

Araldite®

Adhesives and Tooling Products for
the Wind Turbine Industry

vantico

Leading the industry in adhesive technology

Assembly bonding

Vantico has many years experience in producing adhesives for use with composite materials. For assembly of turbine blades a range of Araldite® non-slump, easily pumpable, two component epoxy and polyurethane adhesives have been developed giving dramatically increased productivity. They can be cured at room or elevated temperatures, and use unique, patented technology.

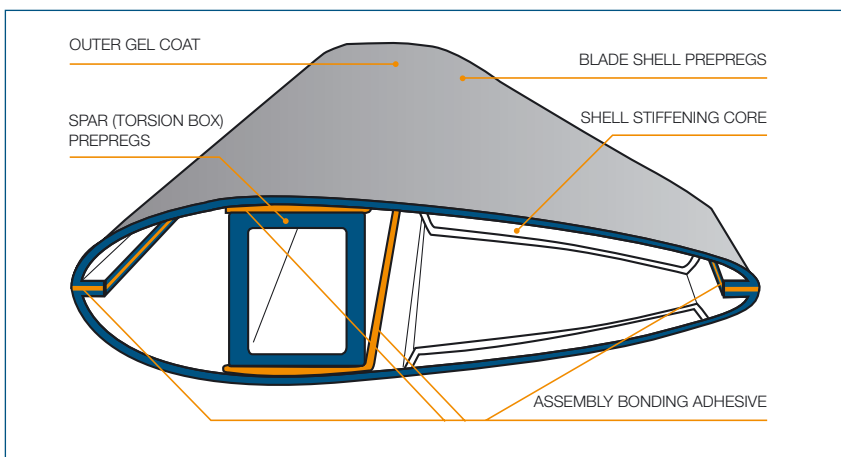
End-ring bonding/bolt bonding

Where turbine blades are fixed to the main rotor, Araldite adhesives are used to bond metal fittings into composite blade assembly. A range of two component Araldite epoxy adhesives are used for this purpose. They meet a variety of processing techniques and product design criteria.

Typical Araldite adhesives for wind energy applications

	Shell Bonding	Repair	Other Applications
Polyurethane	XD 4527 / XB 5304	XD 4497 / XB 5304	–
Epoxy	XD 4733 / XD 4735 XD 4734 / XD 4735 AV 4076-1 / HV 5309-1	Araldite AW 2101 / HW 2951	XB 5047 / XB 5067 AV 4076-1 / HV 5309-1 Araldite AV 138M / HV 998 2013 (AV 144-2 / HV 997) 2014 (AW 139 / XB 5323) XD 4734 / XD 4741 XD 4733 / XD 4741
Methacrylate	–	XD 4665 A/B Araldite 2021 (XD 4661 A/B)	–

Typical turbine blade cross section



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Our customers include:

Vestas DK
Enercon D
ATV F
Gamesa Eólica E
NOI D
Nordex AG D
Tecsis Br
LM DK

Handling precautions

Caution

Vantico products are generally quite harmless to handle provided that certain precautions normally taken when handling chemicals are observed. The uncured materials must not, for instance, be allowed to come in contact with foodstuffs or food utensils, and measures should also be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The wearing of impervious rubber or plastic gloves will normally be necessary; likewise the use of eye protection. The skin should be thoroughly cleansed at the end of each working period by washing with soap and warm water. The use of solvents is to be avoided. Disposable paper towels – not cloth towels – should be used to dry the skin. The work area should be well ventilated. The precautions are described in greater detail in Vantico Manual No. 24264/e Hygienic Precautions for Handling Plastic Products of Vantico and in the Vantico Material Safety Data Sheets for the individual products. These publications are available on request and should be referred to for fuller information.

All recommendations for use of our products, whether given by us in writing, verbally, or to be implied from the results of tests carried out by us, are based on the current state of our knowledge. Notwithstanding any such recommendations the Buyer shall remain responsible for satisfying himself that the products as supplied by us are suitable for his intended process or purpose. Since we cannot control the application, use or processing of the products, we cannot accept responsibility therefor. The Buyer shall ensure that the intended use of the products will not infringe any third party's intellectual property rights.

We cannot warrant that our products are free from defects in accordance with and subject to our general conditions of supply.

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The logo for Vantico, featuring the word "vantico" in a lowercase, sans-serif font. The letters "van" and "ico" are in blue, while "tic" is in orange.