



DGE GROUP

# Wind energy industry

PRODUCT GUIDE

**HUNTSMAN**  
Enriching lives through innovation

**Araldite®**  
Build. Bond. Protect.

**DOWSIL™**  
silicones by **DOW**

**MOLYKOTE®**

**Tectyl™**  
Born to protect.



## The industry

As progress is made towards sustainability, wind power is playing a vital role in providing green energy. We support the main manufacturing, service, and maintenance companies in the wind industry, providing technical support from leading brands in the industry throughout the life cycle of the wind turbine.

This allows our customers to save from an optimised supply chain with more than 20 years of technical experience that ranges from the most demanding lubrication applications to the repair of turbine blades due to severe weather and bird strikes.

We offer optimal bonding and lubrication solutions to enable efficient wind farm operation.

## Onshore & Offshore



Both offshore and onshore wind farms play a crucial role in the development of renewable energy.

A combination of onshore and offshore wind power provides enough energy to power millions of homes; therefore, governments continue to invest in green initiatives.

While the commitment to renewable energies continues to grow, at Antala, we help manufacturers and owners of wind farms and wind turbine maintenance teams to overcome the new challenges of the industry.

## Our brands



### Epoxies and methacrylates

Excellent adhesion to metals, plastics and composites

High strength and stiffness.

Excellent chemical resistance.

Good temperature resistance.

Mechanical properties from rigid to flexible.

Cure times from short to long.



### Silicone adhesives and sealants

Excellent weather resistance against ozone, acid rain, ultraviolet rays, high temperatures, among others.

Excellent thermal stability at very high and very low temperatures.

High mechanical resistance.

Chemical stability: High resistance to aggressive environments.

Low flammability: In case of fire, silicones are very resistant to combustion

### MOLYKOTE® Pastes, Oils and Fats

Excellent corrosion resistance.

Wide range of viscosities.

Good chemical resistance.

Excellent temperature range.

Rust prevention.



### Anti-corrosive products

Excellent anti-corrosive properties.

Good behavior to salt spray and humidity chamber.

Product with the ability to displace water.

High capillarity.



# Nacelle

## Main applications

Generally constructed of metal and composite materials, the nacelle protects internal components from diverse external conditions. Internal components of turbine nacelles, such as the bearings and drive train, must be properly lubricated and sealed to ensure efficient operations and reduce the risk of unexpected operational problems.



- 1 Bonding of nacelle**
  - ARALDITE 2022-1
  - ARALDITE 2023 (10-30-60 min)
- 2 Control and component axis**
  - ARALDITE 2014-2



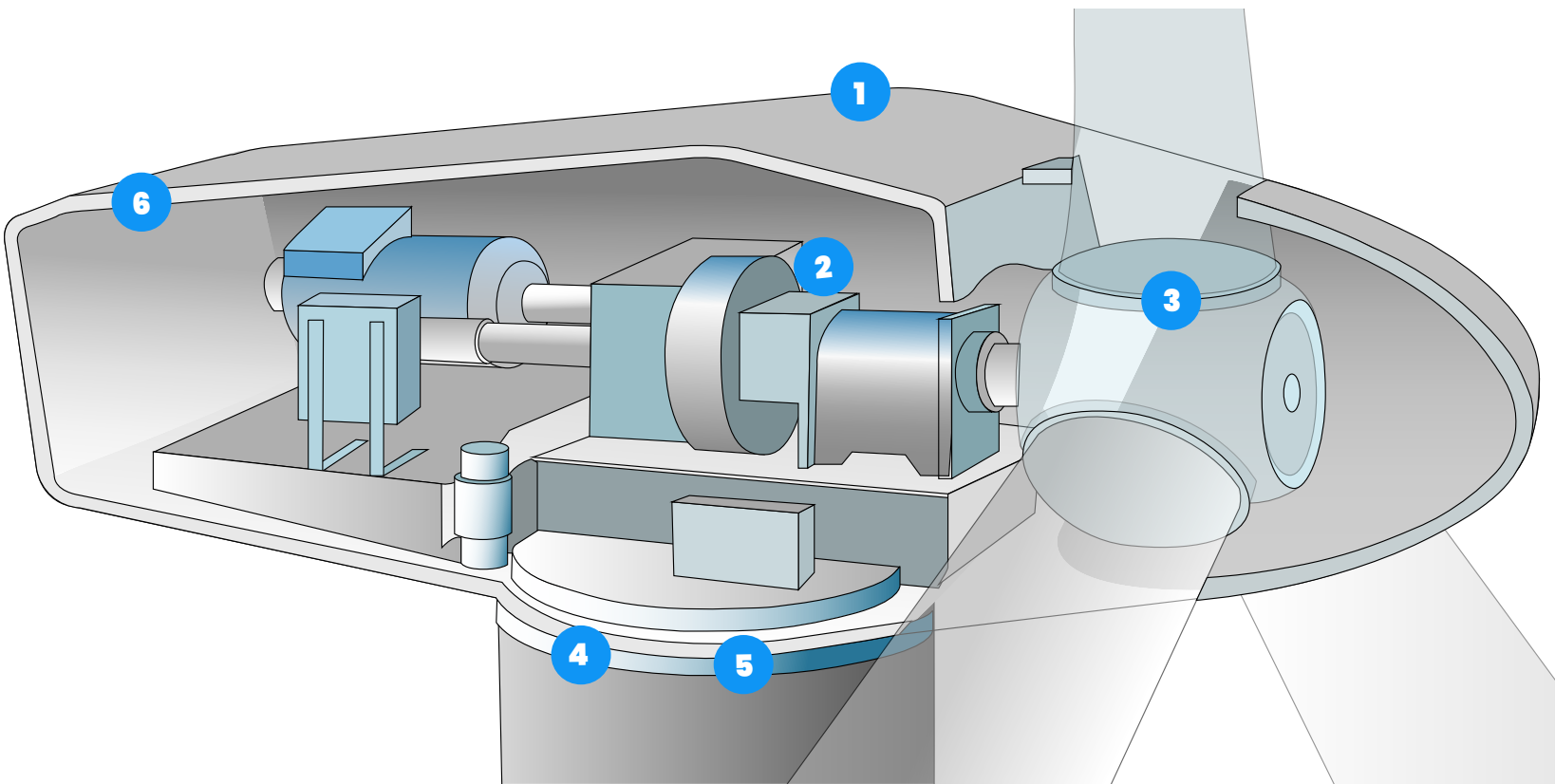
Good durable and resistant sealing of all joints. DOWSIL 7093 in cartridge or sausage.



- 3 Protection of screws and components for export threaded connections**
  - TECTYL 506
  - TECTYL 506 EH
  - TECTYL 127 CGW
  - MULTUPURPOSE AMBER



- 4 Threaded connections**
  - MOLYKOTE TP-42
  - MOLYKOTE 1000
  - MOLYKOTE D-321 R
  - MOLYKOTE P-74
- 5 Crown**
  - Longterm 2+
  - Longterm W2



- 6 Sealing of assembled parts**
  - DOWSIL 7093
  - Colours: White, Gray and Boston Gray (RAL 7035)

# Rotor

## Main applications

Ensuring proper rotor performance is essential to achieving optimal turbine efficiency. Due to the demanding task of the turbine rotor, providing adequate lubrication allows performance at high temperatures and for long periods of time, reducing the risk of failures and unexpected downtime.

In addition to lubrication, the right adhesives can optimise the bonding and sealing of the outer casing, allowing a durable construction.



## MOLYKOTE®

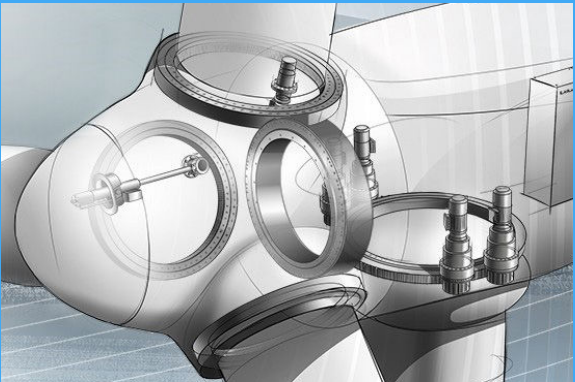
### 1 Blade bearing lubrication

MOLYKOTE Longterm 2+  
MOLYKOTE Longterm W2

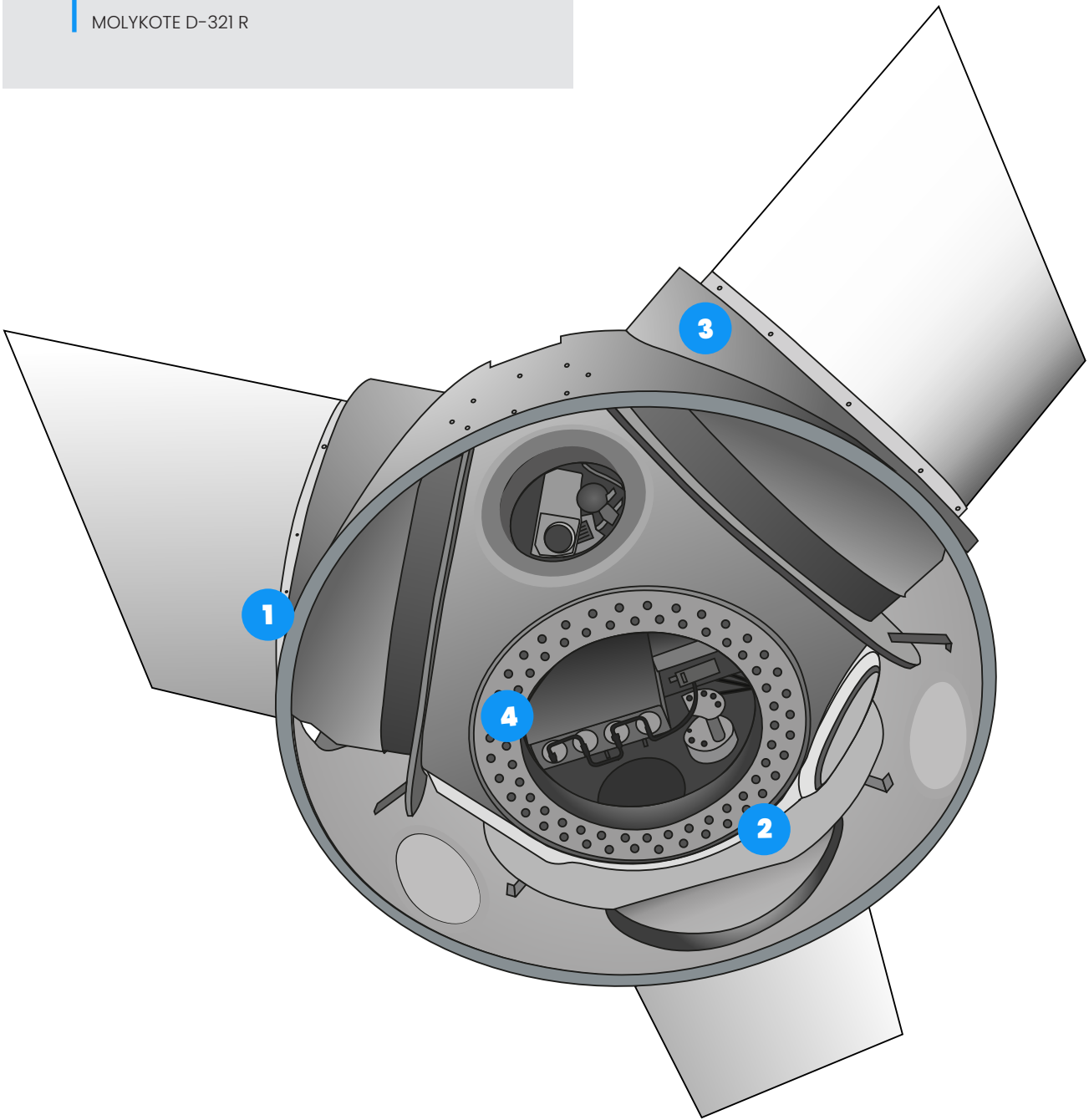
### 2 Threaded connections

MOLYKOTE G-rapid +  
MOLYKOTE TP-42  
MOLYKOTE P-74  
MOLYKOTE 1000  
MOLYKOTE D-321 R

## MOLYKOTE®



Long periods of re-lubrication in ring gear with MOLYKOTE Longterm 2 Plus+.



## DOWSIL™

silicones by DOW

### 3 Sealing of assembled parts

DOWSIL 7091  
DOWSIL 7093

\*Ambos en color Boston Grey

## Tectyl™

Born to protect.

### 4 Screw protection

TECTYL 506  
TECTYL 502 C  
TECTYL EH

TECTYL 127 CGW  
TECTYL MULTUPURPOSE AMBER

# Blades

## Main applications

Blade manufacturers use structural adhesives to bond lightweight and strong composites.

In addition to providing benefits in manufacturing, the right repair technologies help maintenance teams perform more efficient repairs on wind turbine blades, reducing downtime and ensuring the long-term performance of repaired components.



- 1** Filling of gaps and trailing edges  
| ARALDITE 2031-1
- 2** Bonding of sensors and current conductors  
| ARALDITE 2051  
| ARALDITE 2015-1
- 3** Shovel repair, fixing of inserts and added elements  
| ARALDITE 2023 (10-30-60 min)  
| ARALDITE 2021-1 / ARALDITE 2022-1  
| ARALDITE 2050 / ARALDITE 2051
- 4** Shell bonding and repair  
| ARALDITE 2023 (10-30-60 min)  
| ARALDITE 2021-1 / ARALDITE 2022-1
- 5** Tooling with high temperature resistance  
| ARALDITE 2019
- 6** Root  
| ARALDITE 2031-1



Epoxy and methacrylate adhesives for blade repair and manufacturing.

## MOLYKOTE

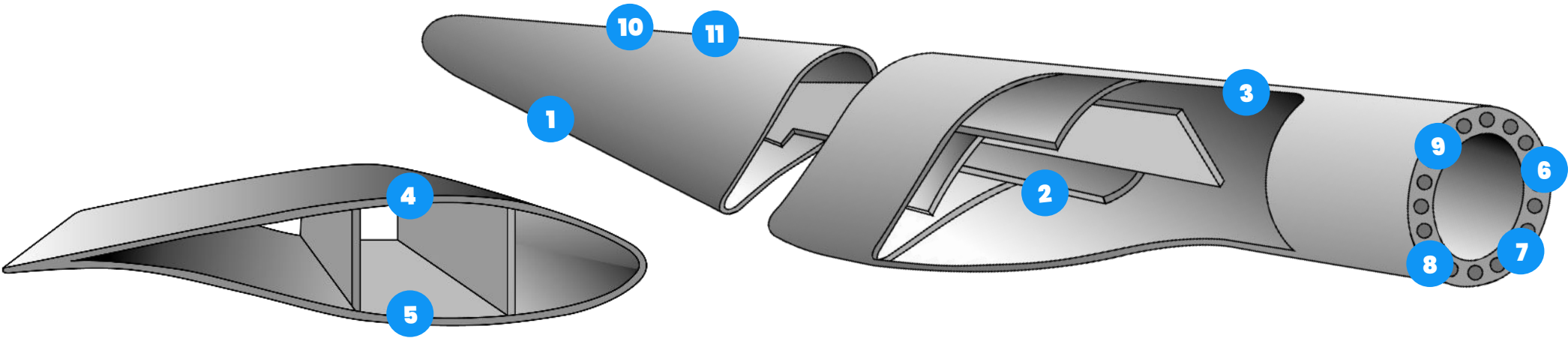
- 7** Blade bearing lubrication  
| MOLYKOTE Longterm 2+  
| MOLYKOTE Longterm W2
- 8** Threaded connections  
| MOLYKOTE G-rapid +  
| MOLYKOTE TP-42  
| MOLYKOTE 1000  
| MOLYKOTE P-74  
| MOLYKOTE D-321 R



- 9** Maintenance and repair  
| TECTYL MULTIPURPOSE AMBER  
| TECTYL 127 CGW



- 10** Leading edge protection bonding  
| ANTALA SE 2040
- 11** Bonding of added elements: vortex, serrations, etc.  
| DOWSIL 7091 Boston Grey

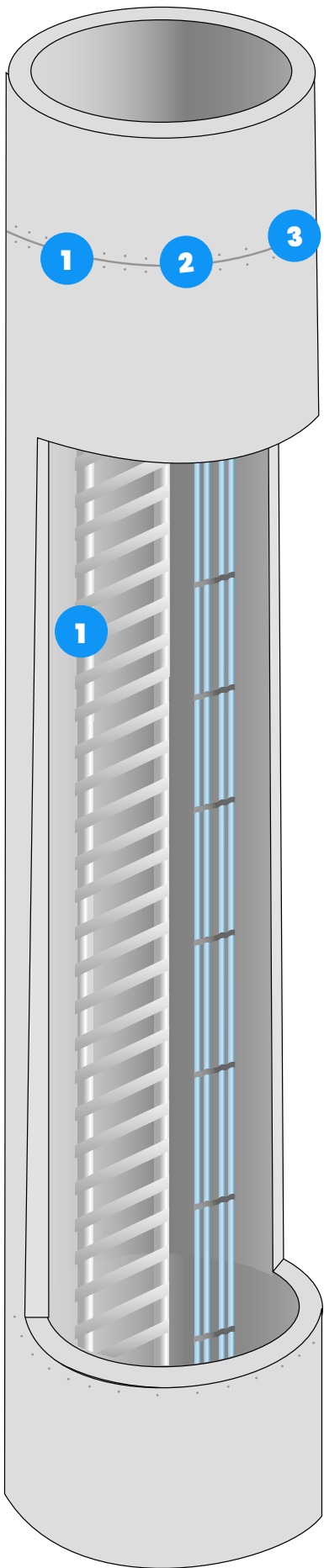




# Tower

## Main applications

Adhesives can be used throughout tower construction to bond and seal any metal or composite joints and/ or support any traditional fastening methods such as riveting and welding. In addition to providing additional structural integrity to the turbine tower, sealants also protect internal components from external conditions such as moisture, chemicals, and erosion.



TECTYL 506/EH is a multi-purpose, fluidised, wax-based anti-corrosive compound, widely used for the protection of bolts in central installation.



### 1 Screws

TECTYL 506  
TECTYL 502 C

TECTYL EH  
TECTYL 127 CGW

TECTYL MULTUPURPOSE AMBER



### 2 Threaded connections

DOWSIL 7091  
DOWSIL 7093

Ambos disponibles en color Boston Grey



### 3 joint sealing

MOLYKOTE D-321-R  
MOLYKOTE 1000

3402-C LF



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[www.antala.uk](http://www.antala.uk)

