

Charred Wood Technological Meaning

Leforest Ltd. uses the industrial method of Wood Surface Treatment with controlled Open-flame fire. We call the process Carbonization of Wood with Gas Plasma.



The carbonization process means an industrial approach

To wood modification with an open flame (gas plasma) on the production line. The idea is to use wood species that cannot be processed in thermo-wood chambers and get a high-quality finishing and structural material.

Burnt Wood (Carbonization Technology) gives the wood new visual characteristics and properties. The technology helps to add value to forest products initially in the middle price range. The industrialist can also restore the old Wood visible part for further sale—alternative wood modification methods. In our opinion, more flexible than Thermo-wood technologies and technologies of surface treatment of Wood with varnishes and paints.

More natural and ecologically cleaner than Tanalith impregnation or WPC, which are difficult to dispose of or have a strong allergic reaction in humans and animals.

We use gas plasma to clean and activate wood surfaces—a new type of Wood with unique characteristics and an excellent economical basis. The new carbonized Wood has a beautiful aesthetic appearance and extremely resistant properties for outdoor usage.

The Wood is resistant to harsh external weather conditions. The technology is adapted for various types of wood species and an extended list of varieties of grades that cannot be in the thermo-wood production process inside the pyrolysis chamber.

In the case of Carbonized Wood, the density of the natural Wood remains the same; we only add a coating layer on the surface, stabilize and preserve the wood structure with oil inside the wood structure. Also, only a few commercial tree species are suitable for producing Thermo-Wood due to specific wood moisture, tissue, timber cutting method, and knot structure.

Therefore, only premium wood goes to Thermo-Wood production; our technology allows us to use any dry tree species with an extended variation of grades. Pyrolysis of Wood in the thermo-wood chamber makes sense only in the case of large bulk quantities and requires expensive engineering control and maintenance.

