# WATTSAN 1610 ST


The large format laser machine **Wattsan 1610 ST** is designed for cutting and mass production of products from non-metallic materials.

The device provides high-precision machining with a positioning accuracy of up to 0.01mm, and is easy to use and durable.

| | |
|---|---|
| Cutting: | wood, plywood, cardboard, paper, plastics, plexiglass (acrylic), leather, fabric, fur, PET, MDF, rubber, paronite, foam rubber |
| Engraving: | wood, plywood, cardboard, plastics, rubber, leather, fabric, fur, plexiglass (acrylic), PET, MDF, glass, stone etc. |

# Product parameters

| | |
|---|---|
| Model | 1610 ST |
| Brand | Wattsan |
| Laser type | Sealed CO2 laser tube |
| Application | Cutting, engraving |
| Warranty | 1 year |
| **Dimensions** | |
| Working area | 1600 * 1000 mm |
| Machine size (L * W * H) | 1505 mm * 2200 mm * 670 + 315 mm (if on its wheels) |
| Packing size | 2300 * 1600 * 810 mm |
| Weight | 442 kg |
| **Optics** | |
| Laser power | 100-120 W |
| Engraving depth | 3 mm |
| Max. cutting thickness (wood) | 10-13 mm |
| Diameter of mirrors | 25 mm |
| ZnSe lens | o20 f-50 |
| Focal length | 50 mm |
| Laser tube life | 10000 h |

| Mechanics | |
|---|---|
| Table model | Lamels |
| Lifting table | No |
| Lowering depth of the work table | 40 mm |
| Control system | Ruida RDC 6445G |
| Cutting speed | 0–500 mm/s |
| Engraving speed | 0–700 mm/s |
| Cooling | Water |
| Electric power supply | 220V |
| Power consumption | 2000 |
| Through table | Yes (Y-axis) |
| Y-axis structure | Linear guide AMT PMI MSB 15S |
| X-axis structure | Linear guide AMT PMI MSB 15S |
| Engine on X | 57-H350C / SH |
| Engine Y | 57-H350C / SH |


# Sphere of application

Souvenir industry, decor, light and heavy industry, funeral services, prototyping and much more. Laser cutting machines are used as stand-alone devices and in combination with other machines, as well as auxiliary equipment for production.

# Lamella table

To improve its quality, the machine is equipped with an anodized coated lamella table that prevents the beam from being pulled on the material or on the operator.
A lamella table is ideal for cutting, but if engraving is your priority, we can install a honeycomb table for this task that is much more suited to the task.
Anodized lamellas eliminate the possibility of backward shooting of the laser beam.

# Advantages:

**Belt gear reducer and 3M belt**
has an increased service life due to the size of the tooth, and also excludes the coin cut due to special materials.
Relieves stress on stepper motors, extending their service life.

**Strengthened portal**
the wall thickness of the aluminum pipe is 5mm, even at maximum speed you will get a perfect engraving.

**PMI rails**
guarantee high accuracy throughout the entire service life of the machine. It is the most widely used brand in the whole world.

**Frame construction**
the uniqueness of all Wattsan laser machines is the presence of a frame structure, this increases the weight of the machine and eliminates vibrations even at high speeds.

**Through table**
the most important advantage of our machine is its ability to work with unlimited lengths of material. The design of the equipment allows you to remove the front wall and use it for cutting free space.

**Three Phase Stepper Motors**
They are characterized by increased accuracy and reliability, as well as provide a smaller step when engraving.

**Unique cutting head**
We design our machines with universal cutting heads with wide and narrow nozzles. The wide nozzle blows away combustion residues and promotes better engraving. The laser head is designed for use with lenses with different focal lengths.

All machine tool upgrades are aimed at improving the end result, taking into account the opinions of customers. The products obtained in Wattsan machines do not require additional processing.
We consider many factors so that our customers can get the best quality products at a lower cost.
Each laser machine is designed to work 24/7.

# Processable materials:

Laser machine Wattsan 1610 ST is designed for cutting and engraving on a wide range of materials. Our task is not only to choose the right machine, but also to describe the specifics of processing all materials.


Plywood


Fabric


Rubber


Plastic


Wood


Leather


Acrylic


Ceramic tile


Crystal jade


Bamboo products


Granite


Marble


Resin


Cardboard


Paper


Fur


PET


MDF


Paronite


Foam rubber

# Training to work on the machine

Our machines are used all over the world with a huge variety of materials.
We are constantly gaining experience and will advise not only how to choose the optimal parameters for work, but also help to organize production.

If you have any questions about working with any material or your vector, our manager will send you a video of working with it!

We send the machine with a instruction book, thanks to which you can start the machine yourself.

We communicate using a video call and explain how to start the machine yourself.

An engineer from China arrives to you and gives training on how to work with the machine.

The nearest dealer (may be from the same or a neighboring country) will arrive to you and give instructions.

## We are improving our equipment so that you get the best!

**70**
engineers

**13**
years

In order to use our machines all over the world, for customers, we make them as reliable as possible and select the most popular consumables.

**43000**
factory area

**24/7**
communication

# Well-organized processes at all stages

## Durability

In order to use our machines all over the world, for customers, we make them as reliable as possible and select the most popular consumables.

## Development

The development department designs the machines so that they are suitable for all areas of production. Wattsan machines are designed to work in a 24/7 mode.

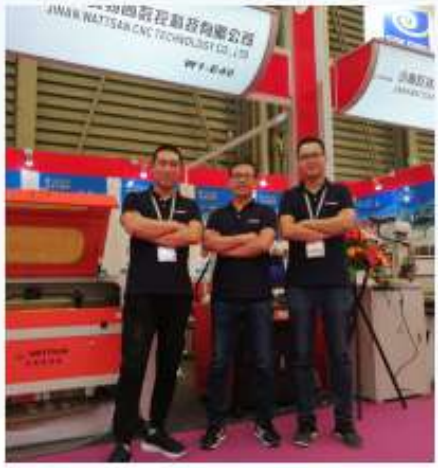
## Training

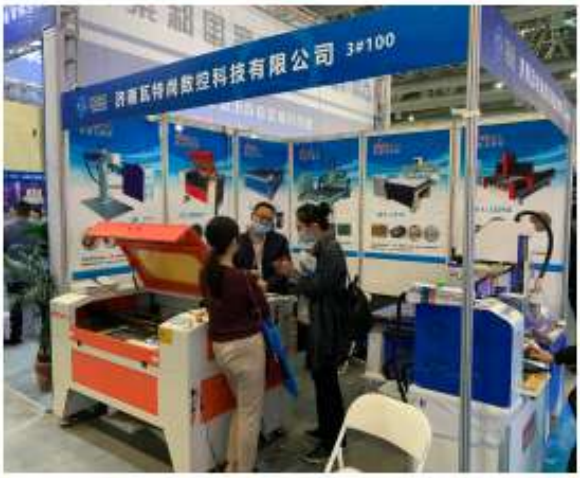
Wattsan has developed and is constantly improving a support system, training for customers and partners, which allows you to start using the equipment in a short time, avoid simple mistakes and get an immediate response from the service department.

## Quality

We use modern high-precision equipment for the assembly of machine tools. This is a guarantee of the highest rate of accuracy of machines throughout the entire life of the equipment.

# Exhibition





# Certificates


Equipment selection for the customer, instruction on logistics

Execution of the contract

Payment

Production of the machine

Quality control check (photo and video fixation)

Shipping

Receiving of the machine by the customer

Launching equipment

(Service engineer from China or from near dealer or On-line launching)

Machine operator and tool training

24/7 Support

When choosing components for our machines, we not only select the best components, but also control their availability in other countries for quick service by our customers or service engineers around the world.

Dealer
Service

## We will show the machine in On-line mode

Our employees will conduct a demonstration of the machine on-line or send you a video of cutting (engraving) your material according to your layout. If necessary, service engineers will resolve most of the issues that arise using video communication.