

## ELLE™ Installation Critical Steps.

### **PURPOSE OF THIS INSTRUCTION**

This instruction describes the critical steps in the application of ELLE.  
Not respecting the requirements will lead to significant risk of detachment of ELLE.

### **ENVIROMENTAL CONDITIONS**

Don't do any installation steps below 5°C / 41°F. The curing cycle will be slowed down, and there is a risk that the low temperature will damage the materials.

Don't do any installation steps above 35°C / 95°F. You will risk that the materials start to cure before the application is finalized.

Don't do any installation steps below 30% RH. The sealer needs humidity to start the curing process. If the humidity is too low the curing will either be slowed down or not start up at all.

Don't do any installation steps above 90% RH. There will be a risk that moisture is entrapped in the adhesive, and you will risk that the materials start to cure before the application is finalized.

### **SANDING**

Make sure that there are no shiny spots left after sanding the application area. Un-sanded areas will significantly reduce the adhesion of the ELLE to the blade.

Always finish up the sanding with a grit 220 to 240 sandpaper. Using another grit will significantly reduce the adhesion of the ELLE to the blade.

### **CLEANING**

Before sanding:

Make sure that the blade surface is properly cleaned with either IPA alcohol or neutral soap dispersed in water, to remove any contamination before sanding. If any contamination is sanded into the surface, there will be a risk that the adhesion of ELLE to the blade is reduced.

After sanding:

Make sure that the blade surface is properly cleaned with IPA alcohol after sanding. Improper cleaning will significantly reduce the adhesion of the ELLE to the blade.

## SIKA ACTIVATION

All the sanded installation area on the blade must be Sika activated. The Sika activator is increasing the surface tension, which increases the Centaur 960 sealer and PSA adhesive bond to the blade. Missing Sika activation will significantly reduce the adhesion of the ELLE to the blade.

All the areas on the ELLE that will be sealed with Centaur 960 sealer must be sika activated, make sure to remember the overlaps. The Sika activator is increasing the surface tension, which increases the Centaur 960 sealer bond to the ELLE. Missing Sika activation will significantly reduce the adhesion of the ELLE to the blade.

Ensure that the cloth is completely soaked with Sika activator to avoid missing activation at any spots. Also remember to soak the cloth again when necessary. Missing Sika activation will significantly reduce the adhesion of the ELLE to the blade.

## INSTALLATION OF ELLE

Make sure that all the surface of the ELLE has been pressure activated with approx. 5 kg. of pressure. Missing pressure activation will significantly reduce the adhesion of the ELLE to the blade.

Make sure that there are no air bubbles outside spec. in the installation. Air bubbles tend to expand over time, eventually loosening the edge of the ELLE.



The overlaps must be sealed underneath, all the way to the pre-installed adhesive.

This will prevent any water penetration to the installation continuing to the next ELLE and any missing sealer will furthermore react as an air bubble and tend to expand over time, eventually loosening the edge of the ELLE.



All the edges at the ELLE must be perfectly sealed without any gaps or missing sealer. Avoid sealing more than one ELLE at a time as the viscosity of the sealer slowly increases, making it more difficult to spread evenly. Any gaps will cause a bridge that will allow water to pass into the PSA adhesive. Water contamination of the PSA adhesive will significantly reduce the adhesion of the ELLE to the blade. Any missing sealer will react as an air bubble and tend to expand over time, eventually loosening the edge of the ELLE.



Make sure that the curing time is respected before restarting the turbine. If the curing time is not respected, there is a significant risk that the edge of the ELLE shells will detach when the turbine is put back in operation.