

DEHONIT® FOR PIN BLOCKS & ACTION PARTS





dehonit® - BOARDS FOR PIN BLOCKS



dehonit® is a material manufactured to DIN 7707 and DIN 68705. Only veneers of red beech (Fagus silvatica) of selected quality are used bonded together under heat and pressure using a special type of phenolic resin.



Available grades

For the manufacturing of piano parts we have developed different grades, as listed below. They have proved successful in thousands of instruments at home and abroad. In addition we can manufacture special **dehonit**® grades upon request.

ORIGINAL dehonit®

B 785 approx. 6 layers per cm density 0,8 - 0,85 g/cm³

Moisture content: Surface:	approx. 8% press finish, unpolished
Sizes:	standard sizes available up to 2400 mm long and
	1200 mm wide
	thickness: 30 - 50 mm
	special sizes on request
Tolerances:	length and width +/- 1.5 mm
	thickness +/- 1.5 mm

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Storage

dehonit® boards should be stored in an enclosed warehouse with constant atmospheric humidity (under 60%). Do not store directly on the ground or close to an outer wall. Protect the boards against direct sunlight (danger of inducing tension) and store by stacking flat one on top of the other on a flat level support with a cover over the top board.

Machining

Carbide tipped tools are recommended for machining **dehonit**® laminated compressed wood.

Quality control

dehonit® laminated compressed wood boards are intensively controlled at all stages of production. In addition the material undergoes extensive laboratory tests, to ensure that the necessary properties are consistent and maintained from batch to batch.





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Dehonit® for piano action

The piano action is the heart of the instrument. To achieve consistent high quality over decades, each of the 6,000 components must be made with the greatest of care to be as uniform and as accurate as possible.





Renner upright action

Three important advantages for using **dehonit**® laminated wood.

- The material does not wrap.
- It retains its shape even under conditions of frequently changing humidity.
- It offers a particularly firm seating for screws

Rener

Renner action part

Machining Instructions for dehonit® - Rails



Carbide tipped tools are required to cut the **dehonit**® compressed laminated wood to size.

1. Cutting of Rails

If the rails cut from boards are not immediately milled into profiles it is recommendable to remove the surface film by cutting. The wood gets free from stresses and the rails will not wrap.

Important: It is essential to machine the rails on both sides uniformly.

In case the machining is done only unilateral the rails will tend to wrap.

2. Storage

If the rails are stored please pay particular attention to:

- 1) The ground where the material is stored must be absolutely even and the material has to lie flat on the ground. The rails have to lie on the ground with the whole surface.
- 2) Do not store directly on the floor (concrete floor). There must be either an insulating layer or a hollow space to avoid that the compressed wood absorbs humidity.
- 3) The room temperature and the atmospheric humidity should be regular without considerable atmospheric fluctuations. The wood should not be stored outdoors.

Recommendable:	temperature	10 - 25 °
	atmospheric humidity	40 - 50 %

This is in accordance with a moisture content of wood of 7 - 9 %

3. Milling

Carbide tipped tools are required. When grinding and trimming please pay particular attention that both sides are machined uniformly.

4. Drilling

Two-edged drills made of HSS-steel according to DIN 338 are most appropriated. The drill-hole must be 0,1 - 0,2 mm larger that the screw thread in order to avoid cracking when the screw is tightend later on.

If the same screws are used for **dehonit**® as for natural wood the diameter of the drill-hole must be slightly larger than for natural wood. The reason is as follows:

The cells of the uncompressed wood yield more to the pressure of the screws than those of compressed wood. If the drill-hole is of same size the wood might crack, because the screw thread has the effect of a wedge.

Due to the higher density of **dehonit**® the screw is absolutely tight even if the drill-hole is slightly larger.

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Test results for pin block material

Drills used:

DIN 338 right hand cutting, for long chipping material, with cylinder shaft.

Important: chips must not be burnt (Black or dark brown colour).

Drill with uniform feed.

Result: Original Quality "dehonit®" Material Grade B785

Density:	0.85
Rotation of the drill:	1,800 - 2,000 rpm.
Drilling time per hole:	approx. 2 secs.
Feed:	0.6 mm per rotation.
Diameter of drill:	6.4 mm
Pin:	6.9 dia. x 64 mm long
Height of pin:	21.5 mm above cast iron plate

Pin pressed in, not turned in.

Values achieved after the pin has been pressed in:	190 - 200 Kp
Values achieved after chipping and trimming:	110 - 130 Kp

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Finally we would like to draw your attention to the following important points:

In order to achieve the correct values when using our material, it is essential that the same testing and machining methods as detailed above are used. Failure to use the correct methods will result in significant differences in the achieved results. After having made the above tests, we further tested both qualities to simulate repeated tuning of the piano over a long period with the following results:

"dehonit®" B785 grade: initial values changed slightly.

Please note that the hole size is different for each grade of material.

We therefore suggest that for high quality pianos only "**dehonit**®" B785 grade should be used to produce a first class quality long lasting pin block.



HOW TO FIND US ...





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Do you require information on other dehoplast® products?

All you have to do is to copy this slip, mark a cross against the product range in question, enter your address and fax back on ++49 2723 772 152



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