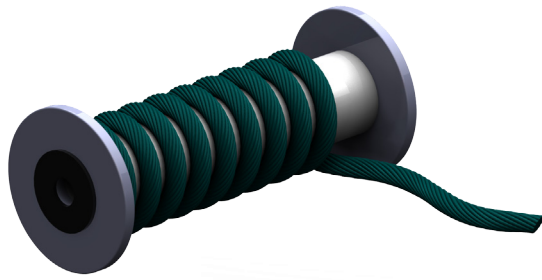


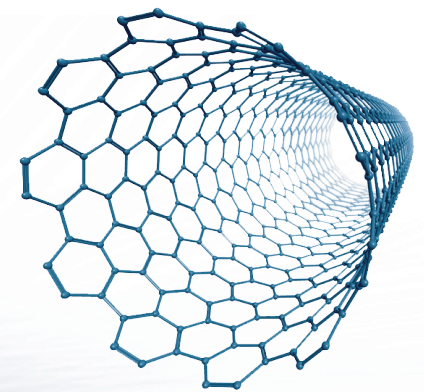
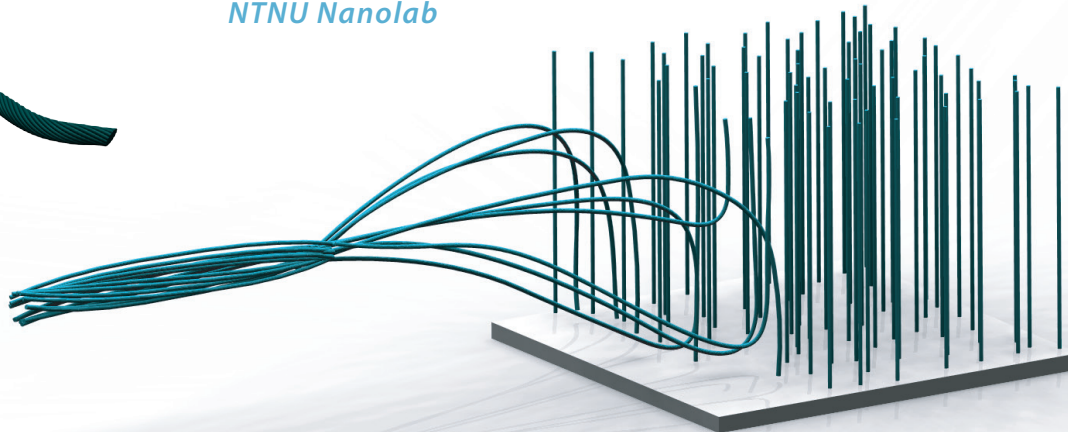
CARBON NANOTUBE FIBER

APRIL 2013



Multiple threads are twisted together to fiber to achieve desired thickness or strength.

A thread is pulled out from a forest of carbon nanotubes grown at NTNU Nanolab



Every thread is composed of millions of tubes made of carbon atoms

Material tailored the offshore oil/gas industry

The Norwegian Government's strategy plan for nanotechnology 2012-2021 urge research institutions and companies for joint commercialization of nanotechnology to reinforce Norwegian industry.

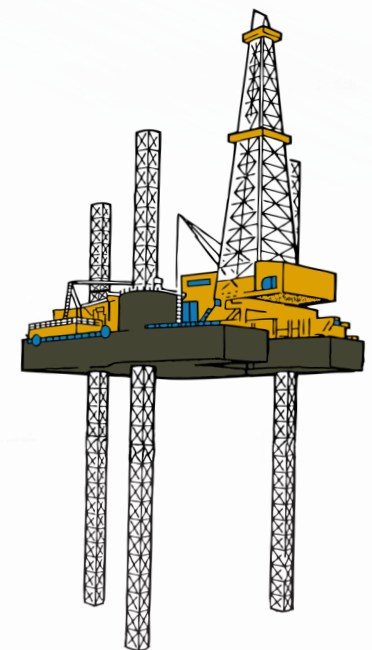
At NTNU, students, professors and lab engineers have developed a highly versatile nanomaterial satisfying the high demands for quality by the offshore oil/gas industry.

Carbon nanotubes (CNT), expected by scientists to overcome current materials, are twisted into a fiber at desired diameter or strength.

PROPERTIES

- Non-corrosive
- Robust
- Slick surface

- High tensile strength
- Tough
- Low thermal expansion
- Low weight
- Electroconductive
- Heat-conducting
- Diameter 0,015 mm - 5 mm



CONTACT

We are seeking ideas and comments from the oil/gas industry on the fibers properties and possible uses.

Professor Christian Thaulow and M.Sc. Øyvind Våland at Institute of Product Design and Materials are happy to hear from you.

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