Cables for Seismic and Oceanographic Applications
Towed and Seabed Systems
Efficient and effective solutions
Nexans is an established supplier of underwater cables for the marine seismic and oceanographic markets. We have products for towed systems including electromagnetic based systems and for permanent, ocean bottom systems. We supply the leading actors in the industry with air-guns, lead-ins, sensor, tow, riser and fiber optic bottom laid cables.

Our experience includes delivery of complete systems as well as cable alone. We have delivered a fiber optic riser cable for a bottom laid permanent systems with a world record breaking 768 fibers. In addition we have experience with supplying airguns and lead-ins with fairings and terminations.

Seismic and Oceanographic Cables

Towed Systems
Air-gun cables are designed for reliability. We use a variety of steel armoring and or aramid armoring to produce the desired combination of strength and weight. Our steel wires are galfan coated to protect against corrosion. The central pneumatic hose is surrounded by power and signal elements and a typical diameter can range from 60 to 80 mm.

Towed Systems

Lead-in, sensor, streamer, boot, and drop cables for towed seismic systems are typically comprised of high performance signal quads, optical fibers and power conductors. These cables are armored with either steel wires or aramid yarns and an outer protective sheath.

Terminations and fairings for air-gun and lead-in cables can be provided. We design and deliver both in-house solutions as well as coordinate with other specialists in the industry in order to be able to deliver a complete package to our seismic customers.
Bottom Laid Systems
Fiber optic riser and sensor array cables incorporate design elements from our standard fiber optic submarine applications. Our world record breaking 768 fiber optic riser cable is comprised of four individual steel armoured cable cores helically stranded together. Nexans fibre in a laser welded steel tube filled with water impregnation preventing compound is a Nexans proven technology and a basic building block of all our sub-sea cables.

Dynamic fiber optic riser cables incorporate the same cable technology as for static riser cables. Whereas static riser cables are typically designed for shallow water applications with a J-tube pull in, the dynamic application requires different and more complicated design criteria. For dynamic riser cables site specific analysis of meteorological data and data on platform movements is necessary to verify the cable configuration.

Nexans can design and deliver a complete system of components and accessories ranging from pull in and hang-off arrangements, transition splitter arrangements, buoyancy elements, general purpose joints, fiber optic termination units, and cable end modules for subsea installation and mating of FO connectors. We provide personnel for offshore installation, assistance and training.
Nexans Cable Production

Nexans, the worldwide leader in the cable industry, offers an extensive range of cables and cabling systems. With an industrial presence in 39 countries and commercial activities worldwide, Nexans employs 22,700 people and had sales in 2009 of 5 billion euros.

Nexans Norway AS has 5 factories producing for both the international and domestic markets and employing over 1100 people in our technical and production divisions. Our customized underwater telecommunication cables are manufactured at our production facility in Rognan on the coast of Norway. This modern plant has a long history of building specialized underwater cables.

Quality Management Systems

We manufacture high quality cables. To achieve and maintain our quality standards we focus on verification and qualification testing according to recognized international standards. Our written quality standards cover all areas of our activities from raw materials selection, process controls to finished product. Nexans Norway is ISO 9001, 18001, and 14001 certified.