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Carbon nanotubes used to make kayaks faster and more stable

Some new kayak prototypes have now been coated with an epoxy gelcoat modified with Baytubes carbon nanotubes from Bayer MaterialScience that has been developed by Norwegian research company Re-Turn AS, based in Gamle Fredrikstad.

F.l.t.r.: Stein Dietrichson, Managing Director of Re-Turn, Paal Francis Hansen, chairman of the board, and a trainee during a trial run

Reinforcing the outer skin of a kayak, the gel coat, with carbon nanotubes makes it more resilient to abrasion from a shingle beach or contact with the edge of a river bank. Baytubes also ensure that cracks appear less frequently over long-term use and reduce wear on the outer skin. In addition, they absorb UV radiation, thereby minimising the associated bleaching and embrittling effects.

According to Re-Turn, the flow resistance of the hull should also be lower. This will enable the kayak to glide through the water faster without its occupant having to paddle harder. The use of Baytubes in the epoxy base also helps to make the kayak more stable and rigid. This makes the boat easier to paddle and translates more of the kayaker's muscle power into speed.

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