Nexans

At the core of performance

WORLDWIDE LEADER IN THE CABLE INDUSTRY

With energy as the basis of its development, Nexans has a global presence in the infrastructure, industry, building, and Local Area Network (LAN) markets. As a worldwide leader in the cable industry we offer an extensive range of cables, cabling systems and services to raise industrial productivity, improve business performance, enhance safety, enrich the quality of life, and assure long-term network reliability. The Group is present worldwide, operating on all continents, and has recently reinforced its position in South America with the acquisition of Madeco Group's cable activities.

Infrastructure

Nexans provides complete cables and cabling solutions for power generation, transmission and distribution. New technologies significantly increase capacity and reduce the danger of blackouts. To reinforce rail safety and efficiency, we have products especially designed for railway and metro expansion around the world. And to meet diverse needs of incumbent and new telecom operators in providing Fiber-To-The-Home, Nexans has customized solutions aimed at lowering capital expenditure and operating costs.
For the world's busy airports, megaports and cargo hubs, we supply cables and cabling systems for all energy and communication needs, a unique offer in today's globalized world.

Industry

Nexans provides a complete portfolio of cables and solutions for market segments as diverse as oil and gas, petrochemicals, nuclear energy, shipbuilding, aerospace, rolling stock, automation, material handling and automotives. We have a reputation for creating advanced technologies and durable high-performance products, while promoting the responsible development of natural resources, protecting the environment, and facilitating recycling. With a strong and dedicated R&D organization, we are committed to adding value to our products for the benefit of our customers. Our Industrial Ethernet solutions have merged production and back office activities, and contributed to leaner and more flexible manufacturing.

Buildings

Nexans supplies cables and network solutions for structures of all types: from small residences to public and office buildings and industrial complexes. We serve both new construction and major renovation markets, often involving cultural and heritage sites. To protect the public and the buildings, themselves, Nexans has pioneered successive generations of fire-resistant, fire-retardant cables which are durable, compact and easy to install. From standard products to renewable energy solutions – like our cables for rooftop photovoltaic arrays – Nexans is contributing to the sustainable and efficient buildings of the future.

Local Area Networks

Nexans provides copper and optical fiber cabling systems for new resource-intensive applications, like Data Centers, Storage Area Networks and Security Services. Nexans' advanced solutions are handling core business data, protecting operations in sensitive conditions, and giving organizations high-speed transmission and the ability to protect and retrieve vital information.

AT THE CORE OF INFRASTRUCTURE: OPTIMIZING NETWORKS

From public utilities to rail transport, from airports to information technology, Nexans cables and solutions support the structures that make it possible for communities and corporations to function in three key areas:

Energy networks

Nexans provides complete cables and solutions for electrical generation, transmission and distribution. Apart from energy and data cables and accessories, we also offer installation expertise, training and services to support the growing energy market worldwide.
According to the International Energy Agency, almost 15 trillion euros of investment will be needed to provide alternative electricity generation technology to halve atmospheric emissions of carbon dioxide by 2050. Investment is especially high in fast-developing countries (India and China), while developed nations are continuing to integrate their regional grids, bury overhead cables (Canada and Sweden), upgrade nuclear plants, and turn to alternative energy sources (wind turbines, biomass, and solar energy).

As experts in network engineering, Nexans provides its clients with a choice of solutions for grid optimization, including thermal rating technology to safely manage power loads on high-voltage overhead lines in real time.

Railway networks

Nexans contributes to railway network security by supplying a wide choice of power, signalling and telecommunications cables and components for railways, especially adapted to today's high-speed lines and trans-European interoperability (ERTMS/ETCS), while continuing to serve mass transit, light rail, metros and tramways. We have pioneered cables with improved fire-performance in tunnels, stations and public areas; and developed networks for local stations, complete urban systems and long-haul trunks based on radio and fiber links.

Nexans provides customized engineering, turnkey installation and maintenance anywhere in the world.

Telecom networks

Today's telecom networks are no longer run by national monopolies, but include a wide range of players: Incumbent Local Exchange Carriers (ILECs), Competitive Local Exchange Carriers (CLECs), municipalities wishing to "bridge the digital divide" to create social, educational and employment opportunities, and power utilities who want to harness their energy infrastructure to upgrade service to their customers. To strengthen terrestrial telecommunications in Europe for the private, public and business sectors, Nexans provides FTTH (Fiber-to-the-Home) networks and FTTx applications.

NordNed, the world's longest high-voltage submarine cable (580 km) was installed between Norway and the Netherlands by Nexans own cable-laying ship, C/S Nexans Skagerrak, which will also install the 500kV Fenno-Skan cable between Finland and Sweden.

To keep pace with China's ultra-fast train expansion, Nexans has increased energy and control cable production in Shanghai. Meanwhile, Nexans is participating in major subway extension programs in Istanbul, Seoul, and Sao Paulo.

For the Sheringham Shoal Offshore Windfarm (88 turbines) located off Norfolk in eastern England, Nexans is supplying 81 km of submarine power cables which also contain optical fibers for remote monitoring and control.

Nexans provided 500 km of power networks, signalling and instrumentation cables for Moscow's new Sheremetevo Terminal 3 which is being constructed for Russia's national airline, Aeroflot.

New high-temperature power cables developed for today's hybrid cars provide 600 V without causing interference to adjacent equipment. On the red planet, Nexans control cables on Mars Rover robots are continuing to operate five years after touchdown.

For Total's Usan deepwater oilfield in Nigeria, Nexans supplied umbilical cables for control and fluid transmission between the subsea wells and FPSOs. Nexans provided Brazil's Petrobras with two different umbilical designs for the Mexilhão gas field.

Nexans RHEYCORD® handling cable has been installed on a Hitachi ship-to-shore crane at the SSA Terminals in the Port of Oakland, California. This flexible but robust cable not only endures repetitive winding/unwinding but takes the stress of high winds.

Nexans is supplying 3,000 km of halogen-free cables for marine power transmission on 54 new offshore supply vessels being built for Bourbon at shipyards in China. The vessels will help develop deepwater and continental shelf oil and gas fields worldwide.

AT THE CORE OF INDUSTRY: EMPOWERING PRODUCTION

Nexans' industrial markets are closely linked to world economic development in everything from oil and gas and petrochemicals to nuclear technologies, from automotives to the rolling stock, shipbuilding and aerospace industries, from electronics and robotics to material handling in ports and freight terminals. For each of these markets, Nexans offers:

Dedicated expertise

Every major market has its own concerns: whether adapting to customers, operating in harsh environments, assuring public safety, keeping pace with new technologies, or creating and delivering goods worldwide. By taking a "vertical" approach to clearly defined market segments, Nexans not only rationalizes its own production, it also customizes research and focuses development where it is most needed. For shipyards, we developed modular assembly and advanced material handling solutions. For the nuclear industry, railways and aerospace, we resolved important reliability and security issues.

A complete range of cables

For each of these market segments, Nexans offers a complete range of cables, often specifically designed for special environments. Ultra-cold temperature marine cables make it possible for ships of all types, including scientific vessels and cruise ships, to navigate safely in Arctic and Antarctic waters. Meanwhile, our special umbilicals are protecting the seafloor and marine life during deepwater drilling. As in other segments, efficiency begins with an up-front requirement analysis and ends with the practical implementation of customized cable designs. That's what led us to develop advanced cryogenic transfer lines for liquefied natural gas, and a new generation of aerospace cables for the latest passenger jets.

Specialized services and support

Key Account Managers allow Nexans to speak with one voice to its customers in priority markets, while Customer Technical Interface engineers deal directly with their counterparts on site. Often, customers work alongside Nexans personnel in one of our Research or Competence Centers. Industrial support can mean finding new ways of meeting customer demands on the production floor (in terms of process), or can be product-oriented, with the ultimate user very much in mind. Recent breakthroughs include flat elevator cables that contain optical fiber for visual information. We have set up specialized Application Centers according to market segment (e.g. cranes and material handling) to help customers test their own applications.

Logistics and proximity

Nexans continues to fine-tune its logistical systems to deliver cables anywhere and on time. As more and more industries become global in scope, with production done in distant plants or offshore, Nexans has followed them by acquiring warehousing and production facilities. It also accounts for increased manufacturing capacity in Asia and South America to support other customers in these areas.

AT THE CORE OF BUILDINGS: CREATING ADDED VALUE

With half of the world's 6.77 billion people now living in cities, the building market has to constantly adapt to meet new levels of safety and fire-performance. Nexans has a leading edge position in fire-performance cables for buildings, and recently launched a new fire-resistant cable based on advanced INFIT™ technology to address safety issues in buildings, as well as rolling stock, shipbuilding, etc.

Industrial sites and complexes

Nexans provides a full range of cables for energy, control and telecommunications for industrial buildings. In many cases, these cables and solutions are industry-specific and adapted to harsh conditions. Nexans adds value to satisfy three major concerns. To ensure the safety of employees, equipment and the building, itself, we pioneered fire-performance cables which limit the propagation of flames, smoke and noxious gases, and developed LAN-based surveillance and crisis control networks that keep on functioning, even in the event of a fire. To enhance reliability, our cables resist vibration, high-temperatures, oils, chemicals, etc. Data and control transmission networks assure manufacturing continuity, and production-line efficiency. Finally, since environmental-friendliness is a key goal for Nexans and its customers, we are dedicated to eliminating dangerous materials, and recycling everything from copper and alloys to plastics in cable scraps.

Public and office buildings

To improve efficiency and lower building operating costs, Building Automation Systems (BAS) are increasingly delivered by Web-based IP infrastructures. Since information is considered an aspect of comfort, broadband is creating new forms of communications and public services, like interactive screens in hotels, libraries, hospitals, administrations, and airport terminals. Nexans works closely with builders and installers to identify needs for specific building types and recommend cabling solutions. Above all, it has developed fire-safety cables to protect both people and the building, itself.

Residential dwellings

While offering a wide range of standard cables for residences of all kinds (from detached homes to multi-dwellings), Nexans is keeping pace with change by developing new cables for the world's "sustainable housing" movement which strives to achieve important energy savings while at the same time taking an ecological approach to home management. From efficient radiating floor cables in bathrooms to high-performance cable links for solar photovoltaic panels on the roof, Nexans is omnipresent in creating energy-efficient and healthy homes to enhance family comfort and respect the environment.

To protect the four million inhabitants of Saint Petersburg from periodic flooding, a dam has been built across the Gulf of Finland with the island of Kronstadt at its center. Its power supply will be provided by 178 km of Nexans high-voltage cables.

After a catastrophic electrical fire which destroyed 50,000 volumes in Weimer's 18th century Duchess Anna Amalia Library in 2004, the restored building is now fully refurbished with Nexans low-voltage fire-resistant cables.

Widely used for heating homes, public buildings and industrial sites, Nexans radiant heating cables were installed in the underground car park for Beijing's "Bird's Nest Stadium" which was built for the 2008 Olympic Games.

As part of its heritage commitment, Nexans is donating power cables, telecommunications and optical fiber cables for the "Great Versailles" renovation project to assure fire-safety and upgrade building infrastructure.
The project will run until 2011.

Erikson Retirement Corp. runs a dozen retirement communities across the US. Its data center near Baltimore is the central repository for personal information, medical records and resident business information, in addition to providing entertainment and management resources.

Interxion, the pan-European leader in data center solutions is operating the first Nexans-approved hosting center in France. Meanwhile, AZ Sint-Jan AV hospital in Bruges (Belgium) and the University of Massachusetts Medical Center are both Nexans supplied.

Nexans supplied 351 km of LAN cabling for Korea's Incheon International Airport which included LANsense for network management, and backbones to handle security functions and IP telephony/video. Nexans installed a similar LAN at Singapore's Changi Airport.

Food Lion, a grocery store chain serving the eastern US (1,300 supermarkets) and Sligro Food Group in the Netherlands (250 locations) both use Nexans LANs for financial operations, billing, communications, stock control, and delivery, etc.

AT THE CORE OF INFORMATION: ENRICHING LOCAL AREA NETWORKS

Apart from handling astronomical amounts of operational data and communications, LANs now face new developments, like High Definition Multimedia Interface and "Cloud" Computing. Migration has already moved from one gigabit to 10G and the new benchmark is 40G, with 100G on the horizon. Operators want 100% uptime, high security, lower costs and a "green" data offering.

Data Centers and Storage Area Networks (SANs)

Nexans advanced copper and fiber solutions cover every aspect of LANs infrastructure, from racks, cabinets, patch panels and connectivity to the latest cable designs. Our Category 6A copper cabling has already become the newest paradigm for large corporations, financial institutions and data centers, while 7A allows next-generation Ethernet to advance to 40 Gbps and beyond. Since our shielded copper cables are less affected by external interference, they require less noise cancellation, less cooling and thus less energy. Nexans optical fiber cables also provide easy upgrades to 40G and 100G. Our patching systems have the highest density in the business, meaning important space savings.

However, Nexans offers more than just a LAN. The system is revolutionary because it is both backward compatible with conventional connectivity, and future-proof since we enable our customers to migrate upwards without network disruption, providing peace of mind for years to come. To ensure 100% uptime and operational continuity, Nexans also offers LANsense Intelligent Infrastructure Management (IIM) to keep costs down and lower capital expenditure by automatically mapping, locating, reporting and alerting on any network event. This solution also monitors moves or unauthorized connects, records the power consumption of servers and equipment, and detects real-time changes in temperature, humidity, and operational conditions. Data centers today account for about 10–20% of the cabling market, but this figure will soon rise to 30%.

Security services

Given ongoing industrial espionage and the threat of terrorist attacks, security has become a new priority issue for many organizations and businesses. That is why Nexans has focused on new IT solutions, like Video-Over-IP and enhanced LAN/WAN/MAN capabilities for corporate offices, banks, airports and high-security environments. Instead of a parallel network of coaxial cameras, surveillance and response resources are now being merged on LAN systems combining voice, data and video. Nexans provides complete copper and optical fiber end-to-end solutions which incorporate multiple, high-resolution digital cameras at drop points covering a wide surveillance area (e.g. naval shipyard or multimodal cargo hub). The security systems market is expected to grow by 15% yearly.

AT THE CORE OF CORPORATE SOCIAL RESPONSIBILITY: ENSURING ETHICAL BUSINESS CONDUCT, ENVIRONMENTAL PROTECTION AND WORKPLACE SAFETY

Nexans has stepped up its efforts to protect the environment, control its consumption of energy, water and materials, and facilitate recycling. The Group works alongside its customers to provide solutions that enhance the safety of both people and equipment, achieve power savings, and facilitate the use of renewable energy.

Applying our Code of Ethics, and adhesion to the UN Global Compact

Nexans conforms to the highest standards of ethics and business conduct summarized in its Code of Ethics and Business Conduct, updated in early 2009. This document states business conduct standards that reflect the principles of Corporate Social Responsibility for every Nexans employee. By adhering to the United Nations Global Compact, Nexans is confirming its commitment to respect fundamental principles in the areas of human rights, labor standards, the environment and the fight against corruption.

Strict environmental management

Nexans' environmental policy includes a thorough analysis of the risks associated with the Group's products and manufacturing processes, a continuous improvement program and employee training on good environmental practices. Nexans' environmental management system, in line with ISO 14001, is based on monitoring the environmental performance of Group sites through an in-depth survey and specialized audits. The Nexans EHP label (Highly Protected Environment) is awarded to sites that meet the Group's environmental criteria. More than 50% of plants are EHP certified, and nearly 40 plants are ISO 14001 certified. Nexans has also been deeply involved in recycling its own manufacturing waste groupwide, and also end-of-life cables, often in close partnership with its customers.

Better design for better production

Nexans does its utmost to develop products that both meet customers' needs and have a minimum impact on the environment over their entire life cycle. For instance, the Group has successfully worked on decreasing the weight of cables for airplanes, ships, cars and trains, and has developed solutions that keep temperatures low in equipment and guarantee the resistance of cables in difficult environments. Nexans uses EIME (Environmental Information and Management Explorer) software to identify the best available materials and techniques, as this application determines the main environmental impacts of products.

Workplace safety as the number one priority

Nexans has set itself the goal of halving the number of occupational accidents within the Group by reducing the incident rate to below 10 per million hours worked by 2011. Workplace safety is one of the ten manufacturing performance indicators that each plant reports on every month. The Group wants every employee to play a part in ensuring workplace safety and has asked all of its human resources teams to implement proactive measures to achieve this.

To help create renewable clean energy, Nexans developed a new halogen-free, high-performance cable, ENERGYFLEX™ for roof-installed photovoltaic sun panels, and a complete set of WINDLINK™ solutions for wind turbines and windfarms.

Nexans new DATAGREEN® data, sensor and low-energy lighting cables incorporate a new high-performance alloy which greatly decreases the copper content in the cables, thus achieving significant mass/volume savings and energy efficiency.

ICEFLEX™ ultra-cold cables are the first marine energy cable qualified for ships and offshore/onshore facilities operating in polar conditions. By safeguarding the Arctic from chemical and biological threats, they assure sustainable energy development.

Dedicated to cable retrieval, recycling and reuse, Nexans set up a partnering arrangement between its subsidiary, RIPS, and Suez Environment's subsidiary, Sita, to re-harvest both metals and polymer insulations.

A TRIPLE COMMITMENT TO THE CUSTOMER

Global Expertise

With over a century of experience behind it, Nexans provides complete expertise in cables and cabling systems, from original conception and design of both products and solutions to manufacturing and installation and ultimate recycling. Our presence worldwide (23,500 people in 39 countries) assures high availability for a broad range of energy and telecom cables, in addition to all accessories and complete systems.
As a cable supplier serving our customers diverse markets, Nexans has developed best-of-class solutions for every continent, and pioneered national and international standards.

Local presence

Nexans has installed plants, facilities and offices around the world to support its customers' international activities. Understanding the local supply chain and culture allows us to respond quickly and efficiently to support production.
We keep close to the customer by working side-by-side with them to meet requirements, solve specific problems, and adapt proven technology to their own special needs.
We also offer capabilities in terms of design, implementation and maintenance, and assume total responsibility for complete cable networks and turnkey installations.

Innovation

Because innovation is one of the prime drivers of long-term productivity, Nexans has built a strong R&D network to meet customer expectations. We have proven our ability to develop new designs and materials to improve efficiency, prolong product life, and ensure reliability and safety. Technical value creation begins far upstream both in pure research and in practical problem-solving for our customers in areas like offshore oil and gas, aerospace or power utilities. Downstream, it includes the organized retrieval of scrap and obsolete cables, and efficient recycling of both copper and plastics.

BECAUSE INNOVATION IS AT THE CORE OF OUR PRODUCTS...

- Research is carried out in an International Research Center, and industrial integration is transferred to nine Competence Centers throughout the world.
- 600 scientists, engineers and technicians invent on average two new products per week.
- Upstream activities are concentrated on polymers, deep-sea technologies, alloys, superconductors, power and telecom connectivity, etc.
- Our Application Centers conduct customer demonstrations, system profiling and tests.

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