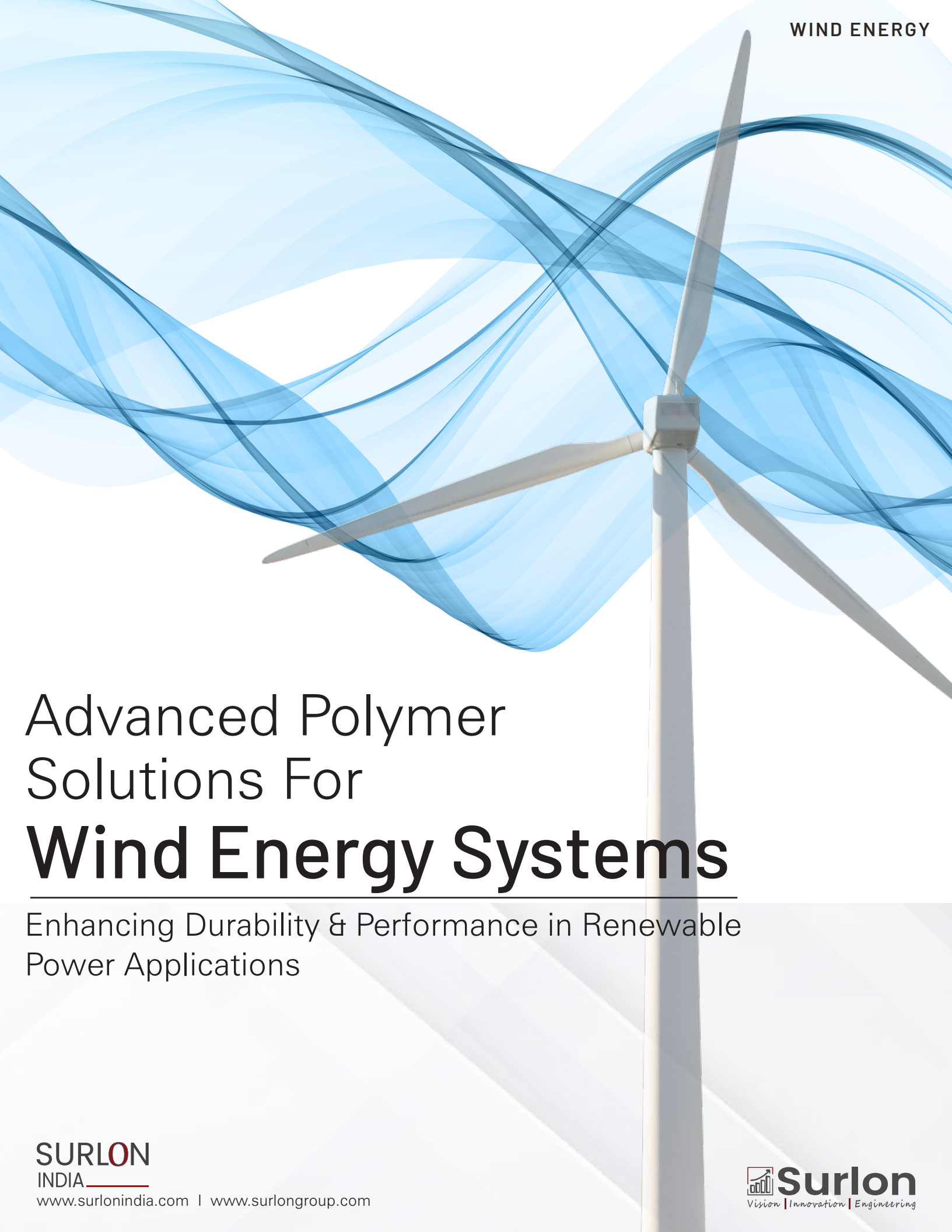




# Advanced Polymer Solutions For **Wind Energy Systems**

Enhancing Durability & Performance in Renewable  
Power Applications

### Material Solutions for Efficient & Reliable Turbines

As the global demand for wind energy accelerates, our advanced material solutions play a pivotal role in enabling the next generation of turbine technology. From bearings and bushings to insulation sleeves and yaw system components, our polymers are engineered to perform in the most demanding environments ensuring mechanical reliability, long service life, and minimal maintenance.

Designed to stand the harsh offshore and onshore conditions, our components help reduce weight, improve energy efficiency and enhance structural integrity across the entire turbine system. As a trusted partner, we are committed to supporting the global transition to sustainable energy through materials that deliver high performance, durability, and environmental compatibility

### Why Surlon Polymers Are Ideal for Wind Energy Applications

Our polymers are meticulously designed to meet the demanding requirements of modern wind turbine systems delivering performance, protection and long-term reliability in harsh environments.

**Lightweight** – Improves energy efficiency and supports larger, more powerful turbine designs

**Corrosion Resistance** – Essential for offshore applications, protects against saltwater degradation

**Thermal & Electrical Insulation** – Ensures performance stability under extreme temperature ranges.

**Durability** – Withstands wear, fatigue, impact and high-stress loads for extended service life.

**Cost-Effective** – Reduces long-term maintenance and operational costs

**Noise Reduction** – Dampens vibrations, enabling quieter turbine operation

**Sustainability** – Many grades are recyclable and support environmentally conscious design goals

**Low Friction** – Materials offer non-stick, smooth movement with low coefficient of friction

**Mechanical Strength** – Resists deformation and maintains stability under high load conditions

**Self-Lubricating** – Ideal for extreme conditions where traditional lubrication isn't feasible



## Surlon India's Solutions and Applications

Each of our component is developed to address site-specific operational challenges. With proven resistance to fatigue, creep, and chemical degradation, our materials are selected for critical functions in nacelle assemblies, yaw systems, drivetrains, and electrical enclosures.

### Key Components

**Bearings & Bushings** – High wear resistance and thermal stability even under heavy load

**Gearbox Distributor Rings** – Reduce friction and noise thus to improve gearbox lifespan

**Seals & Gaskets** – Provides chemical- resistant materials for the nacelle and gearbox sealing

**Energy Absorption Components** – Engineered for shock and vibration damping

**Nacelle Housings** – Lightweight protection for electronics

**Sliding Pads for Yaw Systems** – Slide plate, radial

plates, axial plate, top plate, lower puck, etc. for smooth rotation

**Bending Restrictors** – Protect cables with high flexural strength and wear resistance

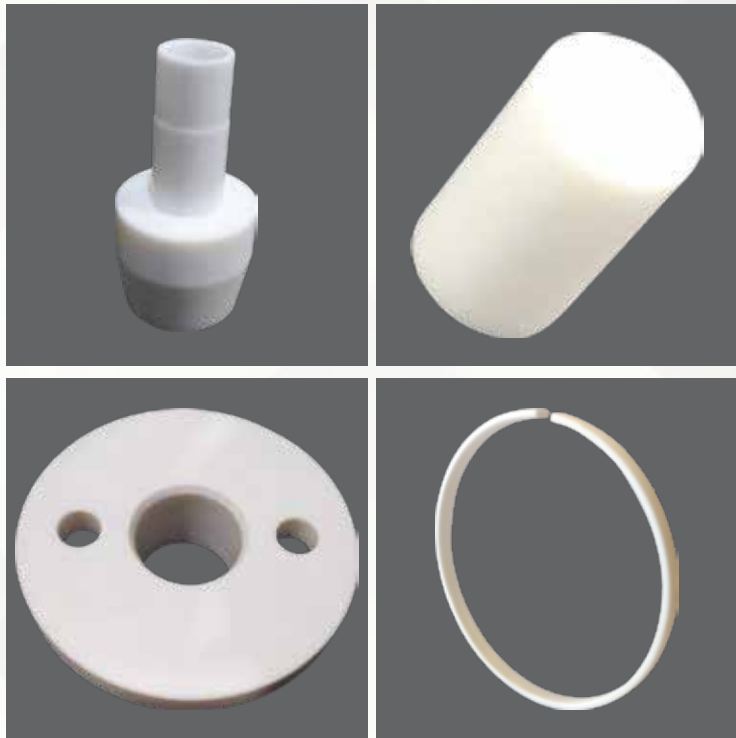
**Insulating Sleeves & Spacers** – Thermal and electrical insulation for shaft assemblies

**Thrust Washer Ring Segment in Yaw Bearing** – Self-lubricating and low-friction, available in large dimensions

**Cable Clamps**– Corrosion- resistant retention for routing

### Built for Onshore & Offshore

- Saltwater corrosion
- Offshore platforms with high humidity
- High altitude sites with thermal extremes
- Coastal regions with sand & dust erosion
- Remote sites requiring low maintenance reliability
- Continuous vibration and rotational stress
- High mechanical load-bearing zones
- Long exposure to UV, moisture and temperature cycling



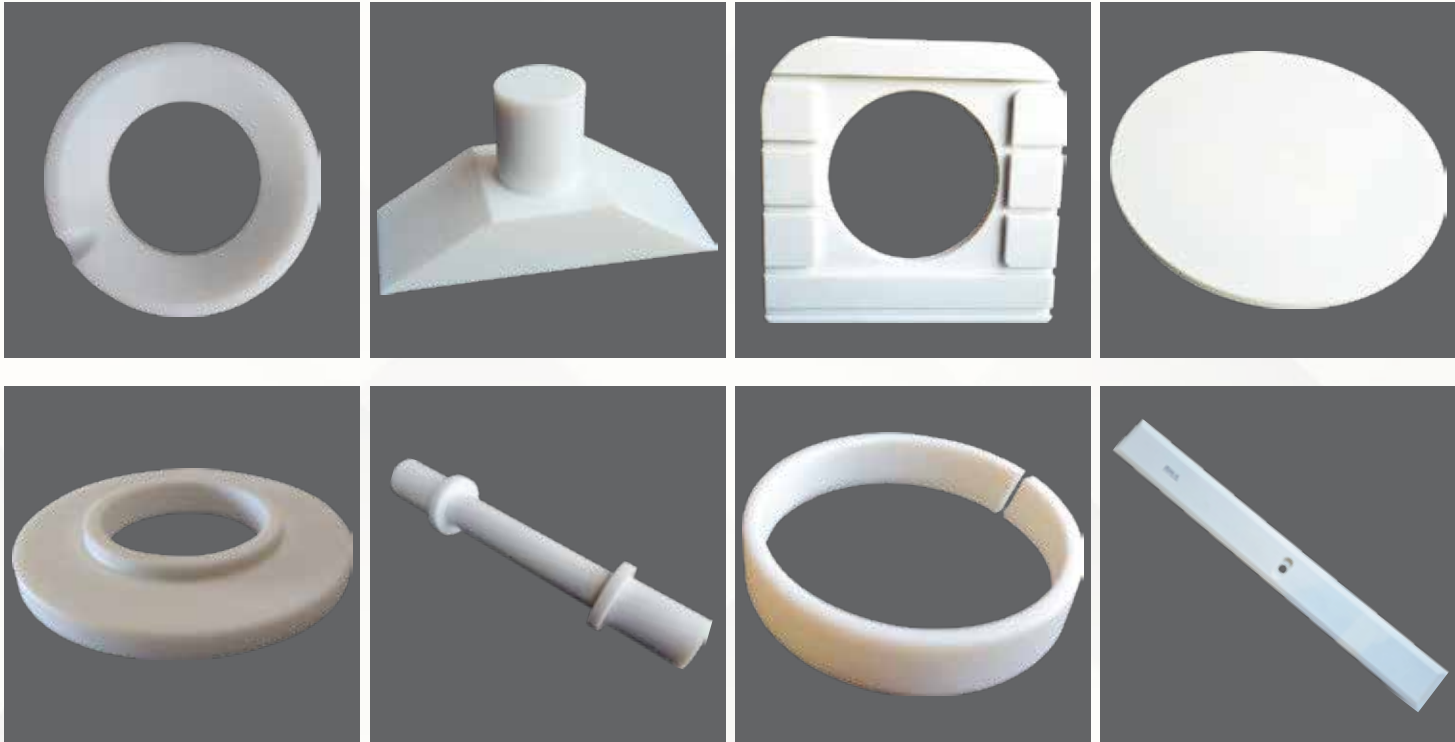
## Powering the Future of Wind Energy

As global demand for clean energy accelerates, the wind industry is projected to expand significantly between 2022 and 2030. We are proud to support this transition by delivering our high-performance solutions that make wind turbines more efficient and cost-effective.

### Partner with Surlon India

Whether you're enhancing existing turbine systems or developing next - generation wind technologies, Surlon India delivers precision- engineered polymer components built for structural integrity, chemical resistance and durability in harsh

operating conditions. Our proprietary materials METALON®, METALENE®, METAPOM®, METAPET®, METAPUR® as well as METRON® are registered trademarks of the Surlon Group.



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