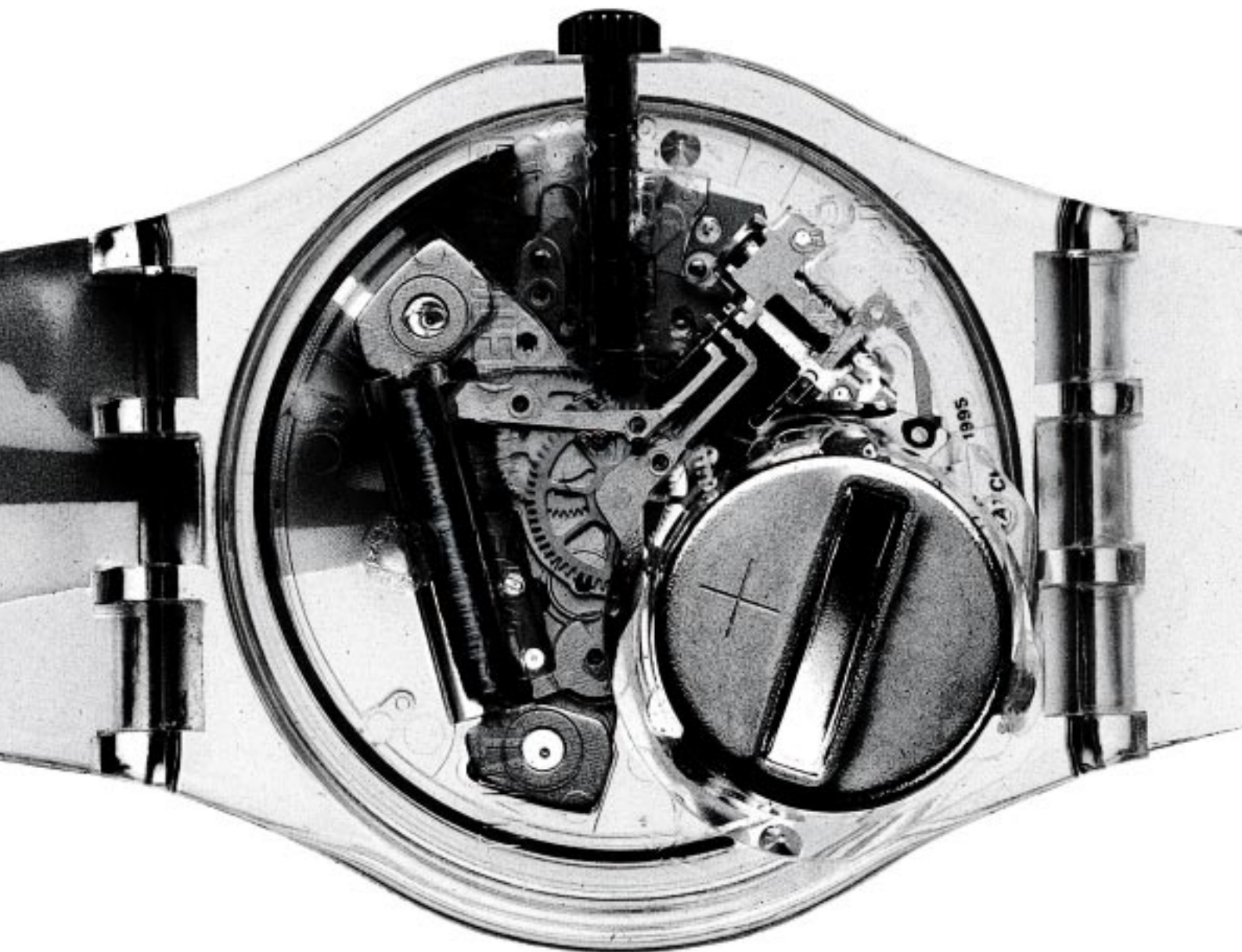


# Electrical wires\_



# With , electrical wires are entering the "made-to-measure" era\_

Nexans masters the entire production line, from the copper cathode, close to the base metal, through to the world standards for wire and cable, and is placed at the forefront of a healthy market.

Number 1 Worldwide for winding wires and number 2 European for bare wires, Nexans combines steady growth with good profitability thanks to its high-performance products and strong industrial partnerships.

On 31/12/2000  
25%  
of the Group's  
activities

Total sales of  
1,095 million euros\_  
(at constant copper price)  
2,672 employees\_

No.1 Worldwide  
for winding wires\_

No.1 European  
for wirerod\_

No.2 European  
for bare wires\_



Michel Lemaire

**"The fact that we master the copper production process from the cathode through to the finished cable gives us an advantage over most of our competitors. The contracts concluded many years ago with the world's main copper producers, especially in Chile and Africa, place us in a privileged position and it is vital for us to take advantage of this."**

## An historical advantage

Nexans is one of the world's largest electrical wire manufacturers. It benefits from a longstanding market presence that goes back to the end of the 19th century. From the very outset, the Group was able to gain the support of copper producers all over the world and master the entire production chain by manufacturing the wires used to make the cables. More specifically, Nexans produces the 8-mm rod, the standard used by all wire and cable manufacturers in the world, many of whom are obliged to purchase the rod from outside sources. Thus in 2000, the Group transformed some 700,000 tons of copper. The market follows the

economic climate of the consumer regions and market sectors, especially in the case of winding wires, destined more specifically for the automotive, household appliances and computer industry. The cyclic effects are attenuated by Nexans' global and multi-sector presence. The total sales of the Electrical Wires Division in 2000 totalled 1,095 million euros (at constant copper price), representing, in the domain of winding wires, an increase of over 15% on the 1999 figure.

## A profitable activity...

### because it is streamlined

The results of Nexans' Electrical Wires Division were good this year. This performance can be explained among other things by a rational purchasing and procurement policy. In a raw material market that is subject to strong fluctuations, Nexans has a sufficient diversity of supplier countries to be able to overcome any procurement crises. With a copper processing capacity that is going to be upped from 44 to 55 tons per hour, and the implementation of new software package systems, the Group is working to reduce stocks and production costs. The medium-term objective for the winding



**Magnebond®**

Magnebond is an innovative copper winding wire that has the property of becoming adherent in the presence of heat and producing sintered windings without any impregnation treatment. This type of wire is used in the manufacture of television sets, hand-held electric tools (drills etc), fans, refrigerator compressor motors etc.



**Ultrahigh-performance technologies**

Nexans has recently acquired a horizontal enamelling furnace with which it can improve the quality of winding wires and meet the ever-more stringent requirements and growing demand of its industrial customers (manufacturers of automotive equipment, household appliances, lighting appliances etc)

wire activity is to lower production costs by 20% thanks to the "New Horizontal Process". This process places all the elements in the production line at the same level, starting with the customer's demand, thereby enabling needs to be satisfied under optimum technical or lead-time conditions.

**High-performance products**

The electrical wires activity includes rods, bare wire and winding wires. The former cover all bare copper, aluminium or alloy conductor wires for cables and electrical applications. Nexans markets a complete range of copper conductors intended more specifically for high-performance sectors such as

ultrafine wire, surface finish quality and electrodeposition. The Group develops value-added products and focuses

on niche markets. Winding wires represent the second category of electrical wires. These are varnish-coated

copper or aluminium wires designed for electric motors, transformers and magnetic coils. They find numerous





### New lubricants

New lubricants have been developed for drawing copper wires. Ensuring the same level of quality, if not better, they bring substantial savings in production costs... for the benefit of Nexans' customers.

### Did you know?\_

Packed with technology and very expensive (about 2,000 euros per kilo), coated with varnish and yet finer than a hair, winding wires are commonly used in clockmaking and the manufacture of wristwatches.

applications in the car industry, lighting, household appliances, and electricity distribution, to name but some. And Nexans is meeting all these customers' growing demands for miniaturization.

### Development by innovation

Nexans' historic position on the electrical wires market does not stop it from implementing a very active policy of research and innovation. Quite the contrary. Its ultramodern centre at Meyzieu is geared to offer new products that correspond exactly to its customers' demands. The quality of its conductors used for electrical wires or LANs has become a reference the world over. Nexans has

recently developed an insulating varnish that gives its winding wires an unequalled capacity to withstand extremely high temperatures. It is also strongly involved in the development of transposed cables (CTC), which are used increasingly in the manufacture of transformers.

### A strategy of global conquest

Nexans has production units in Europe, North America and Asia. Its development strategy is based, among other things, on across-the-world deployment, and Asia is a focal point in this respect. This global strategy provides the possibility of balancing any reductions in activity in countries suffering an



economic slowdown, and above all of selling irrefragable quality more cheaply, thanks to the integration of its product range and its local or sector-based alliances.