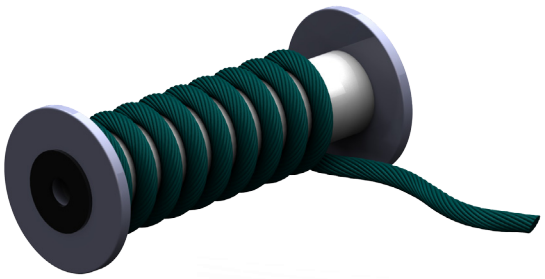
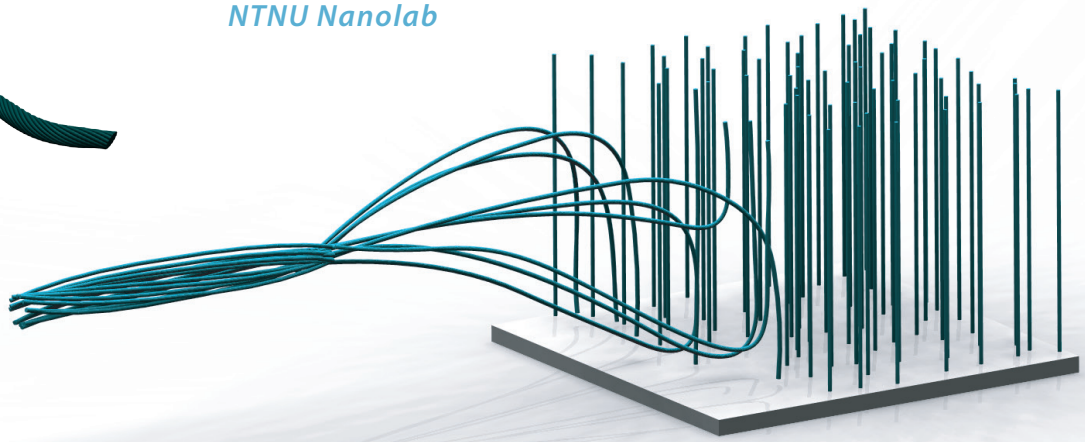
CARBON NANOTUBE FIBER

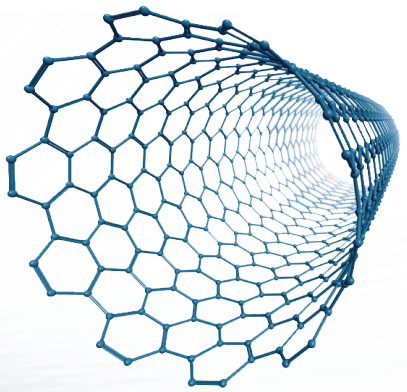
APRIL 2013



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 maritime environment

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 shipbuilding and shipping industries.

Carbon nanotubes (CNTs), 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 maritime 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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