

## High-speed CO2 Laser Cutting & Engraving Machine

——MY-L3040HS&4060HS&L6090HS



## High-speed CO2 Laser Engraving & Cutting Machine

### Feature

1. The complete Interlock System can protect the operator from smoke or laser radiation hurting once the operator opens any door on the machine.
2. RUIDA DSP controller RDC6445G system is the latest generation of laser engraving / cutting control system. The control system has better hardware stability and better resistance to high voltage and static electricity.
3. Strong competitiveness: DSP control system supports windows XP/7/8/10, virtual printer driver model and Flying cutting.
4. WIFI wireless control system can help you control more machine by one computer, and DATA Transit is faster and easier.
5. Equipped with high-precision Guide Rail, with small resistance, low machanical vibration and beautiful appearance.
6. The laser tube from RECI Laser guarantees high stability and fine laser beam, the lifespan of tube can reach 10 000 hours. The laser has Global Warranty, the new laser tube for replacement can be shipped globally, buyers don't need to pay any shipping cost.
7. The smart water-cooling system can keep the temperature inside tube while the laser is firing, it ensures the stable output of laser.
8. The machine is suitable for thin & soft material smoothly cutting or engraving at high speed, and can cut thick acrylic, wood, bamboo, etc

### Application

WISELY HS Series laser cutting & engraving machine is mainly used to cut thin and soft non-metal materials, such as leather, fabric, textile, cloth, paper and so on. Meanwhile, the machine can cut or engrave thick acrylic, bamboo, plastic, marble, glass, woods, etc. It can process the plexiglas products, acrylic display panel lenses, wood carving, advertising products, crystal characters, models, toys, furniture and so on.

### Parameter

Model	MY-L3040HS	MY-L4060HS	MY-L6090HS
Working Area	400*300mm	400*600mm	600*900mm
Laser Power	40W / 60W / 90W / 100W / 130W / 150W		
Laser Type	RECI Glass CO2 laser tube (Lifespan: Max. 10 000 hours)		
Transmitting Parts	High-speed Guiderail		
Drive Type	Stepper Driver / Motor		
Default Software / Controller	RUIDA DSP Controller & RDWorks		
Max. Cutting Speed	1500mm/s		
Max. Corner Acceleration	6000mm/s		
Recommended Corner Acceleration	Less than 3500mm/s, we suggest you to use different Corner Acceleration for different materials		
Max. Engraving Speed	1200mm/s		
Mechanical Vibration in process	0.1 ~ 0.6		
Positioning Accuracy	≤ 0.015mm		
Min. Forming Character	English: 1.5 x 1.5mm		
Power Supply	220V±10% 50HZ or 110V±10% 60HZ		
Software Supported	CorelDraw, ArtCut, PhotoShop, AutoCAD		
Graphic Format Supported	PLT, DXF, BMP, JPG, GIF, PGN, TIF and so on		
Working Table (DEFAULT)	Fixed Honeycomb / Blade Table		
Air Pump & Water Pump & Chiller	Yes		
Exhausting System	Yes		
Gross Power	<1200W		
Net Weight	90 KG	180 KG	260 KG
Gross Weight	150KG / 0.7CBM	240KG / 1.4CBM	350KG / 2.4CBM
Dimension (mm)	88*70*65cm	130*74*93cm	141*102*101cm
Package Size (mm)	98*80*85cm	140*84*113cm	157*118*126cm
Operating Temperature	0℃-45℃		
Operating Humidity	5%-95% Free of condensed water		
Recommended Spare Parts	Lens, Mirror, Laser Tube, Laser Power Supply, Rotary, CCD camera etc.		

### Shipment

Within 5~7 working days after receiving your payment.

### Warranty

Whole machine has a warranty period of 12 months since the production date except the laser tube, mirror and lens.

### Training

1~3 working-days training free of charge in factory. Oversea training is available, the buyer can discuss the details with the salesman.

## Main Configurations

	<h3>1. Interlock for Safety</h3> <p>All doors have sensors which can guarantee the INTERLOCK will work properly. It protects the operator from smoke and laser hurting.</p> <p>Once we open any door / cover on the machine, the machine will stop working, XY axis will stop moving, laser will stop firing.</p>		
	<h3>2. RUIDA DSP Control System</h3> <p>RDC6445G system is the latest generation of laser engraving / cutting control system developed by Ruida Technology. The control system has better hardware stability and better resistance to high voltage and static electricity. The human-machine operating system based on the 5-inch color screen has a more friendly operation interface and more powerful functions.</p>		<h3>3. WIFI Remote Control</h3> <ol style="list-style-type: none"><li>1. Convenient - DATA transit and machine control via wireless networks.</li><li>2. The operator can use one computer to control many sets of machine, the WIFI is suitable for factory production.</li></ol> <p>Meanwhile, the machine supports the data transit and machine control via USB cable. You can use any one between the two.</p>
	<h3>4. RECI Glass CO2 Laser Tube</h3> <ol style="list-style-type: none"><li>1. Fine Laser Beam (Small Laser Dot)</li><li>2. Stable Laser Output (Always get the same laser dot and laser power output)</li><li>3. Long Lifespan (Max. 10 000H)</li><li>4. Global Warranty (Can ship new tube for replacement globally, buys don't need to pay any shipping cost)</li></ol>		<h3>5. Zhenyu Power Supply</h3> <ol style="list-style-type: none"><li>1. This power supply can make the CO2 laser easy to start, fully exert the performance of the CO2 laser, and extend the life of the laser.</li><li>2. The operator can adjust the current by the ammeter while machine is working.</li></ol>
	<h3>6. High-Speed Guide Rail</h3> <ol style="list-style-type: none"><li>1. High-series Mjunit High-Speed guide rail, light weight, low mechanical vibration, low noise, small resistance, the above characters ensure the laser machine working fast and smoothly.</li><li>2. Beautiful appearance can help the buyer with sales.</li></ol>		<h3>7. Leadshine Driver &amp; Stepper Motor</h3> <ol style="list-style-type: none"><li>1. Low-speed Ripple Smoothing</li><li>2. Extra Low Motor Noise</li><li>3. Anti Resonance at Middle-Speed Range</li><li>4. Multi-stepping Technology</li><li>5. Command Signal Smoothing</li><li>6. Lower Heating Technology</li><li>7. Self-test and Auto-configuration</li></ol>
	<h3>8. Home Limit Switch</h3> <ol style="list-style-type: none"><li>1. The home limit switches on the machine, which are non-contact sensors, prevents the X &amp; Y axis from attempting to go beyond the mechanical limits of the machine.</li><li>2. WISELY machine adopts the sensors from Omron in Japan, which can guarantee the laser head will not hit the XY axis guiderail.</li></ol>		<h3>9. Fixed Honeycomb or Blade Table</h3> <ol style="list-style-type: none"><li>1. The Fixed Honeycomb is suitable for engraving or cutting soft materials.</li><li>2. The Fixed Blade Table is suitable for hard materials cutting.</li></ol> <p>You can choose one between the two.</p>



	<p><b>10. Pass-Thru Doors</b></p> <p>The machine frame is built with doors that allow materials to extend out the front and/or rear of the machine. The is helpful when engraving or cutting material that can't fit completely inside the machine. The limits are endless. The max. thickness of material which can go through the door is 30mm</p>		<p><b>11. Castor Wheels</b></p> <p>Each machine is equipped with 4 or 6 castor wheels to make it easier to move it around the workshop or office. The Castor Wheels can weigh from 150 kg to more than 1000 kg.</p>
	<p><b>12. Focal Lens and Mirror</b></p> <p>Znse raw materials, imported from Singapore, high penetration, high reflectance and long life.</p> <p>The reflecting rate of silicon reflecting mirror can reach 99.99%.</p>		<p><b>13. Water Chiller</b></p> <p>Industry Water Chiller CW3000 / CW5200 / CW6000, guarantees stable performance, good for keeping temperature of operation for laser beam stable output.</p>
	<p><b>14. Exhaust Blower</b></p> <p>The vacuum blower creates an air flow to remove dust and fumes from the working table of the laser machine, make sure the working table clean and nice engraving and cutting works.</p>		<p><b>15. Air pump</b></p> <p>The air pump is used for three basic reasons:</p> <p>I. To push fumes away from the focal lens. The contaminants could destroy the lens.</p> <p>II. To push air into the material's kerf as created by the laser beam. The air will remove debris/fumes and allow the laser light to penetrate deeper through the material.</p> <p>III. To cool the material. If the laser cut/engraved material stays hot, then it could warp or shrink.</p>
 <p>Left</p> <p>Right</p>	<p><b>14. Water-Electricity Separation</b></p> <p>In order to guarantee the safety, we put the "WATER AREA" at the right rear of machine, put the "ELECTRICITY AREA" at the left rear of machine.</p>		<p><b>15. Waring Lamp</b></p> <p>A function of alerting the operator when finishing the cutting work flashing lamp and a warning lamp when working, when you open door or door not closed, it will not laser out, to protect the operator.</p>

## Optional Parts

	<p><b>1. Auto Focus</b></p> <p><b>I.</b> Ultrasonic Sensor can guarantee the auto focus in high precision.</p> <p><b>II.</b> The auto focus can be used on almost non-metallic materials, such as acrylic, wood, paper, bamboo, glass, plastic, marble and so on.</p> <p><b>III.</b> The auto focus must work with the motorized up/down worktable. You will get right focal length after pressing the button "focus" on control panel, the table will go up/down, then stop moving until the machine find the correct focal length.</p>		<p><b>2. Motorized Up/Down Table</b></p> <p><b>I.</b> Each machine has a piece of fixed honeycomb or blade table, but you can pay extra money to update the standard fixed table to a Motorized Up/Down table.</p> <p><b>II.</b> The motorized up/down table was equipped with motor and ballscrews, you will get enough space to load big objects by lowering the table, especially when you need a rotary for cylinder engraving.</p> <p><b>III.</b> The Motorized Up/Down Table can work with Auto Focus perfectly.</p>
	<p><b>3. Yongli/RECI Laser Tube and Power Supply</b></p> <p>25/40/60W Yongli laser tube and laser power supply</p> <p>W2: 90-100W (90W laser power supply) W4: 100-130W (100W power supply) W6: 130-160W (130W power supply) W8: 150-180W (150W power supply)</p> <p>To get some tubes or power supply for stock is necessary for distributors or resellers.</p>		<p><b>4. Rotary Attachment</b></p> <p>The rotary attachments are suitable for cylinder objects engraving &amp; cutting, such as wine bottle, wood cylinder, etc.</p> <p>We have two types of rotary attachment for your options.</p> <p><b>I.</b> Rotary Attachment with roller - for something like wine bottle</p> <p><b>II.</b> 3-jaw Rotary Attachment - for normal cylinder engraving.</p>
	<p><b>5. Focal Lens and Reflecting Mirror</b></p> <p>Znse raw materials, imported from Singapore, high penetration and long lifespan.</p> <p>The 1.5" or 2" Focal Length is suitable for engraving, the lens would better work with any laser tube with power less than 100W.</p> <p>The 3" or 4" Focal Length is more suitable for cutting, the lens would better work with laser tube with power more than 100W.</p> <p>The raw material of reflecting mirror is silicon, the reflectance can reach to 99.99%, and it can work with any laser power less than 300W.</p>		<p><b>6. Working Table</b></p> <p><b>I.</b> The Honeycomb Table is suitable for engraving or soft material cutting.</p> <p><b>II.</b> The Blade Table is more suitable for hard material cutting.</p> <p>Each machine will have one table free of charge, you can choose one between the two.</p> <p>If you have soft and hard material engraving and cutting, we advise you to buy one extra table for further use.</p>
	<p><b>7. RUIDA CCD</b></p> <p>RUIDA CCD is used for image recognition, with high sensitivity, fast response speed. It's suitable for large quantities products engraving &amp; cutting jobs automatically.</p>		<p><b>8. Red Dot Pointer</b></p> <p>We put the combiner at front of the laser aperture, the combiner will have a red dot pointer which can go with the laser to the laser head, the red laser which is visible can simulate the invisible CO2 laser. We will know the accurate place and the scale the laser will fire before the machine starts moving.</p> <p>It makes the laser head simple.</p>



## Sample Gallery



### Photos Engraving on Wood



### Marble & Wood & People Photos Engraving



### Wooden Case & Bamboo & Coconut Engraving



### Artworks Wood & MDF Cutting



### Wood & MDF Cutting





Acrylic Cutting & Crystal & Wood Engraving



Acrylic Cutting

Thick Acrylic Cutting

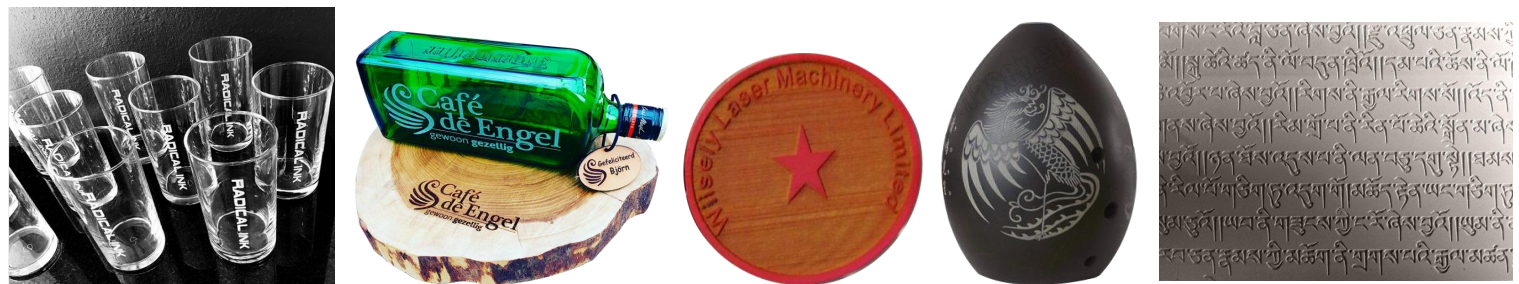


Fabric Cloths & Leather Shoes Cutting



Double color board & Acrylic & Leather Engraving

Oval Template & Paper Cutting



Glass & Rubber & Marble & Pottery Engraving