

ELLE™ Onshore

LEADING EDGE PROTECTION OPTIMIZED SPECIFICALLY FOR ONSHORE SITES



New leading edge protection solution provides exceptional durability and outstanding erosion resistance onshore.

Built on track record - meet the expanding ELLE[™] family

In 2016, we unveiled a brand-new type of leading edge protection (LEP): ELLE[™]. Today, these shells protect more than 55,000 blades worldwide and are applied on over 70% of all offshore blades.

But there was another need onshore.

Using our track record and field experience, we are now expanding the LEP family with ELLE[™] Onshore – a polymer LEP solution optimized specifically for onshore conditions.

Exceptional durability

Leading edge erosion continues to be a major issue and cost driver onshore. That is why you will get unmatched erosion resistance and durability with ELLE[™] Onshore.

Our DNV-certified calculations (according to DNV-RP-0573) show that at most onshore sites, ELLE[™] Onshore will last more than a decade. You get this durability through the unique material properties and thickness of the solution (0.8 mm).

With $\mathsf{ELLE}^{\scriptscriptstyle\mathsf{M}}$ Onshore, you can therefore minimize LEP repairs, costs, and downtime.

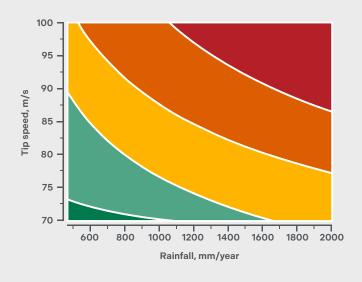
KEY ADVANTAGES

- LONG DURABILITY, lasting more than a decade at most onshore sites (calculated according to DNV-RP-0573)
- CHAMFERED EDGES and 300 mm width to maximize aerodynamics
- EASY INSTALLATION with three-part liner and center marking

ELLE[™] Onshore cross section (exaggerated dimensions)



Site risk - leading edge erosion



Aerodynamics in focus

No need to worry about aerodynamic performance with ELLE[™] Onshore. The chamfered edges and the width (300 mm) of the solution smoothly covers your blades' leading edges to maximize aerodynamics.

 $\mathsf{ELLE}^{\mathsf{M}}$ Onshore's standard length and customizable ends ensure that this LEP solution fits all blade types and brings the same aerodynamic performance to all wind turbines.

Designed for easy installation

No edge sealer, no wet paint, no mixing of products. Just follow the simple work instructions, cut, and install ELLE[™] Onshore on your blades. The resilient polymer will stick to the blades with the pressure sensitive adhesive.

The three-part liner with center marking makes installation easy and swift, even uptower using rope or basket.

Tested in accredited labs and on field

ELLE[™] is currently the only LEP solution one on the market that is DNV-certified. It was therefore natural that we have followed the same rigorous testing schemes when developing ELLE[™] Onshore. This included rain erosion, peel, adhesion, hail and sand impact tests.

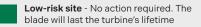


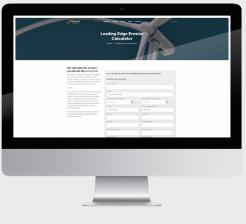
Very high-risk site – Premium LEP required to maintain structural integrity

High-risk site – Premium LEP recommended to avoid excessive maintenance or aerodynamic loss



Risky site - Maintenance required and LEP recommended to preserve aerodynamic performance





Use our DNV-verified <u>erosion</u> risk calculator to find the best solution for your sites



We have also tested $\mathsf{ELLE}^{\mathsf{M}}$ Onshore on operating wind turbines on three continents.

So you truly get a thoroughly tested and validated LEP solution for your blades.

Site-specific leading edge protection

With ELLE[™] Onshore and our other LEP solution, ELLE[™], you can cover all your wind parks with a unique, site-specific LEP.

