

## 3D Laser to engrave inside bottles



Our company "Oficyna" dealing with laser marking of industrial spareparts and advertising gadgets would like to present a unique technology of marking the inside walls of the glass bottles to protect against counterfeiting and uplift the attractiveness of products by creating exclusive packaging.

We have been operating in the laser marking industry since 1986. Therefore, we have gained considerable experience in this field along with our subcontractors, and we now offer services as well as laser devices applicable to different industries.

We encourage you, a leading manufacturer of branded products to make yourselves acquainted with this innovative bottle labeling technology. We offer device, which carries out the inside glass wall engraving and is chemically and abrasion resistant. Moreover engraving is not in contact with the liquid contained in the bottle.

Wine and spirits are constantly affected by fake goods, the annual losses run into millions of GBP. Fake wine and spirits destroy real brands, ruin the wine and spirits companies and harm the consumers.

### **Specification**

The unit was designed in collaboration with external partners such as research institutes and foreign cooperastors. We introduce to the market various technologically advanced laser equipment to meet the different customers needs.

## Application

Graving of numbering, logos, security codes, regional marks, two dimensional codes, micro-coding inside the wall or inside bottom of glass bottles. These characters and images are subsurface engraved inside the glassware, keeping the surface smooth. Only by damaging the glass bottle you can get rid of the mark! Truly deep permanent security reached!

## Technical data

Max. laser average power	5W
Wavelength	532nm
Marking depth	≤0.1mm
Quality of the laser M2	1.05.2011
Repeat frequency	≤50kHz
Standard engraving scope	100×100mm (static work)
Linear speed	8 meters/min (simplex, 3 characters high)
Min character	2mm
Repeat accuracy	±0.001mm
Input power	1KW
Electrical source	220V/single-phase/50Hz/10A
Dimensions	1135 mm×635 mm ×1310 mm
Cooling system	670 mm ×300 mm×475 mm

## Application Method

The equipment can be installed in the production line just after the filling stage and before the bulk container packing step but it can work as independent unit as well.

1. Ability to enter data for the assigned territory or different batches. We can label each bottle with consecutive numbers - automatically without manual conversion of characters (digits or letters). Besides information codes we can engrave images such as company logos or other marks raising the appeal of the packaging.
2. Each bottle may have a unique permanent number helpful in determining the batch /vintage for example at auctions.
3. Ability to engrave micro-codes visible only under magnifying glass.

In the case of your interest we will send more technical information and submit the offer.