users of its products introductory and advanced courses.

These concentrate on :

- Installation and maintenance
- Modernisation of existing installations

The training centre is equipped with test beds for practical exercises, simulating a large number of configurations and situations, in actual load conditions.

This training can also be carried out on site.



The LEROY-SOMER training centre has been given a training quality award by the **FIEE** (French **F**ederation of **E**lectrical and **E**lectronic **I**ndustries).

