

# WATTSAN 1610 DUOS ST

The **Wattsan 1610 Duos ST** laser machine is an advanced medium format model for laser cutting and engraving of non-metallic materials.

The machine for cutting most materials to full size. The second cutting head significantly speeds up production.

**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 DUOS ST
Brand	Wattsan
Laser type	Sealed CO2 laser tube
Application	Cutting, engraving
Warranty	1 year
<b>Dimensions</b>	
Working area	1600 * 1000 mm
Machine size (L * W * H)	1600 mm * 2200 mm * 670 mm + 315 mm (if on its wheels)
Packing size	2300 mm * 1750 mm * 810 mm
Weight	457 kg
<b>Optics</b>	
Laser power	100–120 W
Engraving depth	3 mm
Max. cutting thickness (wood)	10–13 mm
Diameter of mirrors	25 mm
ZnSe lens	ø20 f-50
Focal length	50 mm
Laser tube life	10000 h

<b>Mechanics</b>	
Table model	Lamels
Lifting table	No
Lowering depth of the work table	40 mm
Control system	Ruida RDC 6445G
Cutting speed	0-400 mm/s
Engraving speed	0-600 mm/s
Cooling	Water
Electric power supply	220V
Power consumption	3350
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
Engine for the second head	57-H350B (option)

Wood  
processing



Production of  
souvenir



Light and medium  
industry



Decor and design



Outdoor  
advertising

## 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:



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



**Through table**  
the most important advantage of the 1610 DUOS is the ability to work with unlimited material lengths. The fact is that the design of the equipment allows you to remove the front wall and use the freed up space for through cutting.



**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.



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



**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.



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



**Two working heads**  
that is why the machine is called DUOS. The two heads work synchronously with a minimum distance of 130 mm from each other, which speeds up the production process of serial products in half.

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 Duos 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!

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.

**70**  
engineers

**13**  
years



**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.

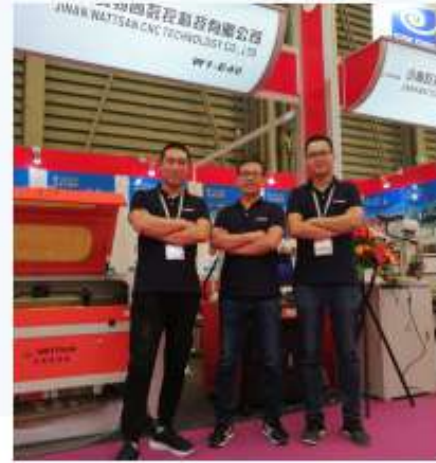
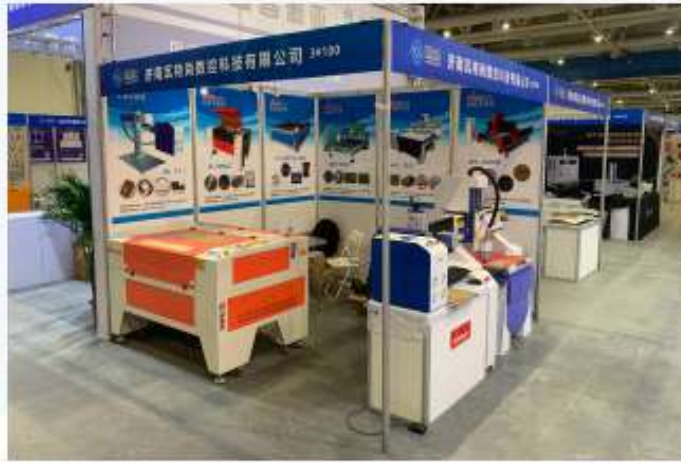


### **Quality**

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





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.

