

Fields of application

in NRC

automation, wind farms, oil + gas, handling, power networks, navy, automotive, rolling stock, building, wind turbines, shipbuilding, railway infrastructure

Nexans R&D

- Calais, France: Extruded HV cables
- Halden, Norway: HV submarine cables
- Hürth, Germany: Superconductors
- Buizingen, Belgium: Cabling systems
- Erembodegem, Belgium: Power cable accessories
- Nürnberg, Germany: NRC
- Bazons, France: Telecom components
- Leins, France: Metallurgy
- Lyon, France: NRC
- New Holland, USA: Data Com

● NRC
● Competence Center

Basic Research
 Cross-linked Materials
 Thermoplastic Materials

international research center
 8 competence centers
 450 researchers, engineers and technicians

450 families of patents registered
 worldwide network of technical experts



Nexans
 Global expert in cables and cabling systems



NRC: Competence at your service

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Nexans Research Center (NRC)

The NRC is the central research organization for the development of new materials and corresponding processing technologies. Its working scope comprises long-term basic research on core technologies, development of new insulation and sheathing material for different market segments as well as unit support in terms of special testing and prototype production. Solutions worked out in the NRC build the basis of the numerous Nexans product innovations.

Its main missions are:

- to develop new products with superior behaviour in case of fire
- to design products suitable for operation in extreme conditions: at very low or very high temperatures or in contact with various chemicals, oil or mud
- to develop materials and products resisting very high mechanical stress (abrasion, bending, torsion)

- to introduce modeling and simulation software as an effective tool to optimise our production processes but also for demonstrating product performances
- to search for new material solutions to be more independent from petrochemical sources
- to take care on the environmental impact of our products, from material selection, cable design, production up to recycling possibilities at the end of the product's life

In the focus of all activities is our customer. Our target is to offer the best solution possible for the required application, using our extensive experiences in materials, processes and cable design.

Where is the NRC located?

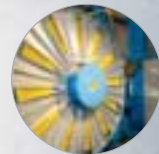
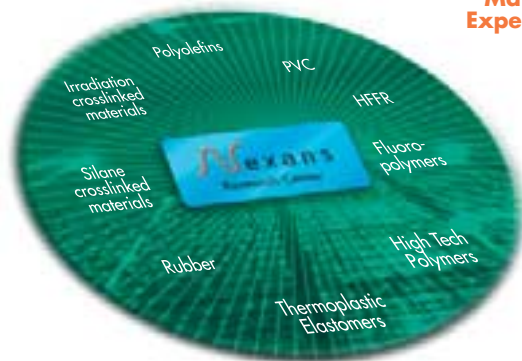
NRC is located in two sites: Lyon (France) and Nuremberg (Germany). Basic research and studies on cross-linked materials are performed in Lyon. The team in Nuremberg is mainly working on thermoplastic materials.

NRC: high-level experts – outstanding labs

For our R&D work we dispose of high skilled experts and well-equipped labs

- chemical laboratories for analyses and microscopy
- equipment for extensive material testing
- simulation & modeling group
- compounding & extrusion trial plant
- superior fire test laboratory
- applications centers for real life cable testing

Material Experiences



Chemical laboratory

Customers Application Centers

Extrusion pilot plant

Compounding pilot plant

Mechanical, thermal, electrical laboratory

Material fire testing laboratory

Cable burning laboratory

Facilities and Equipment

