



## MAINTENANCE GUIDE FOR WOODEN POLES

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# PROCESS OF STAIN APPLICATION

- The water based system has been chosen because of its efficiency and lower environmental impacts.
- Wood is a natural material and it is expected to expand and shrink as the seasons and moisture change. Our elastic coating is designed to expand and shrink with the wood without cracking.

## THE COATING SYSTEM

- The first layer is a preservative which protects the wood from blue stain fungi, mildew and rot.
- The second layer is then applied to give the wood its final colour.
- To receive optimized thickness of varnish, 2 layers of colour tinted varnish are applied to protect against UV.

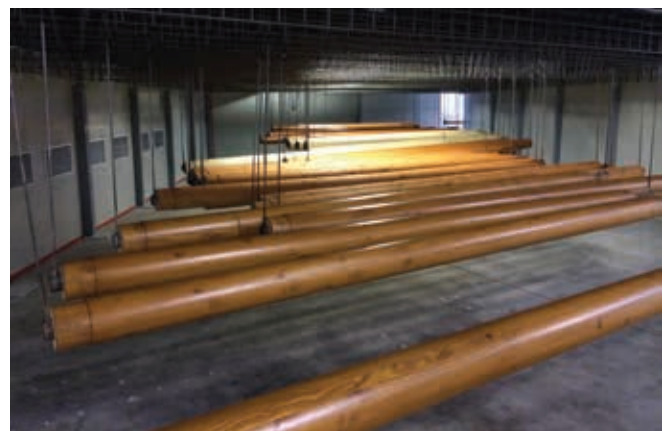
## TO ENSURE THE QUALITY OF THE SYSTEM

- A spray gun is used to ensure a consistent coating.
- Drying chamber is applied on each layer to increase the quality of coating system.

**A spray gun**



**Drying chamber**



## **A SCHEDULED MAINTENANCE PROGRAM IS RECOMMENDED TO MAXIMIZE THE LIFE TIME OF YOUR WOODEN POLE**

UV radiation and humidity are the main reasons for degradation of the surface finish. These two phenomena change the aesthetic of the pole. With no maintenance, the effectiveness of the coating will decrease progressively and make defects in the wood possible.

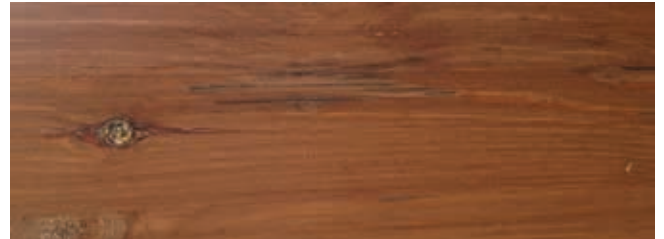
## **AGING**

### **1st stage, the aesthetic effects**



Gradual loss of the glossiness of the finish can be noticed. Micro-cracks may appear.

### **2nd stage, the aesthetic effects**



Some parts of the pole may begin to lose layers of finish. This may cause some discontinuity in the surface colour. Places without stain may become grey. Cracks may appear.

## **FIRST SIGNS OF AGING**

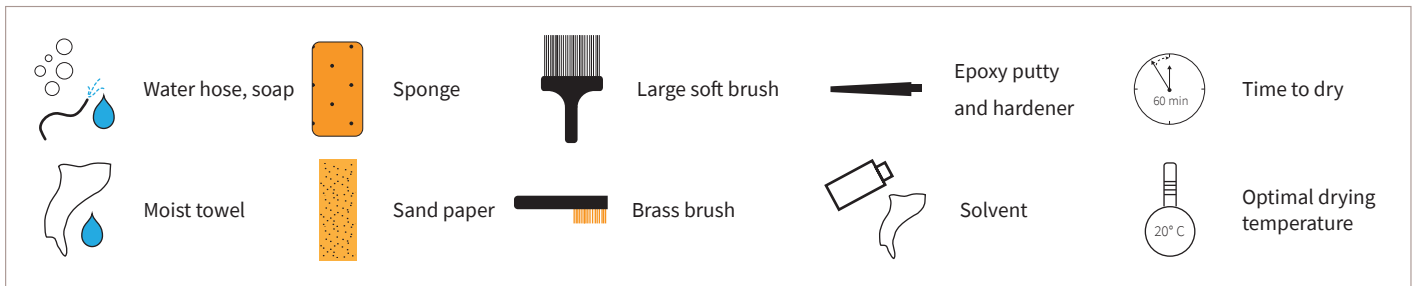
The evolution of the aging depends on the level of sunlight and the alternation between humid and dry periods. For that reason the installation location should be taken into account when choosing the initial colour. Shades in the middle of the colour range show fewer signs of aging.

The first stage is running from 3 to 7 years, except on direct sea side, with the sanding effect that damages all the materials, even steel.

## RECOMMENDED MAINTENANCE CONDITIONS




- The outside temperature must be above 18°C before refinishing the pole can be performed.
- The surface temperature of the pole should not be greater than 50°C.
- Humidity should be less than 70%.

## SYMBOL LEGEND



## STANDARD COATING REVISION

This process should be performed at the first sign of aging. It enables to maintain the aesthetic of the pole by ensuring the finish is thick enough to protect the wood.

-  Clean the surface from all dust and debris.
-  Use soap if needed. Rinse thoroughly. Let it dry.
-  Apply layer of varnish\*. Use large soft brush. Avoid spills and runs of the varnish.

NOTE:  
Use only water based solution:

- \* - Aquatop 2920-04 from TEKNOS
- other equivalent system

### Cleaning



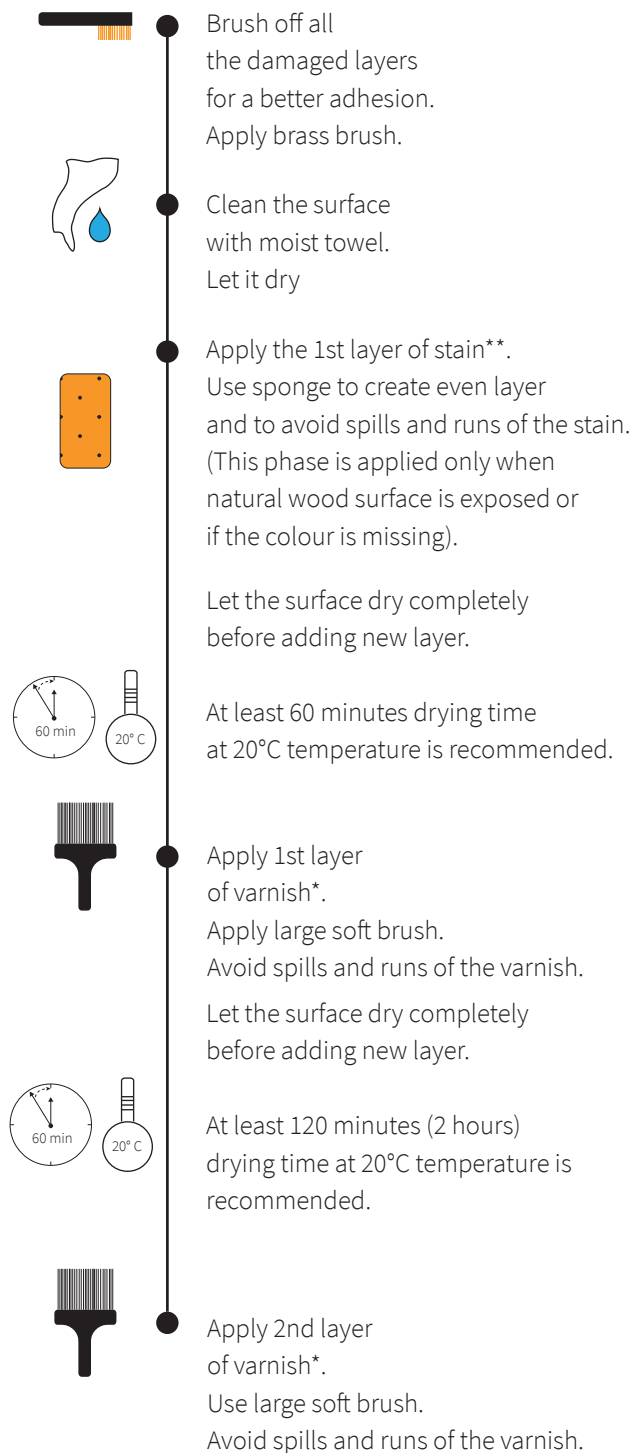


# REFINISHING THE POLE

This process is used to refinish the pole when the initial recommended maintenance has not been followed. At this stage of aging, it may not be possible to fully restore colour and fill in micro cracks, by adding a new specific layers.

Correct thickness of the coating can be restored to protect the wood.

The new layers have the same durability as the original coating from the factory. Maintenance procedures can be performed throughout the life time of the pole.



## Brushing



### NOTE:

Use only water based solution:

\*

- Aquatop 2920-04 from TEKNOS
- other equivalent system

\*\*

- Aqua Primer 2900-02 from TEKNOS
- Pinja Wood Stain from TIKKURILA
- other equivalent system.

# VANDALISM CORRECTIONS

## GRAFFITI

### 01



Clean the affected area with a solvent.



If necessary the affected area can be touched with coloured varnish\*  
Avoid spills and runs of the varnish.

### 02



If the solvent is not effective, graffiti can be removed with sandpaper



If the base colour of the pole remains after the graffiti is removed, reapply the coloured varnish\* to complete the repair.  
Avoid spills and runs of the varnish.

#### Sanding



#### NOTE:

Use only water based solution:

\*

- Aquatop 2920-04 from TEKNOS
- other equivalent system

\*\*

- Aqua Primer 2900-02 from TEKNOS
- Pinja Wood Stain from TIKKURILA
- other equivalent system.

# VANDALISM CORRECTIONS

## GRAFFITI

# 03

If the base colour is removed it will need to be reapplied:



Brush off all the damaged layers for a better adhesion.  
Apply brass brush.

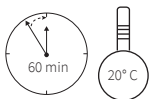


Clean the surface with moist towel.  
Let it dry.



Apply the 1st layer of stain\*\*.  
Use sponge to create even layer and to avoid spills and runs of the stain.  
(This phase is applied only when natural wood surface is exposed or if the colour is missing).

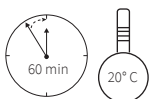
Let the surface dry completely before adding new layer.



At least 60 minutes drying time at 20°C temperature is recommended.



Apply 1st layer of varnish\*.  
Apply large soft brush.  
Avoid spills and runs of the varnish.  
Let the surface dry completely before adding new layer.



At least 120 minutes (2 hours) drying time at 20°C temperature is recommended.



Apply 2nd layer of varnish\*.  
Apply large soft brush.  
Avoid spills and runs of the varnish.

### Applying varnish



#### NOTE:

Use only water based solution:

\*

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- other equivalent system

\*\*

- Aqua Primer 2900-02 from TEKNOS
- Pinja Wood Stain from TIKKURILA
- other equivalent system.



# VANDALISM CORRECTIONS

## NICKS AND CUTS



- For small nicks in the surface, a colour layer \*\* can be applied locally to restore the surface.
- The age of the pole affects on colour contrast and end result.

## DEEP CUTS OR GOUGES



- Mix epoxy putty and hardener (ratio 5:1) and fill the hole.



- After the putty has cured, sand it smooth.



- Once sanded, the base colour \*\* of the pole can be reapplied, if needed.



- Repeat if needed

- See section REFINISHING THE POLE

## POSTERS AND STICKERS



- Try to remove the sticker or poster with warm water or water hose.
- Alcohol can be used to remove any residual glue or adhesive.
- Once dry, if you notice any difference in gloss of the stain, locally apply one layer of translucent coat (see Refinishing of the pole).

### NOTE:

Use only water based solution:

\*

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- other equivalent system

\*\*

- Aqua Primer 2900-02 from TEKNOS
- Pinja Wood Stain from TIKKURILA
- other equivalent system.

### Applying epoxy



# COLOUR MATCHING

To allow a perfect continuity with existing wood poles, it is possible to measure the colour composition of material already installed. Measurement is done with a specific portable device (CIE-LAB colour space).

The results obtained enable our stain supplier to produce a new stain with the matching colour.

## Colour measurement

