

## **The effect of moisture on laser beam wood machining**

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Wood moisture can affect various parameters of the engraving process, such as the depth of engraving, the structure and surface of the wood, and thus the overall quality of the created image. The investigation of the influence of moisture contained in different types of wood on their machining was carried out on samples of oak, beech, pine, spruce, alder, ash and cherry produced using the laser device ILS 3NM, CO<sub>2</sub>, with a wavelength of 10.6 μm and a maximum power 100 W, with a maximum feed speed of 1524 mms<sup>-1</sup>. The depth of ablation and the surface of the machined surface were studied for selected samples with the moisture of the wood plants in the laboratory room, the outdoor and with the moisture created by immersion in the water bath.

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