



MANUAL FOR THE MANUFACTURE OF TRADITIONAL

RESIN TOOLS

1. SMOTHER 2. SCRAPER 3. SMALL SCRAPER 4. PINE TAPPING KNIFE

5. PINE TAPPING KNIFE FOR POLE 6. MALETT

7. HALF-MOON 8. TRACER 9. POLE



Description

Tool used in the bark spike phase that allows to make the spike in a transversal way to the trunk removing a small piece of bark without tearing the wood, later, to apply the resin stimulant. This operation is called "pica de barra a escoda".

Utilisation

It is used by slightly nailing the tool into the right side of the notch and pulling it slightly to the left so that a small piece of bark about 3 cm high is removed. This same tool can be made suitable for left-handed people, in the same way as described above, but for working with the opposite hand.

Observations

The pine tapping knife is a tool similar to another traditionally used one, called axe gouge of tempered steel, with curved form in its end, and used in the Hugues method of resination, when chemical stimulation was not used and more physical effort was required. Like the rest of the resin tools, it had a very sharp blade so that the shavings were easily broken, so it required constant sharpening using a triangular file to make the edge and a sandstone moistened in water or similar to soften and settle it. Variants; rayon pine tapping knife : The u-shaped end of this pine tapping knife type is replaced by a two-sided v-shaped blade (see design on sheet number 5).

Materials

It consists of two flat pieces made of forged and tempered steel. The end of one of the pieces is finished in the shape of an axe, while the end of the other is folded in the shape of a u with an edge at the bottom, allowing the bark to be removed. Both pieces are joined at their straight ends by welding to an iron or steel tube that serves as a clamp, where the tool handle is inserted.





Manufacturing instructions

1. Cutting

The starting point is two 5 mm thick steel plates of wear-resistant quality, which have been pre-cut with a laser cutting machine, as well as an iron or steel tube with a diameter of 50 mm.

2. Roughing

A coarse disc grinding machine is used to quickly polish the workpieces.

3. Forging

The cut-out pieces are worked in the forge at high temperatures until they acquire a red colour, in order to give them the right shape when hot by tapping. This forging is done manually or with a pile driver.

4. Folding

The bending or folding is done by holding the piece to a mold designed for this purpose, where the edges are supported according to the angles indicated in the detail plans, being hit with the hammer until the desired shapes are achieved. To facilitate the bending, a slight vertical cut is previously made to the piece by means of a grinding machine.

5. Welding

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Once both steel pieces are prepared, they are welded to the tube, which will serve as a clamp for the placement of the wooden handle. It is recommended that the welding is done before starting the hardening of the tool because, if the process is reversed, the blade will be de-tempered and lose its hardness.



6. Tempering

The steel parts are heated again until they turn red. These parts are then placed in cold water for a few seconds and then cooled or tempered by immersing them in oil again for several minutes. In this way, the optimum hardness of the parts is achieved.

7. Sharpening

This last treatment is carried out on the edge of the tool blade using a fine disc grinder or a sandstone.

MAINTENANCE: Light sharpening and cleaning with solvent and sand.

