

# **Press Release**

Leverkusen/Shanghai, November 30, 2022

Covestro AG
Communications
51365 Leverkusen
Germany

Contact
Dr. Frank Rothbarth
Telephone
+49 175 30 25363
EMail
Frank.Rothbarth
@covestro.com

Contact
Richard Fu
Telephone
†86 21 8020 8452
EMail
Richard.Fu
@covestro.com

Milestone in cooperation

# Covestro and TMT launch their 1000<sup>th</sup> polyurethane wind rotor blade

- Supporting the development of longer wind blades
- Further collaboration in other areas

Under its current five-year plan, China aims at doubling its wind and solar power output by 2025. That is why also the drive for technological progress in the field of renewable energies has never been stronger. Polyurethane (PU) resin, an innovative manufacturing solution for wind turbine blades, has penetrated the epoxy-dominated market in recent years. Covestro and Zhuzhou Times New Material Technology (TMT), a pioneering PU wind turbine manufacturer, recently announced the launch of their 1000th PU wind turbine blade.

PU in wind-blade production is a transformative innovation delivered by Covestro teams around the globe. With better mechanical properties, an efficient production process, and a more cost-effective production solution than conventional fiberglass-reinforced epoxy blades, PU blades are opening a new chapter in the wind blade industry.

## **Commercial success**

Covestro and TMT signed a memorandum of cooperation about a year ago, based on which significant commercialization results have been achieved. PU wind turbines are now being used in commercial wind farms throughout China.

Dr. Binbin Hou, General Manager of Wind Business at TMT, said, "PU wind blades cater to the growing demand for longer wind blade designs. We hope to further collaborate with Covestro to improve the competitiveness of wind energy through continuous technology innovation."

"We are very pleased to reach the important milestone of the launch of the 1000th blade with TMT," said Christine Bryant, Global Head of the Tailored Urethanes Business Entity at Covestro. "We believe that industrial collaboration is fundamental to addressing global warming and energy shortage issues, and it is also an important part of Covestro's commitment to a circular economy."

TMT produces PU wind blades ranging from 59.5 meters to 94 meters in length with different blade designs and layup structures to meet the growing demand for longer and larger wind blades. The 94-meter wind turbine blade, capable of generating



8 MW of energy, is the largest PU application for Covestro so far. Multiple TMT factories manufacture these blades under different temperatures, humidity, and altitude, proving the wide applicability of PU resin in the manufacturing process.

Dr. Xuebin Feng, R&D Director of Wind Business at TMT, said, "We overcame many technical challenges to accelerate the production process of large polyurethane resin wind blades and achieve mass production."

## **Further collaboration**

In addition to wind turbine development, Covestro and TMT have jointly developed PU railway sleepers, which are more durable and cost-effective in maintenance than traditional wood and concrete sleepers. Covestro, an integrated PU solution provider, will cooperate with TMT to provide various PU resins, coatings, and PU machinery solutions.

#### **About TMT:**

Zhuzhou Times New Material Technology Co., Ltd. (called "TMT" for short), the first-class subsidiary of CRRC, represents a new material industry platform of CRRC. TMT was founded in 1984 and was listed on the Shanghai Stock Exchange in December 2002. With polymer synthesis and modification technologies as its core, TMT's products have extended to such fields as rubber, plastics, composites and functional materials, and we have realized large-scale engineering applications in rail transit, wind power, automobile and other industries. As an international, innovative and high-tech enterprise, TMT boasts subsidiaries and offices in at least ten countries. In 2020, the company's sales revenue reached USD 2.34 billion.

#### **About Covestro:**

Covestro is one of the world's leading manufacturers of high-quality polymer materials and their components. With its innovative products, processes and methods, the company helps enhance sustainability and the quality of life in many areas. Covestro supplies customers around the world in key industries such as mobility, building and living, as well as the electrical and electronics sector. In addition, polymers from Covestro are also used in sectors such as sports and leisure, cosmetics and health, as well as in the chemical industry itself.

The company is committed to becoming fully circular and is striving to become climate neutral by 2035 (scope 1 and 2). Covestro generated sales of EUR 15.9 billion in fiscal 2021. At the end of 2021, the company had 50 production sites worldwide and employed approximately 17,900 people (calculated as full-time equivalents).

Find more information at the <u>Covestro Homepage</u>. Read our <u>Corporate Blog</u>.

Follow us on the Covestro Social Media Channels:

4



in

Forward-looking statements



This news release may contain forward-looking statements based on current assumptions and forecasts made by Covestro AG. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Covestro's public reports which are available at <a href="https://www.covestro.com">www.covestro.com</a>. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.