
Haydale Paddles Forward with Stronger, Lighter Norse Kayaks

2023-02-18

Haydale is delighted that its bespoke mechanical graphene masterbatch has been used to create stronger and lighter composite sea kayaks for Norwegian paddle sport brand Norse Kayaks (“Norse”).

By using the new graphene enhanced material the Norse kayak is now 30% lighter going from 23kg to 16kg, making the composite kayak easier to load and transport. The use of graphene in the vacuum infusion composite layup process has also increased both impact strength and stiffness, improving the resistance to breakage in critical areas of the kayak. Vibration dampening has also improved the user experience.

Norse use vacuum infusion moulding techniques to ensure a flawless finish and the even distribution of materials across the kayak gives a superb construction quality at a competitive price compared to comparable composite kayaks.

Renowned for building well-made, high-quality kayaks since 2013, Norse currently has 12 designs in its fleet. The new graphene enhanced kayak prototype has already sold 30 units, leading to positive expectations on potential sales when the season starts, and the first kayaks reach the European marketplace.

Commenting on the new graphene enhanced kayak, Norse founder Kjetil Sandvik said: “The use of graphene has exceeded our expectations and we are sure that this will set a new standard of what is possible to do with a sea kayak. We have never seen this kind of impact strength on light weight sea kayaks in our 20 years’ experience in the kayaking business.”

[Haydale](#) CEO Keith Broadbent added: “It has been a challenge for the composites industry to effectively use nanomaterials in the resin infusion process, but now having worked closely with Norse on a bespoke graphene resin solution we are delighted with the product

enhancements they have seen.

“It’s not just in the sports and leisure field that we believe there is potential for this weight saving technology. With all the benefits Norse has seen there is potential to replicate this in the automotive and aerospace sectors and beyond where vacuum infusion is part of the manufacturing process.”

The kayaks are designed in Bergen, [Norway](#) and built at A. J. Fishing Industries in [Sri Lanka](#) for touring, expedition, and fitness paddling.

Read the [original article](#) on Haydale.