

DESIGN AND TECHNOLOGICAL FEATURES HARDWOOD VENEER PRODUCTS WITH THE SPECIFIED PATTERN TEXTURE OF WOOD.

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В статье предлагается конструкция и технология паркетных изделий из шпона с заданным рисунком текстуры древесины, при которой значительно сокращаются материальные затраты и расширяется область применения слоистых клееных изделий, достигаются более высокие потребительские качества паркетных изделий, расширяется сырьевая база производства паркетных полов с разнообразными сложными рисунками.

The paper proposes the design and technology of the hardwood veneer products with the specified pattern texture of wood, in which significantly reduces material costs and expanding the scope of layered laminated products, achieved through higher consumer quality hardwood products, expanding resource base production of parquet floors with a variety of complex patterns.

Introduction. Due to the constant changes in market joinery products to wood-processing industries hundred-comes the task of updating and expanding the range of wood products, including the organization of production of high-quality hardwood you products that best meet the needs and capabilities of all people, products that could successfully oversee the concentration on the market.

Now the main task of the woodworking indus-the rational and complex-ing use of forest resources, which is available in all technology-cal operations, refining and include: reducing waste reprocessing wood, getting with a maximum output required sorting-ment, the use of waste of production, resulting in the fabrication of the main products as the main raw material of the secondary process.

The purpose of this work is to develop new technology and design solutions in the production of parquet products, which allow to reduce considerably labor, materials, and the use of expensive materials that promote comprehensive utilization of timber.

The main part. Improving technology woodworking industries — effective use of equipment, improve the quality of products, the introduction of output bezot technologies to better use raw materials, energy, and this will give an opportunity to minimize waste, reduce the complexity and material parquet products, implement enterprise meromorphic environmental protection.

Technology hardwood veneer products with the specified pattern allows the wood grain to make products that have all the factors that determine the value of the wood grain trim, using veneer with low-grade softwood trees. For the manufacture of this product are encouraged to use, except for cut sheets of veneer, plywood, and flaws, as well as lump veneer that would solve the problem of complex and rational use of wood. The main stage in the manufacturing process of products from hardwood veneer with wood grain pattern specified defining pattern on its surface, is the process of bonding package with simultaneous deformation.

Using the technology and equipment for production of plywood, offers an original method of lump hardwood veneer products that have the given the texture of wood.

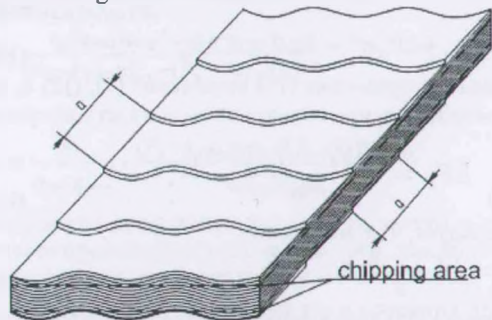


Fig. 1. Glued block veneer grained wave forms: the dotted line — plane wave crests removed.

This object is achieved by the production of parquet floors veneer pattern with the given structure of the wood includes a set package of dry veneer coated with adhesive bonding plates with wavy shape in cross-section, processing (cutting) on the details of the required size. Face cover proposed hardwood products, formed from layers of veneer at an angle to the plane of compression due to the shift of veneers (a value) in the direction of the fiber length, bonding plates with wavy form (copying the surface of the plates press), handling the plane to the desired size for smooth surface which has given the texture of wood. By varying the thickness of veneer, alternating arrangement of veneer sheets in a package of color, changing the length and width of the wave plates, changing the angle of inclination of the veneer sheets, we get a large range

of patterns. To increase the color gamut of decorative laminated plates glued veneer, veneer sheets can imbue thus simulating different types of wood.

The Fig. 1 shows a laminated plate having a wavy shape of the product which is made parquet. The dotted lines show the plane removing crests of the wave.

Execute method performs in the following way.

Into rectangular pieces of veneer, moisture 6-8% Apply glue, for example on the basis of urea-formaldehyde resins, forming a package, putting veneer along the fiber to the desired height, depending on the thickness of the finished product. Veneer sheets are shifted by a certain amount of the grain. The size of the upper and lower veneers reduced by the same amount, "and" to create a particular slope veneers angle" α " to the direction of pressing. The package can be formed from a single sheet of veneer wood species or alternating different breeds, and veneer impregnated with dyes to create color differences of adjacent layers of the package. At a set of packet observe the symmetry with respect to the location of veneers middle of the pack to avoid warping. Package of glue in any conventional manner (according to the standard technological modes) using hot or cold adhesive curing, depending on the thickness of the product. Plate for pressing are in section (perpendicular to the length of the fibers of wood veneers) wavy surface, making blanks are wavy along the fibers as shown in the figure. The resulting package is planed (calibrated) to remove the wave of bumps on both sides, after the machining front surface coating has a predetermined batch image. In Fig. 2 shows a section of parquet flooring with a given pattern texture of wood.



Fig. 2 Fragment of parquet flooring with a wood grain pattern specified

By varying the thickness of veneer, wood species, colors, alternating veneer sheets, changing the value of the slope of the veneer sheets, length and height of the wave, you can create a diverse range of wood grain patterns.

Manufacturing hardwood veneer products from a given wood grain pattern is promising, as it allows to be used as feedstock lump veneer (plywood waste production), low-grade veneer wood, wood with a low density, which removes the problem of shortage of traditional fine wood. Thus, the proposed method has several advantages, which are as high consumer quality, reduce labor costs, raw material consumption, as well as in reducing the economic performance of products.

Conclusion. The proposed technology and design products parquet veneer pattern with the given structure of the wood has a number of advantages, which are as high consumer quality products, a significant reduction in labor costs, raw material consumption, in lowering the economic performance of parquet products, as well as expanding the raw material base for the production of parquet products and receive have different patterns of floors providing their market.

Литература

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