

# WATTSAN 6090 ST

Medium format laser machine **Wattsan 6090 ST** is designed for serial production and cutting of non-metallic materials.

The device is characterized by reliable assembly, high-precision machining (positioning accuracy up to 0.01 mm) and easy operation.

**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	6090 ST
Brand	Wattsan
Laser type	Sealed CO2 laser tube
Application	Cutting, engraving
Warranty	1 year
<b>Dimensions</b>	
Working area	600 * 900 mm
Machine size (L * W * H)	1030 mm * 1490 mm * 670 mm + 315 mm (if on its wheels)
Packing size	1110 * 1580 * 755 mm
Weight	230 kg
<b>Optics</b>	
Laser power	80-90 W
Engraving depth	1.5 mm
Max. cutting thickness (wood)	10 mm
Diameter of mirrors	25 mm
ZnSe lens	ø20 f-50
Focal length	50 mm
Laser tube life	7500 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
Working temperature	10-35
Electric power supply	220V
Power consumption	1500
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-H350CS / SH
Engine Y	57-H350CS / SH

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.



**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.



## PMI rails

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



## Ruida 6445G

the most widely used laser control system in the world. The new modification has an enlarged display.



## 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.



## 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 6090 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.

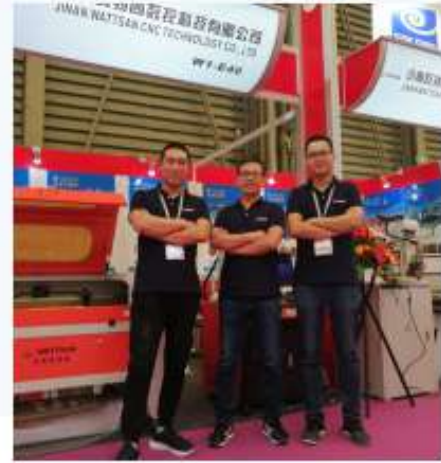


### **Quality**

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.

