



- [Subscribe](#)
[Magazine Profile](#)
[Advertising](#)
[Previous Issues](#)
[Contact](#)



Latest Issues



Greenboats manufactures first natural fibre composite nacelle

Published: 10 February 2021

- [Share](#)
[Tweet](#)
[Share](#)

Sicom, a formulator and supplier of bio-epoxy resin systems, has announced its latest collaboration with Greenboats as they deliver the first ever natural fibre composite (NFC) nacelle for an offshore wind turbine. Working with German distributor Time Out Composites, Sicomin has provided GreenPoxy bio-based resins, intumescent FR gelcoats and UV resistant clear coatings for the new nacelle.



In 2020, Greenboats was commissioned by a wind turbine manufacturer to design and manufacture a sustainable NFC nacelle. The resulting 7.3m long structure has a surface area of approximately 100m2 and was engineered by Greenboats to satisfy all DNV-GL load cases required for an offshore turbine nacelle, including 200km/h max wind loads and 2KN loads on the guard rails.

Sicom's DNV-GL type approved bio-based epoxy was used to infuse BComp flax fibre reinforcements and balsa cores, with Sicomin's intumescent weatherproof gelcoat applied on the outer surface. Cured panels were cut to shape, formed over a male plug and bonded together, before flax reinforcement plies, hand laminated with GreenPoxy resins and vacuum bagged, were added along all the panel joints lines. Finally, Sicomin's highly UV resistant clear coating products were used to protect and enhance the finish of the flax fibre feature stripe details.

The next stage of the project, in which the nacelle will be installed for tests in the harbour of Rotterdam (the Netherlands), is planned for spring 2021. Afterwards the nacelle will be installed at its long-term offshore location.

- Tags: [Greenboats](#) [Sicom](#) [Time Out Composites](#) [natural fibre composite](#) [nacelle](#) [offshorewind](#)

[Prev](#)

[Next](#)

Joomla SEF URLs by Arto

Related Articles

- Uptime awarded 3 contracts for Vard service operation vessels
- Vattenfall starts construction of offshore wind farm Hollandse Kust Zuid
- Ceit tested a new wireless communication system for offshore wind platforms
- FOVIC awarded turbine installation contract for Baltic Eagle offshore wind farm
- Dominion Energy's Coastal Virginia Offshore Wind Project achieves key regulatory milestone
- BOEM announces environmental review of Vineyard Wind South offshore wind project
- Atlantic Shores granted right to built offshore wind farm off the coast of New Jersey
- Orsted awarded 1,148MW offshore wind contract in New Jersey
- RWE joins forces with Polish maritime industry for offshore wind market
- Vestas and Iberdrola finalise contract on Baltic Eagle offshore project in Germany
- Cadeler orders two new wind turbine installation vessels
- Cerulean Winds names NOV as delivery partner in offshore floating wind scheme
- Ocean Winds secures a 25-year CfD for offshore wind projects in Poland
- Vattenfall builds new European warehouse for wind turbines at the Danish Port of Esbjerg
- Fugro's Seawatch Wind Lidar Buoy deployed for offshore wind farm in Vietnam
- Fred. Olsen Ocean partners with Shimizu for offshore wind developments
- Beta jacket for offshore power socket Hollandse Kust (zuid) installed
- The tender for Danish Hesselø offshore wind farm has been put on hold
- Goldwind installs first international offshore turbine
- Vestas wins offshore order for Arcadis Ost 1



Sponsored Video



Latest Articles

CREATING A VIABLE BUSINESS MODEL FOR THE SUCCESSFUL FUTURE OF GREEN HYDROGEN



Turbine Shots brought to you by TECHNOSTROBE



#27 91 turbines Siemens SWT-2.3-93 turbines installed at Horns Rev 2 offshore wind farm, Denmark (courtesy Mb Wind)

Every week on our website and in our [email newsletter](#) we want to show you that wind energy is more than just technology. We therefore invite you to send stunning pictures of wind turbines inspired by "light" (in the broadest sense of the word).

After 52 submissions we will announce the winner of the year's best picture!

Email your photo to photo@windtech-international.com Include turbine model, location and name of photographer. (size of the published photo will be 336 px width x 280 px high).



Check our [Instagram](#) to see all published pictures

Stay informed with Windtech International! Sign up here for our free newsletters

Windtech International Newsletter

Third party information

I'm not a robot



I agree with the [Terms and Conditions](#) and the [Privacy policy](#)

-

Upcoming Events

- 08 July 2021 10:00 - 11:00 [Ports & Vessels 2021; Port infrastructure and O&M support](#)
- 19 July 2021 [Australia Wind Energy 2021](#)
- 18 August 2021 [All Energy 2021](#)
- 07 September 2021 [Onshore Wind Energy webinar: Green finance](#)
- 09 September 2021 [Wind & Aviation: Surveillance & Radar](#)
- 09 September 2021 [WindEurope Technology Workshop](#)
- 14 September 2021 [HUSUM Wind 2021](#)

Login

Want to read full articles? Sign up **free of charge** and login and read the full text of published articles on our website.

You can use your **email** or **username** to login

Remember Me

- [Create an account](#)
- [Forgot your username?](#)
- [Forgot your password?](#)