| <br>Software Installation                                    |               |   |
|--|---------------|---|
| <br>Finished Installation Interface                          |               |   |
| <br>USB Driver Installation Interface                        |               | OOM/ A smaller Oratting a Demonstration |
| <br>Software Interface                                       |               | 80W Acrylic Cutting Parameter           |
| <br>Import Import Applicable Format                          |               |   |
| <br>Data Check   |               | 100W Acrylic Cutting Parameter          |
| <br>Curve auto close   |               |   |
| <br>Combine curve  |               | 135W Acrylic Cutting Parameter          |
| <br>Delete Overlap   |               | Toot Acrylic Outling Fuldheter          |
| <br>Curve Smooth   |               | 300W Acrylic Cutting Parameter          |
| <br>Show Path  |               | Soow Acrylic Culling Parameter          |
| <br>Cut Optimize Inside to outside                           |               | COM/ Engraving Developmentar            |
| Order of layer Block handle                                  |               | 60W Engraving Parameter                 |
| <br>Layer Parameter Layer Parameter-Cut Layer Parameter-Scan | Layer Paramet | ter-                                    |
| Dot  |               | 60W Half-cutting Parameter and          |
| <br>Line/column Setup  |               |   |
| <br>Position   |               | remarks                                 |
| <br>Go scale   |               |   |
| <br>Start Pause/Continue Stop                                |               | 135 W Glass Tube Plywood Cutting        |
| Summary  |               | , |
| How to choose different size focus lens                      |               | Parameter                               |
| About Air Pressure   |               |   |

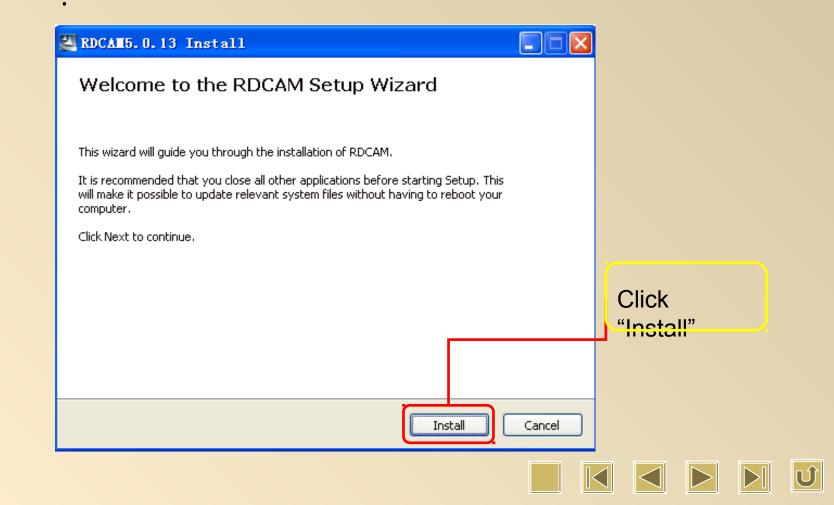


### **Software Installation**

Double click



### , here comes out software installation window



### Choose Software Version, Language and Mother Board :

| Welcome to use  |                  |   | Install USB driver   |
|---|------------------|---|----------------------|
| Inst  | tall USB driver  |   | Choose Type          |
| Type:   | LaserWork        | ~ |                      |
| Language:   | Simplify Chinese | ~ | Choose               |
| Mainboard:  | RDLC320          | * | Language             |
| Locate insta<br>Demo version<br>Pen drawing<br>Plug LaserWo | lines            |   | Choose Mainboard     |
| Install   | Exit             |   | Install the software |
|   |                  | _ |                      |



### **Finished Installation Interface**

| RDCAM5.0.21       | Install                     |          |
|-------------------|-----------------------------|----------|
| R                 | Welcome to use              |          |
|                   | Install USB driver          |          |
| Please wait while | Type: RLaserSetUpV5         | iinutes. |
|                   | Language:                   |          |
|                   | Mainboard V Install Finish! |          |
|                   | Locate OK Demo ve           |          |
|                   | Pen drawing lines           |          |
| Execute the comn  |                             |          |
|                   | Install Exit                |          |
| Convright 22011R  |                             |          |
|                   | < Back Next >               | Cancel   |

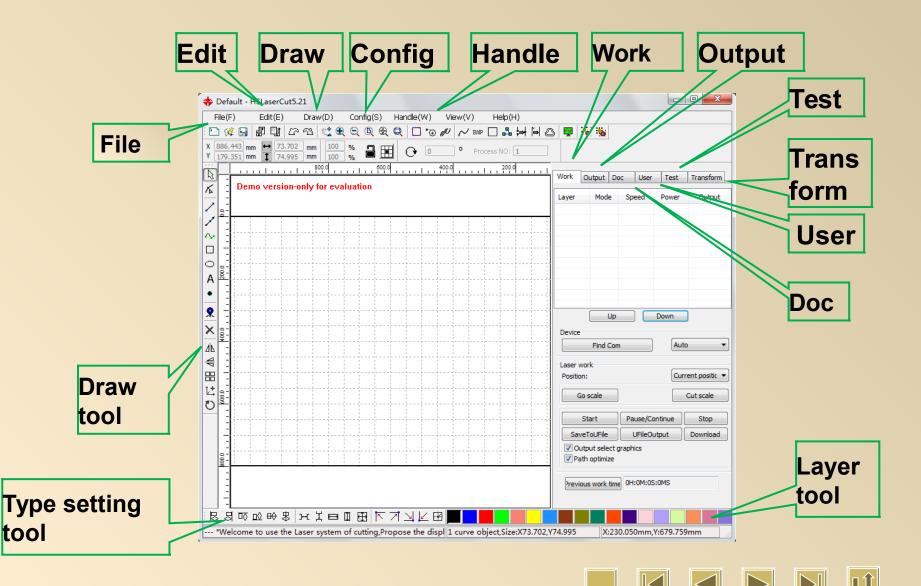


### **Finished Driver Installation Interface**

| 🛃 RDCAM5.0.21      | Install                       |                 |  |  |  |
|--------------------|-------------------------------|-----------------|--|--|--|
| k}                 | Welcome to use                |                 |  |  |  |
|                    | Install USB driver            |                 |  |  |  |
| Please wait while  | Type: Di scorSoti loV5        |                 |  |  |  |
|                    | Type: RLaserSetUpV5 X         |                 |  |  |  |
|                    | Mainboard (1) Install Finish! | tall the driver |  |  |  |
|                    | Locate OK                     |                 |  |  |  |
|                    | Demo ve<br>Pen drawing lines  |                 |  |  |  |
| Execute the comn   | Plug LaserWork                |                 |  |  |  |
|                    | Install Exit                  |                 |  |  |  |
| Copyright ?2011Rec | la(SZ)Ltd,                    |                 |  |  |  |
|                    | < Back Next >                 | Cancel          |  |  |  |

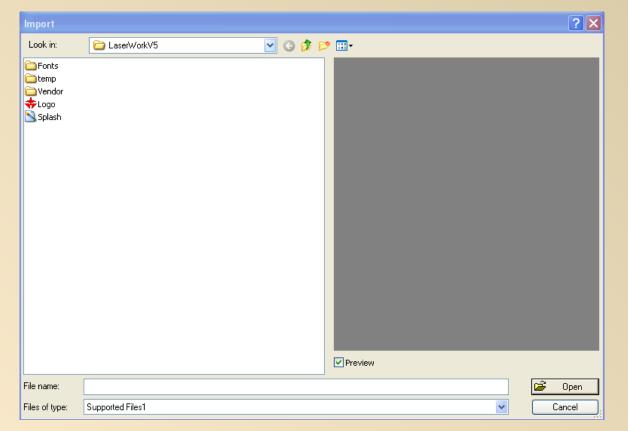


### **Software Interface**





Click one time diamond to import our design shown in the following. Choose proper file and click [Open].





## **Import Applicable Format**

# 勖

### .ai / .dxf / .plt etc are applicable

| Import  |  | ? 🛛    |
|---|--|--------|
| Look in:  | 🔁 LaserWorkV5 🛛 🕑 🕜 🌮 🖽 -  |        |
| Conts<br>Contemp<br>Contemp<br>Vendor<br>◆ Logo.ico<br>Splash.bmp | DXF Files (".dxf)<br>DXF Files (".dxf)<br>DST Files (".dxf)<br>DSB Files (".dxb)<br>BMP Files (".dxb)<br>BMP Files (".bmp)<br>GIF Files (".ipg,".jpeg,".jpe;".jpf)<br>PNG Files (".jpg,".jpeg,".jpe;".jpf)<br>PNG Files (".ipg)<br>MNG Files (".ing)<br>ICON Files (".ing)<br>ICON Files (".ing)<br>ICON Files (".cur)<br>TIFF Files (".tif,".tiff)<br>TGA Files (".tiga)<br>PCX Files (".tga)<br>PCX Files (".tga)<br>PCX Files (".tomp)<br>WMF Files (".wmf)<br>EMF Files (".ipg)<br>JP2 Files (".jpg,)<br>RAS Files (".ras) |        |
| File name:  | PNM Files (".pnm;".pgm;".ppm)<br>SKA Files (".ska)<br>RAW Files (".raw)  | 🗃 राम  |
| Files of type:  | Supported Files1   | Cancel |







Click , then we will see the following:

| Data check       |                 |  |
|------------------|-----------------|--|
| Check close      | Error(mm): 0.01 | Close check end<br>Find unclose curves:9<br>Self-cross check end<br>Not find self-cross curves |
| Check self-cross |                 | Cross check end<br>Find cross curves:1<br>Overlap check end                                    |
| Check cross      |                 | Find overlap lines:279   |
| Check overlap    |                 |  |
| Enable error     | Error(mm): 0.01 | Check  |



## Curve auto close



### Click so we will see the following:

| Setting close error                              |  |
|--|--|
| Close error(mm): 0.1<br>Force to close Ok Cancel |  |

Closing Allowance: Curve will close automatically when the allowance is smaller than the number we type into.

**Compulsory Closing: Tick this function for compulsory closing.** 





Click there is a new interface coming out as follow.

| Setting combine error 🛛 🛛 🔀 |  |
|-----------------------------|--|
| Combine error(mm): 0.1      |  |
| Ok Cancel                   |  |

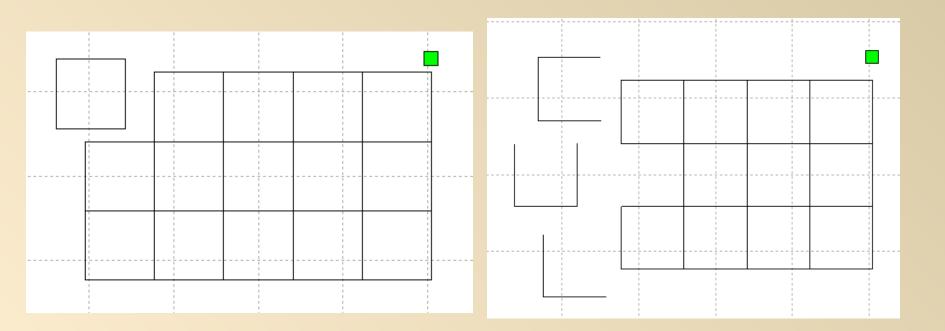
New curve will be seen according to the above setting for combination allowance. Max. is 5mm.



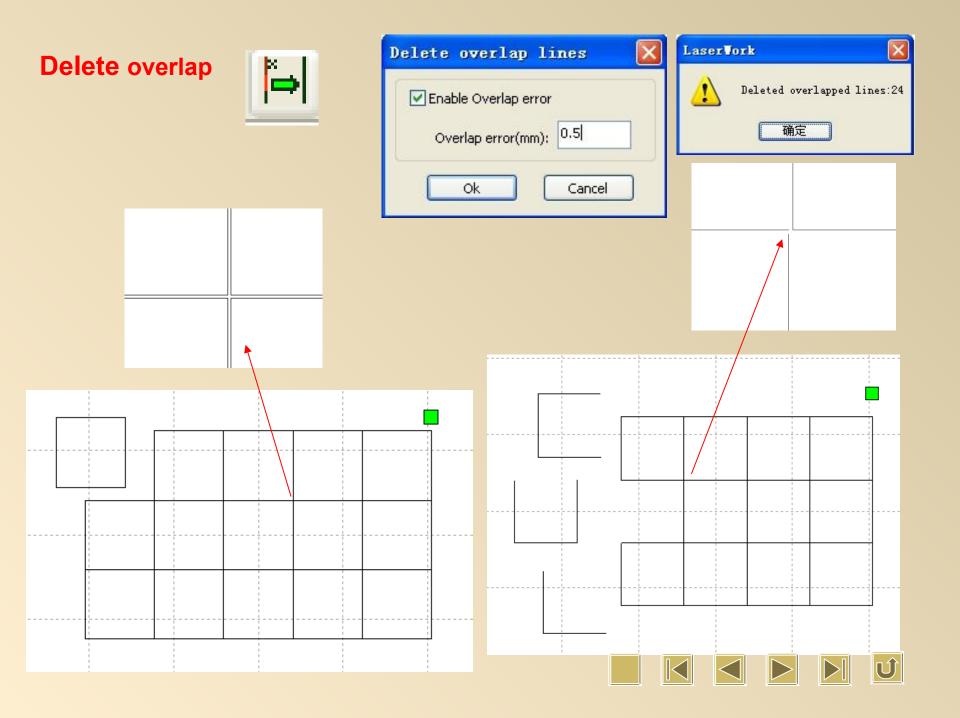
## Delete overlap



| Delete overlap lines 🛛 🔀       | LaserVork 🛛 🔀               |
|--------------------------------|-----------------------------|
| Enable Overlap error           | Deleted overlapped lines:24 |
| Overlap error(mm): 1 Ok Cancel |                             |







## Curve Smooth

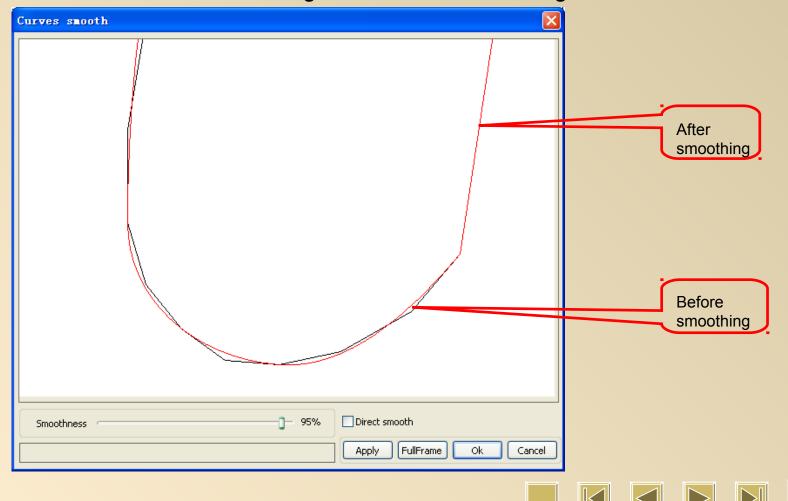
Click 🔁 so as to smoothen curve with the following way:

| Curves smooth  |
|--|
| CHOLMOUTON<br>SA                                     |
| Smoothness 95% Direct smooth Direct smooth Ok Cancel |
|  |

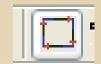




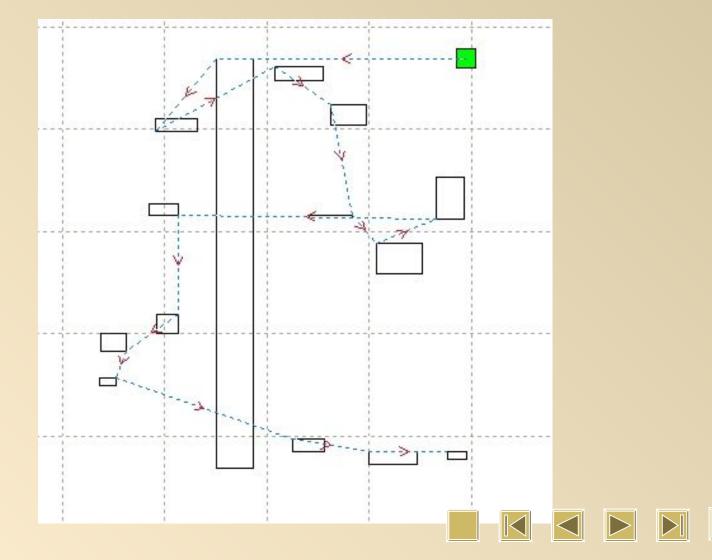
Adjusting smooth rate then we will see the previous and after changing result. Black line is before smoothening, and after smoothening is red line.



## Show path



Tick "path displaying" so we will see the order and direction.







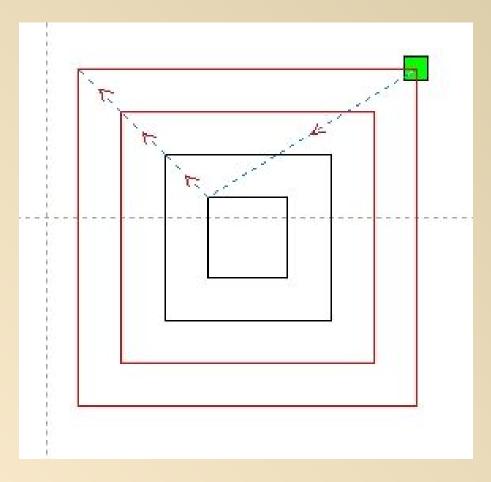
To optimize order for outputting, we have to use this function.

| Cutting optimize handle  |
|--|
| Order of layer   |
| Inside to outside  |
| Single inner to outer  |
| Block handle<br>Height: 50 Dir: Up to bott                     |
| Start point optimize  Auto determine start point and direction |
| Ok Cancel  |



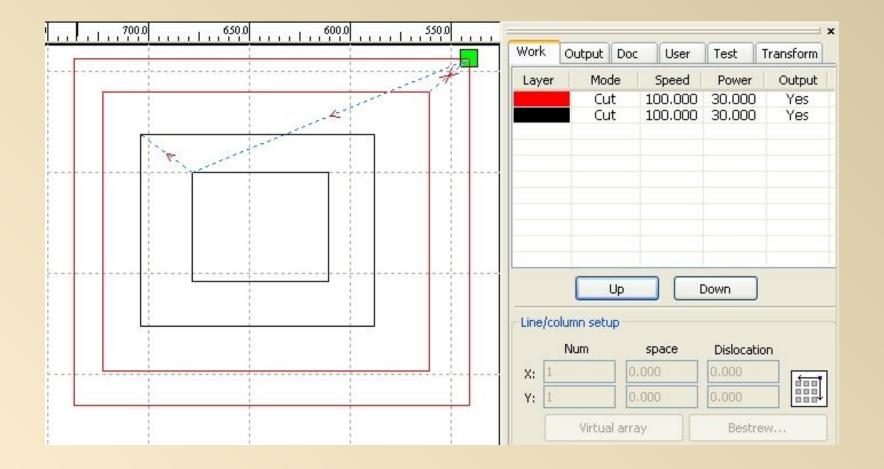
## **Inside to outside**

## Inside to outside Single inner to outer

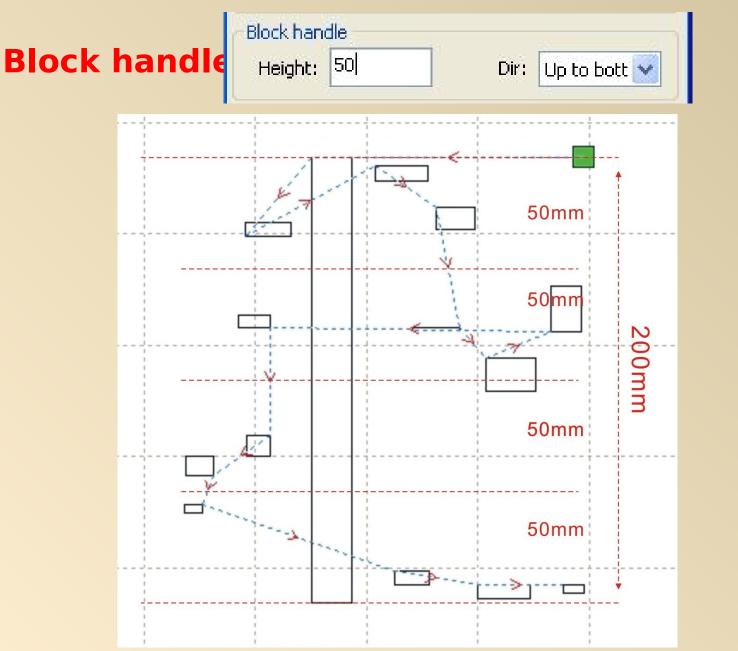














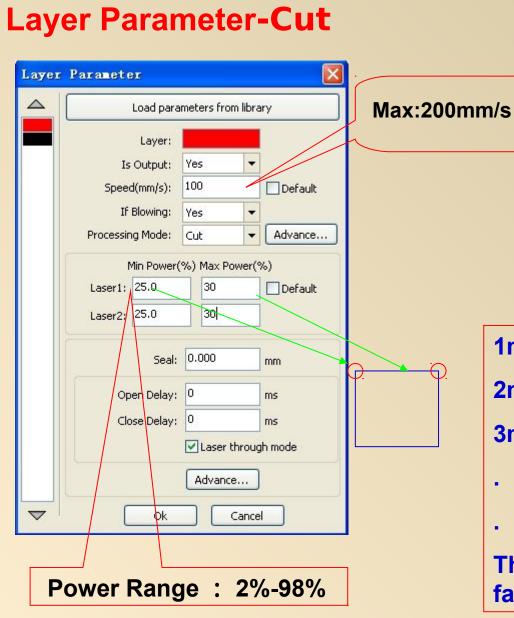
## Layer Parameter

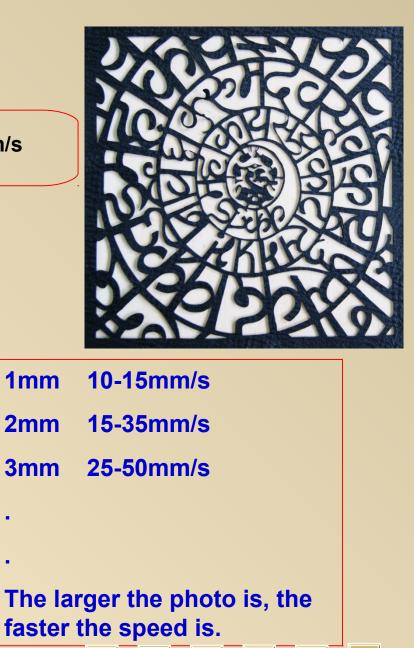
| Work  | Output | Doc | User    | Test   | Transform |
|-------|--------|-----|---------|--------|-----------|
| Layer | Mod    | de  | Speed   | Power  | Output    |
|       | Cu     | ıt  | 100.000 | 30.000 | Yes       |
|       | Cu     | it  | 100.000 | 30.000 | Yes       |

#### Click 2 times on different color to get layer setting interface

| Layer | Parameter  |  | X                         | Layer | Parameter  |   |                                     |
|-------|--|--|---------------------------|-------|--|---|-------------------------------------|
|       | Load para  | meters from libr                                     | ary                       |       | Load para  | ameters from libra                                | ary                                 |
|       | Laser1: 30   | Yes ▼<br>No<br>Yes ▼<br>Cut ▼<br>%) Max Power(<br>30 |                           |       | Layer:<br>Is Output:<br>Speed(mm/s):<br>If Blowing:<br>Processing Mode:<br>Min Power<br>Laser1: 30 | Yes<br>100 Yes<br>Cut<br>Scan<br>Cut<br>Dot<br>30 | Default<br>Advance<br>%)<br>Default |
|       | Laser2: 30<br>Seal:<br>Open Delay:<br>Close Delay: | 0.000  | mm<br>ms<br>ms<br>gh mode |       | Laser2: 30<br>Seal:<br>Open Delay:<br>Close Delay:   | 0.000   | ] mm<br>] ms<br>] ms<br>gh mode     |
| ~     | Ok   | Cance  | el                        |       | Ok   | Cance   | 9                                   |



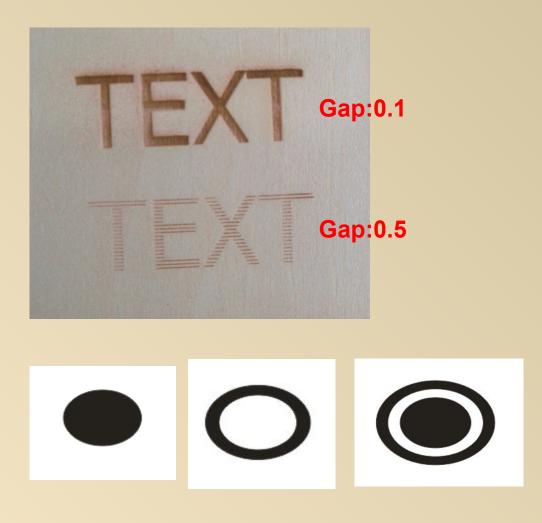




Ú

## Layer Parameter-Scan

| Layer | Parameter   |                              |      |                         |  |  |  |  |  |
|-------|---|------------------------------|------|-------------------------|--|--|--|--|--|
|       | Load para   | Load parameters from library |      |                         |  |  |  |  |  |
|       | Layer:<br>Is Output:  | Yes 🔻                        |      |                         |  |  |  |  |  |
|       | Speed(mm/s):<br>If Blowing:                                   | 200.00<br>Yes                | •    | Default                 |  |  |  |  |  |
|       | Processing Mode:  | Scan                         | -    | Advance                 |  |  |  |  |  |
|       | Min Power   | (%) Max Pow                  | er(% | 6)                      |  |  |  |  |  |
|       | Laser1: 20.0  | 20.0                         |      | Default                 |  |  |  |  |  |
|       | Laser2: 20.0  | 20                           |      |                         |  |  |  |  |  |
|       | Negative Engr<br>Output direct<br>Ramp Effect<br>Ramp Length: | Inde                         |      | ed Scan<br>Ident output |  |  |  |  |  |
|       | Overstriking: L   | In-process                   | •    |                         |  |  |  |  |  |
|       | Scan Mode: 🛛  | _swing                       | •    |                         |  |  |  |  |  |
|       | Interval(mm): 0   | .1                           |      | Advance                 |  |  |  |  |  |
|       | Ok  | Ca                           | ncel |                         |  |  |  |  |  |

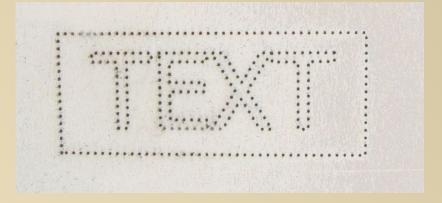


Attention: It must be closed design.



## Layer Parameter-Dot

| Layer | Paramete  | er                                       |     |                       |       |               |
|-------|---|--|-----|-----------------------|-------|---------------|
|       |   | n libra                                  | ry  |                       |       |               |
|       | Layer:<br>Is Output:<br>Speed(mm/s):<br>If Blowing: |  | 10  | Yes<br>100.00<br>Yes  |       | Default       |
|       | Processir   | ng Mode:                                 | Do  | it                    | -     | Advance       |
|       | r   | Min Power                                | (%) | Max Po                | wer(% | %)            |
|       | Laser1:   | 30.0                                     |     | 30.0                  |       | Default       |
|       | Laser2:   | 30.0                                     |     | 30.0                  |       |               |
|       |   | Dot time:<br>ot interval:<br>Dot length: | 1.  | 100<br>000<br> Center | dot   | s<br>mn<br>mn |
|       | (   | Ok                                       |     |                       | ance  |               |



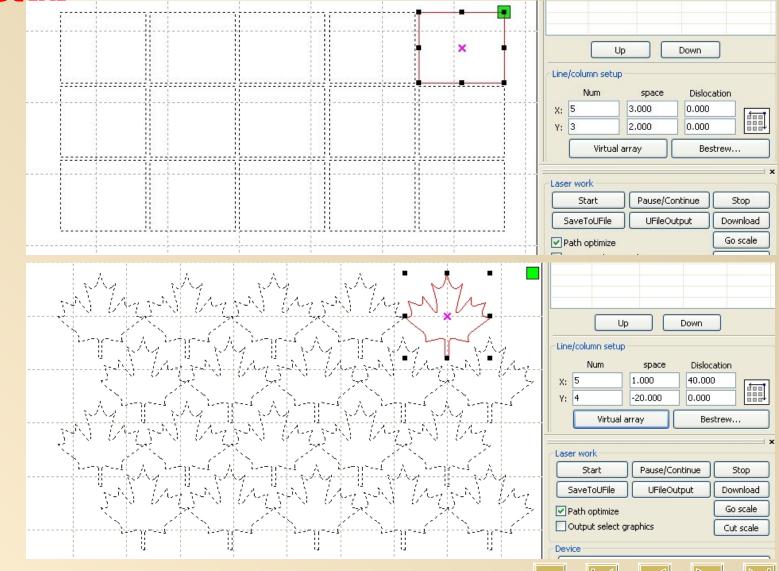
Gap: 1mm Length: 0mm



Gap: 1mm Length: 2mm



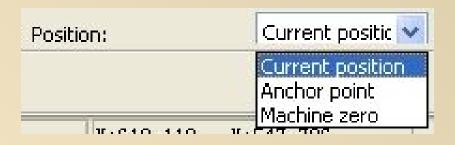
## Line/column Setup







## **Position**



Obviously, this function is used to set up starting point for laser head. It has 3 choices: present, previous, machinery

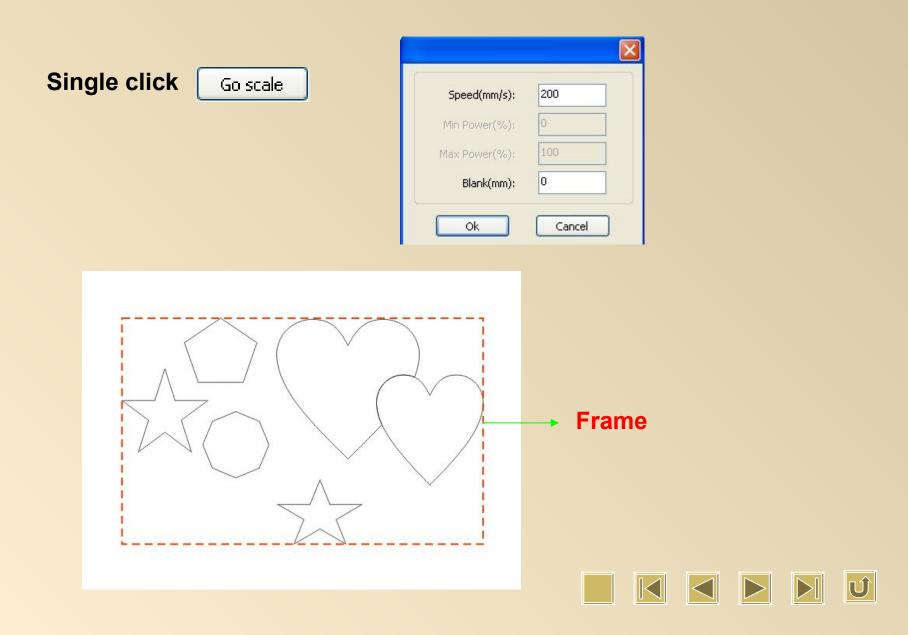
1.Present: Laser Head stats to move from the present location.

2.Previous: Choose this one, laser head moves from the previous setting point. And it can be changed by "Origin" on panel. Origin

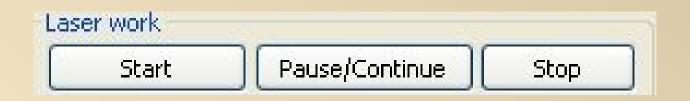
3. Machinery: Laser Heads moves back to Zero Point, that is the right side at the top of platform.



### Go scale



## **Start** Pause/Continue **Stop**



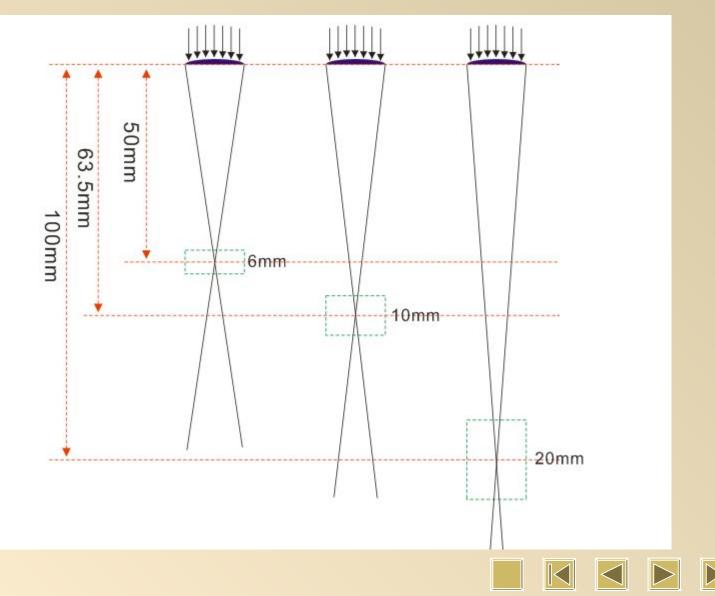
1. Start: Press this button so as to give order to machine to start to work.

2.Pause/Continue: Single click for pause, and double click to continue.

3. Stop: Machine stops working if we press this button.



### How to choose different size focus lens



### **Air Pressure**

Fabric Cutting: Adjust accordingly if there is no deformation for fabric sheet. The larger the pressure is, the better the cutting result will be.

Fabric Engraving : Not too large not too small.

Acrylic Cutting: Increase pressure a little for those under 2mm.

Decrease it if acrylic is beyond 2mm to prevent possible error.

Acrylic Engraving: Small pressure is ok to get transparent result.

Double Color Board Cutting: Large pressure is necessary to prevent from black edge.

**Double Color Board Engraving : Never use large pressure.** 

Wood Cutting: Must use large air pressure.

Wood Engraving: Not too large not too small.



| 80W Laser Tube Cutting Parameter (Reference Photo No.4) |              |                  |            |            |                              |  |  |  |  |  |
|---|--------------|------------------|------------|------------|------------------------------|--|--|--|--|--|
| Lens f63.5  | Speed (mm/s) |                  | Powe       | er (%)     | Remarks                      |  |  |  |  |  |
| Thickness   | Best Speed   | Applicable Speed | Min. Power | Max. Power |                              |  |  |  |  |  |
| 1mm   | 60           | 35-100           | 75         | 80         | Reference Photo No. 1        |  |  |  |  |  |
| 2mm   | 50           | 30-80            | 75         | 80         | Reference Photo No. 1        |  |  |  |  |  |
| 3mm   | 20           | 10-30            | 75         | 80         | Reference Photo No. 2        |  |  |  |  |  |
| 5mm   | 8            | 6-17             | 75         | 80         | Reference Photo No. 2        |  |  |  |  |  |
| 8mm   | 4            | 3-6              | 75         | 80         | Reference Photo No. <b>3</b> |  |  |  |  |  |
| 10mm  | 4            | 2-5              | 75         | 80         | Reference Photo No. <b>3</b> |  |  |  |  |  |
| Lens f100   | Speed        | (mm/s)           | Powe       | er (%)     | Remarks                      |  |  |  |  |  |
| Thickness   | Best Speed   | Applicable Speed | Min. Power | Max. Power |                              |  |  |  |  |  |
| 1mm   | 55           | 20-90            | 75         | 80         | Reference Photo No. 1        |  |  |  |  |  |
| 2mm   | 45           | 15-70            | 75         | 80         | Reference Photo No. <b>1</b> |  |  |  |  |  |
| 3mm   | 15           | 8-28             | 75         | 80         | Reference Photo No. 2        |  |  |  |  |  |
| 5mm   | 7            | 5-15             | 75         | 80         | Reference Photo No. 2        |  |  |  |  |  |
| 8mm   | 4            | 2-6              | 75         | 80         | Reference Photo No. <b>3</b> |  |  |  |  |  |
| 10mm  | 3            | 2-5              | 75         | 80         | Reference Photo No. <b>3</b> |  |  |  |  |  |
| 12mm  | 2            | 1-5              | 75         | 80         | Reference Photo No. <b>3</b> |  |  |  |  |  |



| <b>100W Laser Tube Cutting Parameter</b> (Reference Photo No.4) |            |                  |            |            |                              |  |  |  |  |  |
|---|------------|------------------|------------|------------|------------------------------|--|--|--|--|--|
| Lens f63.5  | Speed      | (mm/s)           | Pow        | er (%)     | Remarks                      |  |  |  |  |  |
| Thickness   | Best Speed | Applicable Speed | Min. Power | Max. Power |                              |  |  |  |  |  |
| 1mm   | 100        | 40-130           | 75         | 80         | Reference Photo No. 1        |  |  |  |  |  |
| 2mm   | 60         | 30-90            | 75         | 80         | Reference Photo No. 1        |  |  |  |  |  |
| 3mm   | 25         | 10-40            | 75         | 80         | Reference Photo No. 2        |  |  |  |  |  |
| 5mm   | 12         | 8-20             | 75         | 80         | Reference Photo No. 2        |  |  |  |  |  |
| 8mm   | 5          | 2-7              | 75         | 80         | Reference Photo No. <b>3</b> |  |  |  |  |  |
| 10mm  | 4          | 2-6              | 75         | 80         | Reference Photo No. <b>3</b> |  |  |  |  |  |
| Lens f100   | Speed      | (mm/s)           | Pow        | er (%)     | Remarks                      |  |  |  |  |  |
| Thickness   | Best Speed | Applicable Speed | Min. Power | Max. Power |                              |  |  |  |  |  |
| 1mm   | 60         | 30-100           | 75         | 80         | Reference Photo No. 1        |  |  |  |  |  |
| 2mm   | 30         | 20-50            | 75         | 80         | Reference Photo No. 1        |  |  |  |  |  |
| 3mm   | 15         | 10-30            | 75         | 80         | Reference Photo No. 2        |  |  |  |  |  |
| 5mm   | 10         | 7-15             | 75         | 80         | Reference Photo No. 2        |  |  |  |  |  |
| 8mm   | 5          | 2-9              | 75         | 80         | Reference Photo No. <b>3</b> |  |  |  |  |  |
| 10mm  | 4          | 2-6              | 75         | 80         | Reference Photo No. <b>3</b> |  |  |  |  |  |
| 12mm  | 3          | 2-5              | 75         | 80         | Reference Photo No. 3        |  |  |  |  |  |
| 15mm  | 1.5        | 1-3              | 75         | 80         | Reference Photo No. 3        |  |  |  |  |  |



| 135W Laser Tube Cutting Parameter (Reference Photo No.4) |              |                  |            |            |                       |  |  |  |  |  |
|--|--------------|------------------|------------|------------|-----------------------|--|--|--|--|--|
| Lens f63.5   | Speed (      | mm/s)            | Powe       | er (%)     | Remarks               |  |  |  |  |  |
| Thickness  | Best Speed   | Applicable Speed | Min. Power | Max. Power | 1                     |  |  |  |  |  |
| 1mm  | 100          | 40~150           | 75         | 80         | Reference Photo No. 1 |  |  |  |  |  |
| 2mm  | 60           | 30~90            | 75         | 80         | Reference Photo No. 1 |  |  |  |  |  |
| 3mm  | 25           | 10~35            | 75         | 80         | Reference Photo No. 2 |  |  |  |  |  |
| 5mm  | 12           | 8~18             | 75         | 80         | Reference Photo No. 2 |  |  |  |  |  |
| 8mm  | 6            | 3~9              | 75         | 80         | Reference Photo No. 3 |  |  |  |  |  |
| 10mm   | 5            | 3~7              | 75         | 80         | Reference Photo No. 3 |  |  |  |  |  |
| Lens f100  | Speed (mm/s) |                  | Powe       | er (%)     | Remarks               |  |  |  |  |  |
| Thickness  | Best Speed   | Applicable Speed | Min. Power | Max. Power | ]                     |  |  |  |  |  |
| 1mm  | 60           | 40~120           | 75         | 80         | Reference Photo No. 1 |  |  |  |  |  |
| 2mm  | 50           | 30~75            | 75         | 80         | Reference Photo No. 1 |  |  |  |  |  |
| 3mm  | 20           | 10~30            | 75         | 80         | Reference Photo No. 2 |  |  |  |  |  |
| 5mm  | 10           | 8~15             | 75         | 80         | Reference Photo No. 2 |  |  |  |  |  |
| 8mm  | 6            | 3~10             | 75         | 80         | Reference Photo No. 3 |  |  |  |  |  |
| 10mm   | 5            | 3~7              | 75         | 80         | Reference Photo No. 3 |  |  |  |  |  |
| 12mm   | 4            | 2~6              | 75         | 80         | Reference Photo No. 3 |  |  |  |  |  |
| 15mm   | 2.5          | 1~4              | 75         | 80         | Reference Photo No. 3 |  |  |  |  |  |
| 20mm   | 1            | 1~2              | 75         | 80         | Reference Photo No. 3 |  |  |  |  |  |



|                     | 300W Las     | ser Tube Cuttin  | g Parameter (R | eference Photo | No.4 )                |
|---------------------|--------------|------------------|----------------|----------------|-----------------------|
| Lens f63.5          | Speed (mm/s) |                  | Powe           | er (%)         | Remarks               |
| Thickness           | Best Speed   | Applicable Speed | Min. Power     | Max. Power     |                       |
| 1.9mm with<br>paper | 80           | 30-120           | 80             | 85             | Reference Photo No. 1 |
| 3.4mm with<br>paper | 40           | 10-70            | 80             | 85             | Reference Photo No. 2 |
| 4.7mm with          | 20           | 8-30             | 80             | 85             | Reference Photo No. 2 |
| 8mm with paper      | 10           | 3-15             | 80             | 85             | Reference Photo No. 3 |
| 9.7mm without paper | 7            | 3-10             | 80             | 85             | Reference Photo No. 3 |
| Lens f100           | Speed        | (mm/s)           | Powe           | er (%)         | Remarks               |
| Thickness           | Best Speed   | Applicable Speed | Min. Power     | Max. Power     | 1                     |
| 1.9mm with<br>paper | 70           | 30-110           | 80             | 85             | Reference Photo No. 1 |
| 3.4mm with          | 40           | 10-62            | 80             | 85             | Reference Photo No. 2 |
| 4.7mm with          | 18           | 8-28             | 80             | 85             | Reference Photo No. 2 |
| 8mm with paper      | 10           | 3-15             | 80             | 85             | Reference Photo No. 3 |
| 7mm without paper   | 7            | 3-10             | 80             | 85             | Reference Photo No. 3 |
| .6mm without pape   | • 3          | 1-6              | 80             | 85             | Reference Photo No. 3 |
| 0mm without paper   | 2            | 1-3.5            | 80             | 85             | Reference Photo No. 3 |
| 25mm without paper  | 1            | 0.8-2            | 80             | 85             | Reference Photo No. 3 |





| Work | Coutput Doc User        | Test   | Transform |
|------|-------------------------|--------|-----------|
| Ξ    | Cut parameters          |        | ^         |
|      | Idle speed(mm/s)        | 200.00 |           |
|      | Idle Acc(mm/s2)         | 1000.0 | 0         |
|      | Start speed(mm/s)       | 15.000 | =         |
|      | Min Acc(mm/s2)          | 800.00 |           |
|      | Max Acc(mm/s2)          | 1000.0 |           |
|      | Cutting mode            | Normal | Cutting   |
|      | Acc Mode                | S mode |           |
| Ξ    | Sweep parameters        |        |           |
|      | x Start Speed(mm/s)     | 40     |           |
|      | y Start Speed(mm/s)     | 15.000 |           |
|      | x Acc(mm/s2)            | 5000.0 | 0         |
|      | y Acc(mm/s2)            | 2000.0 | 00        |
|      | Line Shift Sneed (mm/s) | 150.00 | n 💌       |

| Worl | Output      | Doc    | User    | Test           | Transfe | orm |
|------|-------------|--------|---------|----------------|---------|-----|
|      | Cut param   | neters |         |                |         | ^   |
|      | Idle speed  | 200.00 | )       |                |         |     |
|      | Idle Acc(n  | nm/s2) |         | 1000.0         | )0      |     |
|      | Start spee  | ed(mm/ | 's)     | 5.000          |         |     |
|      | Min Acc(m   | 1m/s2) |         | 300.00         | )       |     |
|      | Max Acc(r   | nm/s2) | 500.00  |                |         |     |
|      | Cutting m   | ode    |         | Normal Cutting |         |     |
|      | Acc Mode    |        |         | S mode         |         |     |
|      | Sweep pa    | ramete | ers     |                |         |     |
|      | x Start Sp  | ieed(m | m/s)    | 40             |         |     |
|      | y Start Sp  | ieed(m | m/s)    | 15.000         | )       |     |
|      | x Acc(mm    | /s2)   | 5000.00 |                |         |     |
|      | y Acc(mm    | (s2)   | 2000.0  | 000            |         |     |
|      | l ina Shift | Snood  | (mm/s)  | 150.00         | າດ      | Y   |

| Work | Output Doc I        | Jser   | Test           | Transform |  |
|------|---------------------|--------|----------------|-----------|--|
|      | Cut parameters      |        |                | ~         |  |
|      | Idle speed(mm/s)    | 200.00 | )              |           |  |
|      | Idle Acc(mm/s2)     |        | 1000.0         | 0         |  |
|      | Start speed(mm/s)   |        | 5.000          | =         |  |
|      | Min Acc(mm/s2)      |        | 200.00         | )         |  |
|      | Max Acc(mm/s2)      | 300.00 | )              |           |  |
|      | Cutting mode        |        | Normal Cutting |           |  |
|      | Acc Mode            |        | S mode         | в         |  |
| Ξ    | Sweep parameters    |        |                |           |  |
|      | x Start Speed(mm/   | s)     | 40             |           |  |
|      | y Start Speed(mm/   | s)     | 15.000         | )         |  |
|      | x Acc(mm/s2)        |        | 5000.0         | 0         |  |
|      | y Acc(mm/s2)        |        | 2000.0         | 000       |  |
|      | Line Shift Sneed (m | nm/s)  | 150.00         | חר 💌      |  |

Photo 1

Photo 2

Photo 3





| 135W Glass Tube Plywood Cutting Parameter |            |                     |            |            |  |  |  |  |  |
|---|------------|---------------------|------------|------------|--|--|--|--|--|
| Lens <b>f63.5</b>                         | Speed (    | (mm/s)              | Power (%)  |            |  |  |  |  |  |
| Thickness                                 | Best Speed | Applicable<br>Speed | Min. Power | Max. Power |  |  |  |  |  |
| 1mm                                       | 80         | 30-120              | 75         | 80         |  |  |  |  |  |
| 3mm                                       | 40         | 10-70               | 75         | 80         |  |  |  |  |  |
| 5mm                                       | 20         | 8-30                | 75         | 80         |  |  |  |  |  |
| 8mm                                       | 10         | 3-15                | 75         | 80         |  |  |  |  |  |
| Lens f100                                 | Speed (    | (mm/s)              | Power (%)  |            |  |  |  |  |  |
| Thickness                                 | Best Speed | Applicable<br>Speed | Min. Power | Max. Power |  |  |  |  |  |
| 1mm                                       | 70         | 30-100              | 75         | 80         |  |  |  |  |  |
| 3mm                                       | 30         | 10-50               | 75         | 80         |  |  |  |  |  |
| 5mm                                       | 15         | 8-25                | 75         | 80         |  |  |  |  |  |
| 8mm                                       | 12         | 5-15                | 75         | 80         |  |  |  |  |  |
| 12mm                                      | 4          | 1-6                 | 75         | 80         |  |  |  |  |  |

| 60W Laser Tube Engraving Parameter (Reference Photo No. 6) |              |                  |            |            |                   |                       |  |  |  |  |
|--|--------------|------------------|------------|------------|-------------------|-----------------------|--|--|--|--|
| Lens f50   | Speed (mm/s) |                  | Power (%)  |            | Scanning Gap (mm) | Remarks               |  |  |  |  |
| Material   | Best Speed   | Applicable Speed | Min. Power | Max. Power |                   |                       |  |  |  |  |
| Acrylic  | 200          | 10-400           | 18         | 18         | 0.08(0.05以上)      | Reference Photo No. 5 |  |  |  |  |
| Double Color<br>Board                                      | 200          | 10-400           | 18         | 18         | 0.08(0.05以上)      | Reference Photo No. 5 |  |  |  |  |
| Wood   | 200          | 10-400           | 18         | 18         | 0.08(0.05以上)      | Reference Photo No. 5 |  |  |  |  |
| Denim  | 200          | 10-400           | 18         | 18         | 0.25(0.05以上)      | Reference Photo No. 5 |  |  |  |  |



| Work | Output                  | Doc    | User   | Test        | Transform |
|------|-------------------------|--------|--------|-------------|-----------|
|      | Sweep pa                | ramete |        | ~           |           |
|      | x Start Sp              | eed(m  | 40     |             |           |
|      | y Start Sp              | eed(m  | 15.000 |             |           |
|      | x Acc(mm                | /s2)   | 8000   |             |           |
|      | y Acc(mm/s2)            |        |        | 2000.000    |           |
|      | Line Shift Speed (mm/s) |        |        | 150.000     |           |
|      | Scan Mode               |        |        | Common Mode |           |
|      | Facula Size(50~99%)     |        |        | 98.000      | )         |
|      | Home para               | 9      |        |             |           |
|      | Home speed(mm/s)        |        |        | 80.000      | )         |
|      | Auto hom                | еX     | Yes    |             |           |
|      | Auto hom                | еY     | Yes    |             |           |
|      | Auto hom                | e z    | No     |             |           |
|      | Auto hom                | еU     | No     | *           |           |

Photo 5



**Acrylic Engraving Result** 



Double Color Board Engraving Result



Wood Engraving Result



**Denim Engraving Result** 



## 60W Laser Tube Half-cutting Parameter

| Lens f50                | Speed (mm/s)  |                      | Power (%)     |               | Remarks  |
|-------------------------|---------------|----------------------|---------------|---------------|--|
| Material                | Best<br>Speed | Applicabl<br>e Speed | Min.<br>Power | Max.<br>Power | Min. Power is to control corner laser force<br>while max. power take control of laser force<br>for straight line. With improper min. power,<br>the result won't be good, neither there is no |
| Wood                    | 20            | 1~200                | 8.8           | 9             | light nor black edge.  |
| Double<br>Color Board   | 20            | 1~200                | 8.8           | 9             | Better not using large power laser tube  |
| Acrylic                 | 20            | 1~200                | 8.8           | 9             | 40w glass laser tube or RF metal laser tube<br>will be a good option   |
| Reflective<br>Materials | 20            | 1~200                | 8.5           | 8.5           | HS 60W laser tube is so good as SP 60W for min. power  |



# Thanks for your patient browsing.

