THE CTRUCTURE OF LASER ENGRAVER

Main components:CO2 laser , laser switch ,control motherboard ,control panel ,flat bench ,fixture ,
Light system ,illuminating system and water-cooling system

◆ Explanation of the control panel :

<u>Electric current adjustment :</u> using this button to adjust the electric current output.
<u>Electric current range:</u> mA : refers to actual output electric currnet of the engraver .The output current range of DC-K40III is 0-20 mA .(generally the current will not over 15 mA)
<u>Laser switch:</u> After pressing the button ,the laser switch be pressed before each engrave ,otherwise the laser will not shine.
<u>Checking switch:</u> Only available for checking .
<u>Switchboard :</u> Master switch for controlling engraver.

◆ Appearance and connecting directions of the engraver:

<u>Parallel digital port :</u> At right side of the engraver , the port will connect with relevant port on the computer through printing cable .
<u>Switchboard port :</u> At right hinder of the engraver (5A) ,close to the switch port , safety coefficient of the machine can be guaranteed .
<u>Water-cooling pipe port :</u> It is for the circulation of cooling water . To lengthen the service life of the laser tube ,   purified water is to promoted .
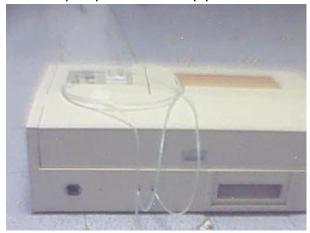<u>Fan port :</u>   At the hinder of the engraver and used for the installation of exhaust fan . The fan must be correctly installed for the cleanness of the machine .

◆ Installation of the Engraver : (detailed procedures)

1. Unpacking , put the engraver flatly on the desk ,turn on the switch and observe the self-check of the machine ('Recover ' button, at the left upper corner of the platform).
2. Connect one end of the water pipe to the pump (normally right end is intake pipe). Put the other end and switch to see water current is normal or not (water circulation means normal).
3. Turn on 'laser switch ' and 'checking switch ' and adjust output electric current .presently the laser pipe will illuminate (Note : laser can't be seen by bare eyes .Hands should not be inserted into its avoid being burnt).
4. Shut off switchboard , connect engraver and computer through relevant ports and turn on the switch of engraver and computer one by one . Enter engrave surface , fix the engrave surface onto focusing area of the focus lens .then make a trial.

The switch must connect to secure ground wire!

Following I want to introduce how to install the fan and the water pump on the

machine , hoping it can help you :

1.Water pump and smoke pipe installation

Before Install Water pump and smoke pipe, make sure the water pump is running. but do not switch on machine.

2.Connect the water pipe with the water pump

Then the other end of the water pipe flow out water

Now put the end of the water pipe in water ware, Make sure the water is circulating

Prepare the fan for smoke

Smoke pipe for fan

Install fan on the smoke exit

Fan is installed

Install smoke pipe on smoke fan

Switch on fan while run the machine now you can switch on the machine and try to make a small sample of the engraving. When you run the machine, make sure the water pump is always running and the water on pipe is circulatory flowing !

◆ Operating instructions :

1. Engraving procedures: Turn on switchboard of the engraver and make sure

cooling water circulation is functional . After measuring the engraving object . pinch it on the focus of the focus lens . Turn on computer , enter engrave surface and make typesetting .

2. Notes and maintenance points :

a) The engraver should be put on flat surface without slant . Avoid collision when move .

b) Check out cooling water , pararrel line and switch before getting in use . Conduct without cooling water is strictly prohibited to proof against laser destruction. Reflection mirror and focus lens should be examined frequently with absorbent cotton wiping off the dirt. Damaged plating coat should be replaced in time .

c) Deviated light road should be adjusted instantly during engraving process (non-professionals are prohibited to touch it).

d) Before engraving new material , first judge it whether suitable to the laser engraver and get parameters through experiment . During engraving process , any part of human body is prohibited putting into light road avoid being burnt).

Note : laser .reflection mirror and focus lens are exhaustible material . Ventilation pipe should be connected outdoors .

◆ Common breakdown and the fixation :

A. After typesetting and output .if the laser head don't move , you should :

a) Be sure that the engraver is connecting to the computer .

b) Shut off the switch and check whether the parallel line is well connected .

B. If the laser don't illuminate , you should :

a) Be sure that the laser switch has been pressed down .

b) Check whether the electric current button at the zero place . If so , adjust it to appropriate place.

c) Observe the cooling water in normal process or not . If it stops to work , maybe the laser has been damaged , and you should shut off the machine immediately. In half an hour , check whether the cooling water unit return to normal state , if so reopen the machine .

d) If the power of the laser decrease, then maybe it reaches its longevity and should replace it in time. If the laser work normally and engraving parameter is right . but engraving effects is not good . then you should :

a) Check whether engraving surface is on the focusing area of the focus lens .

b) Judge whether the engraver power is decreasing . If so , you should increase output current or change the laser .

c) Check whether the light road is diverted: cover the entrance of the first , second and third reflector (the first generation machine has four reflectors) with polyester film successively , press down laser switch and hand checking switch . observe the location of light spot . If the spot diverts from the certer of entrance . you should adjust the position and angle of laser or reflector slightly to guarantee the light road pass through the focus lens . (The adjustment of

light road is not easy . please contact the maintenance section.)

d) If extra lines take place in engraving process; you should check the pararrel digital line and replace it if necessary.

Please look up the Manual if you have any question; Please cintact us if you couldn't resolve the problems!

◆ Accessories and other articles:

Switch wire , computer parallel line (typewriter cable), software . technical manuel ,product qualification (Posted on the machine ,then there is no maintenance sheet), a length of ventilating pipe , a ventilating fan and a water pump . Any short of the above articles , please request to the engraver manvfacturer or agent .

Catalogue of software

Short introduction of NewlySEAL

Ⅰ. Setup NewlySEAL

Ⅱ. The knowledge ready for make a seal

Ⅲ. Make a seal

1. Make a department seal.

2. Make a contract seal.

3. Make a more-line-ring words department seal.

4. Make a right angle square seal.

5. Make a round line inside seal.

6. Other seal examples.

Ⅳ. Make seal template

1. Male seal template.

2. Choose seal template.

3. Manage seal template.

Ⅴ. Output seal

Ⅵ. Seal engrave

Introduction of Newly-Sino®

NewlySEAL

This software is easy to operate even though the user not contacts the computer.

NewlySEAL Software combines modern computer technical with traditional seal craft. It's sort scientific, easy to operate, and conform to seal trade and technical demand

This software has a large of common seal template. That was composed. The user just fill in the words and the output the seal, it has the function of seal template, so the user can make lots of same form seals with deferent appellation.

The manage function of seal template can exchange the new seal templates between the users of Newlysoft or between the users and Newlysoft company. Newlysoft website (www.0123.com.cn) supply with marry seal template for user.

This is software adapt to different habits of different region. It can calculate line length, word height, word wide, line space word speck automatic. User output BMP JPG GIF picture document etc. It is easier exchange with other software. It is can compose lace and stripe code convict.

Computer demand

CPU main frequency: 100MH2 or above;

Memory：32MB or above;

The hard disk: 10-400MB;

CD drive；   USB port

Operate System: WINDOW2000/XP.

Recommendation：CPU: P Ⅲ ; Memory: 128MB; Operate System: WINDOW2000. The cultivation is higher and the velocity is quicker.
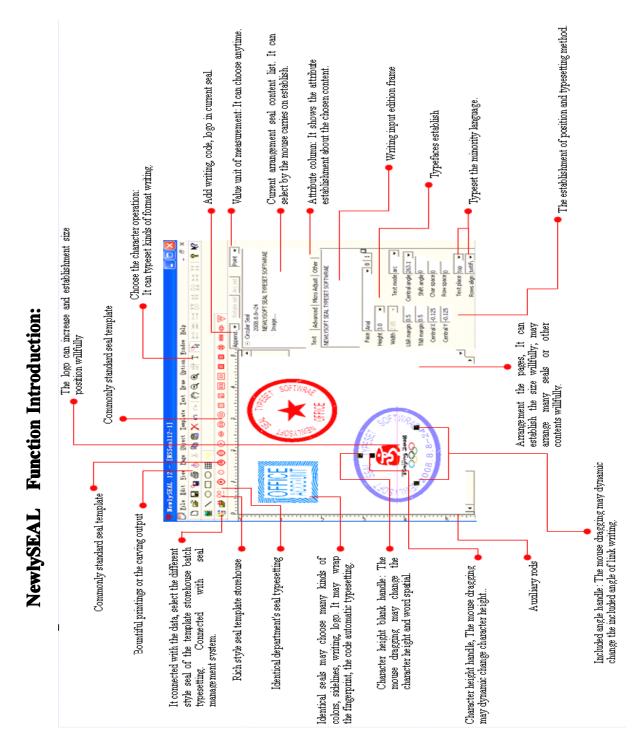
Output function

According different edition the user can print，engrave and save as BMP, JPEG, and GIF picture decampment.

Seal 11 various editions function discrimination

Function \ Edition	Carves the stereotype	Prints the version	Carving printing version	The forgery-proof carves the stereotype	Forgery-proof printing version	Versatile version
Forgery-proof grain line and code	Artificial	Artificial	Artificial	Automatic	Automatic	Automatic
Database row of seal	X	X	X	√	√	√
The engraving machine outputs	√	X	√	√	X	√

Printer output	X	√	√	X	√	√

NewlySEAL Function Introduction:

The logo can increase and establishment size position willfully

Commonly standard seal template

Choose the character operation: It can typeset kinds of format writing.

Add writing, code, logo in current seal.

Value unit of measurement: It can choose anytime.

Current arrangement seal content list. It can select by the mouse carries on establish.

Attribute column: It shows the attribute establishment about the chosen content.

Writing input edition frame

Typefaces establish

Typeset the minority language.

The establishment of position and typesetting method.

Commonly standard seal template

Bountiful printings or the carving output.

It connected with the data, select the different style seal of the template storehouse batch typesetting. Connected with seal management system.

Rich style seal template storehouse

Identical department's seal typesetting

Identical seals may choose many kinds of colors, sidelines, writing, logo. It may wrap the fingerprint, the code automatic typesetting.

Character height blank handle: The mouse dragging may change the character height and word spatial.

Character height handle, The mouse dragging may dynamic change character height..

Auxiliary rods

Arrangement the pages, It can establish the size willfully, may arrange many seals or other contents willfully.

Included angle handle: The mouse dragging may dynamic change the included angle of link writing.

Ⅰ. NewlySEAL installation orders.

1. Put the NewlySEAL 11 disc into the CD-room, it will setup automatically. If the procedure not movement, then fellow these orders: Double click "My computer" → Double click compact disc icon → Double click "Setup" icon;

2. Choose installment.

3. After installs the software the tabletop will appear "sets up the NewlySEAL 11" the icon

4. Put the NewlySEAL USB key insert a USB receptacle of your computer;

5. If your current operating system is WINDOWS2000/98/Me, then it can appear the dialog box of "Discovered the new hardware", the system can install the actuation automatically, does not need any operation, until the dialog box vanishing;

Ⅱ. Manufacture seal knowledge preparation (Department Seal example)

1. It can draw a rectangle outside the seal, the following chart (Figure 2-1) shows for the red rectangle.

Figure 2-1

2. Each part of writing or the graph all can become the object. When the mouse places on the object, it will appear a pink color frame around the correspond object, the following chart (Figure 2-2) shows.

Figure 2-2

3. Noun explanation

Logo: The decorate graph mark in the seal.

Center line: The beautification line of the seal center.

Nearby character spatial: The distance from the outside boundary of the link words to the sides of the outside rectangle (The red rectangle of Figure 2-1) in the round, ellipse seal. The distance from outside boundary of the character to the frame in the square shape seal.

Between character spatial: The distance between every words in a same line.

Between lines spatial: The distance between every lines.

Link platoon: The writing arrangement for arc in round seal.

Included angle: It's the included angle between the left and right side of the round words line and the centre line of the seal.

Character height: The height of the character.

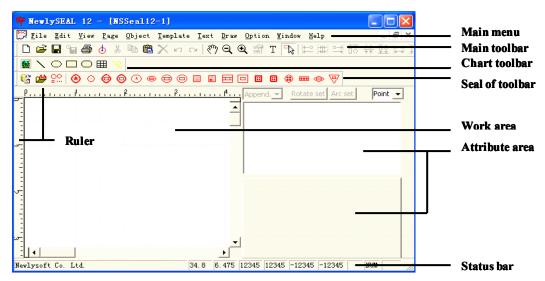4. The basic contact surface software and every part names like chart 2-3.

Figure 2-3

Ⅲ. Manufacture a seal

1. To manufacture a department seal

⑴ Single-click the button ⊕ of the toolbar, then the work area will appear a department seal automatic (Figure3-1). It has four objects, upper part of the category region is objects list, and lower part is category of the objects.
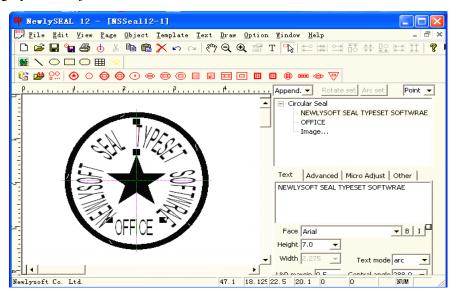

Figure 3-1

⑵ To revise, increase, delete the objects according to the customer requests.

①Revises the up-round writing.

a. Selects the up-round writing: The mouse single-clicks the up-round writing, around the link row of writing appears four control points, the mouse places in the writing to become　　　.

b. Changes the up-round writing: Change the "NewlySEAL Typesetting Software" into the words what the user want in the writing frame of category area and enter.

c. Adjusting the included angle of round line: The mouse places about a link row of writing in two side control points Becoming　　or　⬈, drag the mouse, loosens the mouse left key after satisfaction. Or: Enter the degree (eg: enter 240) at the "included angle" category region straightly.

Attention: Don's t cover the other objects.

d. The change character height: Use the mouse to pull the up and down side control point of the round words till your satisfaction. Or: Enter the height (eg: enter 7) at "Height" of the category column straightly.

② Revision the logo

a. Selects the logo: The mouse places in the logo to single-click the mouse, attempts about the symbol about to appear four control points.

b. In the attribute column the object tabulates the Chinese Library logo reverse demonstration; In the attribute column under the part logo this object related attribute as shown in Figure 3-2.
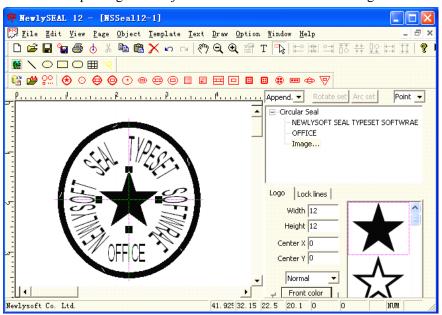
Figure 3-2

c. Replacement logo: Has the logo in logo attribute column right side which each kind of logo tabulation single click must elect, in the seal logo can change automatically. (If tabulates graphic file which appropriate logo user has not been possible to induct oneself manufactures, single click "filename" after "browsing" button, found own graphic file then)

d. Adjustment logo size: When the mouse places about the logo in about control point to become ↔ or ↕, With the mouse dragging, loosens the mouse left key after satisfaction, this time the logo is carries on the reproduce by pantograph take the seal central point as the symmetrical points;

e. Adjustment logo color: The single click "front the scenery" the button, appears the color dialog box single click to select the color, in single click definite button then

f. Increase Logo Grain line: In the single click attribute column the lower part minute "grain line" the label, attempts the symbol the grain line attribute to adjust front as shown in Figure 3-3, in the column inputs 20 in "grain line number", the single click "arranges the grain line button".
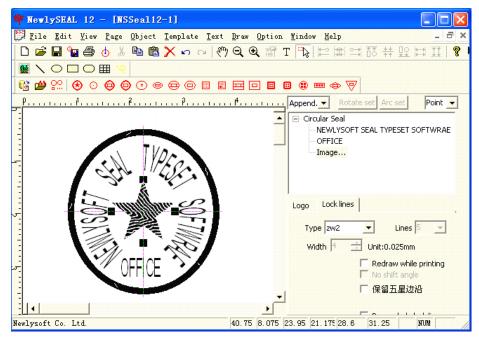
Figure 3-3

③ Revision horizontal type-setting writing: With revises the up round writing method to be same

④ Revises a lower ring row of writing: With revises the up round row of writing method to be same, if the next row of writing is time a numeral, when adjustment typeface should choose the western languages typeface;

⑤ About writing attribute in under high-quality label some explanations

Character height: The typeface

Character width: The typeface width

Character spatial: Between line of within writing distance

Line spatial: Between line and line distance

Overall width: The writing partial overall widths are the character width character empty for always the wide

Overall height: The writing partial gross altitudes empty character immediately high for overall height

Seal height: Seal whole highly

Seal width: Seal overall altitude

Line of computation:

a. The overall height line calculated spatially the character height, the width and height does not limit: When adjustment writing part gross altitude immediately spacing, software automatic control writing altitude, and is not limited highly in the alignment procedure Chinese character width.

b. The overall height line calculated spatially the character is high, the character extends the <= character to be high: When adjustment writing part gross altitude and good spacing, software automatic control writing altitude, also when adjustment maintains the single writing throughout highly the <= character altitude

c. Overall height character height calculated line is spatial: When adjustment writing part gross altitude and writing highly, software automatic control good spacing.

d. Character height line spatial calculates the overall height, does not change the seal altitude, again does not change in the seal high situation to adjust the writing highly, the navigation bureau, the software automatic control writing part.

e. Character-height line-spatial calculated the overall-height change seal is high, in may change

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in the seal high situation to adjust the writing highly, the navigation bureau, software calculate the writing partial gross altitudes; And acts according to this height control seal the altitude.

Character computation

a. The overall extends the character to calculate spatially the character is wide, does not limit highly: Does not limit in writing part character width Yu Character-height when in situation, adjustment overall width and writing spacing, software automatic control writing width

b. Always extends the character to calculate spatially the character is high, the character high <= character is high: Is smaller than in the request writing width is equal to in the writing highly situation, when adjustment overall width and writing spacing, software automatic control writing width;

c. Always extends the character width to calculate the character is spatial: When adjustment writing overall width and writing width, software automatic control writing spacing

d. Character width this calculated spatially always extends, does not revise regulations the width: Again does not change the seal in the width situation, when adjustment writing width and writing spacing, software from adjustment writing partial overall widths;

⑥ Manufacture seal completely. (Figure 3-4)

Figure 3-4

(3) Save the manufactured department seal: In the single click main menu "Document" the menu, single click "Preservation", then appear "SAVE AS", inputs the filename in the document column, the single click "Preservation" the button.

2. Manufactures one contract seal

Manufacture analysis: Contract seal of as shown in Figure 3-5, Includes the contract Seal object: up-round writing "NewlySEAL Typesetting Software", the logo, five line of horizontal type-setting writing, the altogether seven objects, the contract seal with department seal of similar, might increase four line of writing objects in a manufacture department seal of foundation to be possible.

Figure 3-5

(1) Single click the button of the seal toolbar.

(2) Adjustment seal of each object position and attribute

① Adjusts a up round row of writing

a. Selects a up round row of writing: The mouse single-clicks a up round row of writing;

b. Change writing: In the writing frame "NewlySEAL Typesetting Software" in the attribute

column the writing to delete the input customer will need the writing.

c. Adjustment included angle: The mouse places about a link row of writing in two side control points becomes   or   click, with the mouse dragging, after satisfaction loosens the mouse left key then; Or directly in attribute column "included angle" in attribute column direct input angle，(For example inputs 150) then, this time a link row of writing is the seal middle line for the axis of symmetry change included angle；

d. The adjustment character high with a mouse dragging link row of writing about two side control points, loosens the mouse left key after satisfaction, Or "Height" in the attribute column in the attribute column the direct input (eg: input 7) then;

②Adjustment chart

a. Selects the logo: Mouse single click logo

b. Replacement logo: Has the logo in logo attribute column right side which each kind of logo tabulation single click must elect

c. Motion logo: In the logo attribute column "Demonstration width", "Demonstration altitude" in the column inputs 6 respectively, "central Y" in the column inputs - 6.5 (or mouse turns when logo drives logo to ideal position)；

③Under adjustment horizontal type-setting writing

a. Under selects the horizontal type-setting writing;

b. Under change horizontal type-setting writing;

c. Under reduction, migration horizontal type-setting writing: "Height" in the column in under horizontal type-setting writing attribute to output 3.5, "Overall altitude" in the column inputs 15, "Overall altitude" in the column inputs 26, "Displaces" in the column to input - 13 (or adjusts directly with mouse also may)

④ Deletes a lower ring row of writing: Single-clicks a lower ring row of writing, single-clicks in the host toolbar   button.

⑤ This time seal model as shown in Figure 3-6.

Figure 3-6

⑶ The increase horizontal type-setting writing
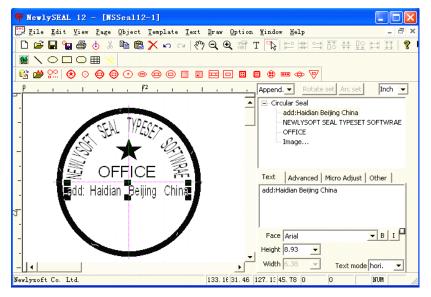
① increases the horizontal type-setting writing;

Figure 3-7

a. In single click attribute column above line of "increase···" (As shown in Figure 3-7), pulls in the menu in under to single-click "sets horizontally"

b. Replaces the writing in the attribute column, "the character will be high" in the column to input 7;

c. Adjusts the character with the mouse to be wide

d. With mouse adjustment overall position, about when adjustment requests the displacement is 0 guarantee horizontal type-setting writing crosswise comes between;

e. The similar method increases other several lines of writing

② Adjustment horizontal type-setting writing attention horizontal type-setting writing character high equal quite good

③Seal document preservation

3. Manufactures more than a line of ring-like writing department seal.

Manufacture analysis: Many line of ring-like writing department seal as shown in Figure 3-8, includes in the seal of object: A left up round row of writing "the People's Republic of China", "sets up the NewlySEAL Typesetting Software" by a up round row of writing, the logo, the horizontal type-setting writing, a lower ring row of writing, The altogether five objects, the contract seal compared with the department seal have been many "the People's Republic of China" this two row up round writing.

Figure 3-8

⑴ In single click seal of toolbar button

⑵ An original up round row of writing will adjust seal of right side

① Changes a up round row of writing, should input a link row of writing the right side single line character

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② Holds down ALT the key not to let go, when drives the left control point migration with the mouse which up round sets, this is a link row of writing is not by the seal center axial symmetry change, but is only then left side position variation as shown in Figure 3-9.

Figure 3-9

③ Perhaps in attribute column direct input included angle value (take this seal as example) 160, angle of crab － 40

⑶ In increase two row row of writing

① Increases a up round row of writing in the attribute column: In single click attribute column above line of "Increase…" Pulls in the menu in under to single-click "Up round to set"

② Manufacture two row writing

a. Inputs "People's Republic" in the writing attribute column;

b. Holds down Ctrl the key not to let go, but in the single click Enter key, this time may line feed the input writing not to be able to finish the input writing;

c. In second line of input "of China";

d. Single-clicks the Enter key conclusion writing input

③ Adjustment two rows up round sets the position and the size

a. In up round sets the character high should suppose for specific up round sets the character high one half, a line of up round sets the character high in this example is 3.5, but a line of up round sets the character high is 7;

b. Holds down ALT the key not to let go, sets the right control point migration with mouse dragging two row up round, this delivers a stock link row of seat is not by the seal center axial symmetry change, but is only then right side the position variation;

④ Perhaps in attribute column direct input included angle value (take this seal as example) 80, the angle of crab is 83;

⑷ Adjusts the seal other object attribute and the layout

⑸ Preserves the seal

4. Manufactures a right angle side seal

⑴ Single click seal of toolbar right angle side seal button ⊞.

⑵ Replacement seal writing

⑶ In the writing high-level attribute, may line feed automatically according to the seal width

⑷ In each line of writing different is may through the writing high-level attribute revision, Following chart:

| Figure 3-10 | Figure 3- | Figure 3-12 |

Writing high-level attribute	The article block breaks the good way	Each line of numbers of words different when
Figure 3-10	The block breaks the line many little	Each line of character width is same
Figure 3-	The block breaks the line many little	Each line of character width is different
Figure 3-12	The block breaks line of how many	Each line of character width is different

Attention: After breaks the good way "how many" two character meanings to be few for first line of character many second line of characters, If right side the writing vertical stroke row first lists as the first line "many" two character meanings to be little many for the first line of character few second line of character.

(5) Add seal sideline

① Selects the entire seal:

② single-clicks the grain line attribute label:

③ Establishes the grain line attributes and the map sheet establishment grain line attribute method is same.
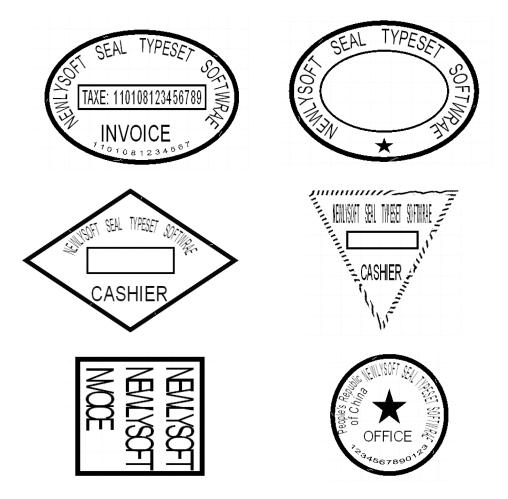
(6) Preserves the seal

5. In belt loop line seal.

Figure 3-13

(1) Manufacture a round seal

(2) In repairs revises regulations the writing

(3) Adjustment writing position

(4) Increase loop line

① In the single click image toolbar (ellipse) finishes the job has the button

② Increases an in loop line in the seal, Drives an ellipse with the mouse, If needs to increase the proper circle, needs to hold down the ALT key to drive the mouse again

③ In adjusts the loop line control point with the mouse to the appropriate size

(6) Preserves the seal

6. Other seal demonstration.

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Ⅳ.Template manufacture

1. Manufactures template

⑴ Selects in the page to have to take the template a seal;

⑵ In the single click menu bar "Template" the option choice "Saves for the template"

⑶ The appearance "Saves for the template" the dialog box like chart 4-1;

Figure 4-1

⑷ Choice "New template storage location"; "New template type storage location";

⑸ In "New template type", "New template name" in the text frame separately inputs the type and

the name which you get up;

(6) The single click "Preservation" the button completes the new template the preservation

(7) When later each time you will use the template which will establish, will take out directly from the template storehouse then uses.

2. Apply template

(1) In single click main menu column "Template" menu;

(2) The single click "Takes the template …"Option;

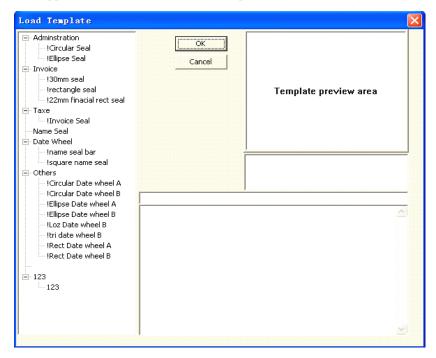(3) The appearance "Takes the template" the dialog box like chart 4-2.

Figure 4-2

(4) The single click needs the seal the template name;

(5) The single click "Determines" button;

(6) According to chooses the template to be able to produce a seal automatically in the work area.

3. Template manages

(1) In single click main menu column "Template" menu

(2) Single click "Template management" option

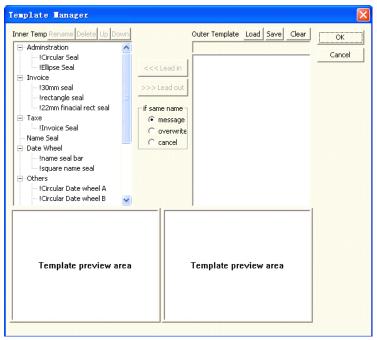(3) Appearance "Template management" dialog box like chart 4-3.

Figure 4-3

（4）After this software may the template which has choose derives saves the plate, also may induct the floppy disk in template to the template storehouse in;

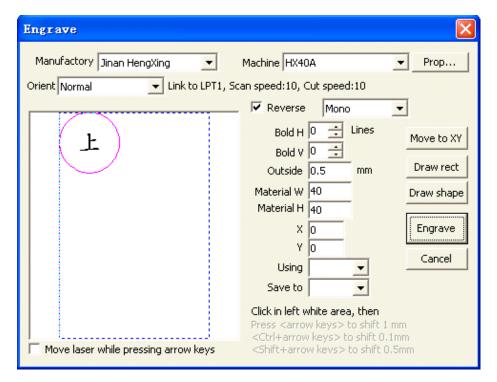（5）After chooses single-clicks "Determines" the button

Ⅴ. Seal output

1. Prints the seal; Selects in the seal → single click main menu "Document" the menu → single click "the printing" the option → appearance "the printing" the dialog box → single click "Printing".

2. The seal outputs the engraving machine
（1）Select seal
（2）Single-click the "Document" in the main menu.
（3）Single-click the "Carving".
（4）The "carving" the dialog box is displayed.
In dialog box left side in demonstration, pink color circle for carving seal;
a．The blue color dashed line makes the big carving scope for the engraving machine;
b．The pink color dashed line is the seal tangent;
c．Locates X, locates Y the coordinates for the seal tangent intersection;
d．This software general default value for the data which already adjusts, the user may carve directly, if has the need customer to be possible to carry on the adjustment;
（5）Single-clicks the "Carving" button.

Ⅵ. Seal engrave

1. Single-clicks the 🔘 button. Then appear the fellow dialogue box:

2. Choose "prop…", then appear the attribute of the engraving machine.

3. Engraving machine attribute

This kind of type engraving machine should connect with computer's LPT Port This software is unable to simulate the machine board. Its attribute dialog box is composed by "General" and "Device".

1. The device

The establishment of "device" in the page must completely consistent with concrete hardware establishment and installment. So the engraving machine factory sign matches the end-user of this software and don't revise the establishment of this page. The user can directly read next content jump over this page.

The attribute page of "device" shows as following chart.

Help: It's showing the method of coordinates direction, topleft corner coordinate and engrave width. If the methods not clear you may test according to the steps of explanation.

Coordinate direction: The movement direction of main indicator, auxiliary indicator electrical

machinery. If the movement direction of the engrave machine not same with your hope when you move in the dialog box, then you should choose different button here.

Topleft XY: The carve region of the engraving machine is topleft corner of the machine. Unit: millimeter.

Carving width: The width and the high size of the carve region about the engraving machine. Unit: millimeter.

Crosswise DPI: The resolution establishment of the transversal motion axis about the engraving machine. Unit: Pulse/Inch.

Vertical DPI: The resolution establishment of longitudinal motion axis about the engraving machine. Unit: Pulse/Inch.

Prompt: Here the establishment choice must same with the machine actual. Otherwise the machine movement is not accurately. If has chosen these establishments after the machine design standard, the machine proper motion has fine distinction with graph size of the software. Then you can trim DPI value. If the movement distance more than graph size then depression DPI value; otherwise increase DPI value.

Examples: If original DPI is 1016, draw a 100*100 square and carry on cutting. And the square size is 102*102 actually, after the trimming in the new DPI= software the graph size/cutting graph actual size =1016*100/102=996.

Locate mode:

The locate mode (in engraving machine attribute dialog box factory attribute page) is assigns carves the position the way. Sets up the Newly CARVING software to provide reaches more than 20 ways newly to carry on the carving localization, the user mainly acts according to the current engraving machine the structure performance and the carving request and the use custom chooses the appropriate locate mode.

Because in ordinary circumstances, locate mode and engraving machine structure related, namely the different engraving machine uses the different locate mode, after and the user designated one appropriate way very little changes, therefore the locate mode choice design places the engraving machine attribute dialog box in the factory attribute page.

Topleft-hand corner in engraving machine current position, left bottom in engraving machine current position, right under angle in engraving machine current position, top right corner in engraving machine current position, central point in engraving machine current position: Each time carves when the output all by an engraving machine laser current position took the carving object on left, left under, right under, the top right corner or the central point position carries on the carving.

Prompt: Only then a part of model carving function uses these locate mode.

Chooses when these locate mode carves in the dialog box above the schematic drawing XY value or insignificant or the expression current engraving machine laser head position. If the software can read out the current engraving machine the position to express the engraving machine position, if the software cannot read out the engraving machine position not to have the significance, rests on the concrete engraving machine performance to decide. The value does not have when the significance in the schematic drawing demonstration is also insignificant.

When chooses these locate mode, generally releases the good material after laser to single-click "Carving" to start to output.

When chooses these locate mode, also may single-click in the dialog box the direction button to move an engraving machine laser position, or also may remove "Single step" in the option regarding certain engraving machines to select the condition then to hold down when the position which the direction button moves continuously needs loosens the button. Thus also may single-click "Move frame"

to cause the engraving machine along the output object outside the package of rectangular frame movement the test output object carving scope.

Typesetting position: Regards as the current typesetting page top left-hand corner is the engraving machine carves the region the top left-hand corner, the output object arranges in the page when any position, the carving output on the output in engraving machine any position. Chooses when this locate mode carves in the dialog box the apex XY value to express the output object top left-hand corner carves the region in the engraving machine the position.

Generally when a whole piece material overall design work also original design output chooses this locate mode. After carves the region to put the material to single-click "Carving" to start directly to output.

When chooses this locate mode, also may single-click "Measured frame" the button causes the engraving machine along the output object outside the package of rectangular frame movement the test output object carving scope.

Assigns the top left-hand corner, the left bottom, the right under angle, the top right corner, the central point, above the central point, left side the central point, under the central point, right side the central point position: Will output the object an outside package of rectangle for instance will be "Field" the character standard, through will assign its 9 intersections the position to carry on the carving localization the way. Chooses when this locate mode carves in the dialog box the apex XY value expression the sizing coordinate figure. X towards right increases, Y downward increase.

Assigns on left (left under, right under, on right) the angle to the engraving machine on left (left under, right under, on right) the angle distance: Through assigns outside the output object package of rectangular one of four angles to arrive the engraving machine to carve the region to correspond the same direction the vertex position distance to carry on the carving localization the way. Chooses when this locate mode the apex XY value expression corresponding distance value, the value is bigger leaves the engraving machine angle to be farther, smaller nearer.

Chooses when above "Assign" the kind of locate mode, may directly revise the XY value either the one-shot "Single step" the direction button revises the XY value or with the mouse left key in the schematic drawing drives the output object to change the XY value, the one-shot "Measured top" either "Move frame" the button test output object carving position or the scope.

This kind of locate mode also is generally in adjusts the carving position no longer to change, later each time all when this position output uses.

2. General

To designs the general parameter in the engraving machine.

Link to···: The direction of engrave machine and computer connection.

Scan speed: The movement speed of sweep the graph itself.

Cut speed: The movement speed of cutting speed and draw frame when engraving.

Link gap: The distance between the up sweep lines and under lines. It related with each pulse machine movement. In ordinary the distance of sweep is 0.05 millimeter

Scan direction: The way of sweep process.

Horizontal: The direction of each scan line is horizontal way.

Longitudinal: The direction each sweep line is vertical way.

Unidirectional: From graph this end sweep toward another end when it's light. After return then move to begin position of next line and continue to sweep.

Bidirectional: It will all light when back and forth sweep in the process to improve the efficiency.

Up down: If it crosswise sweeps, establishment the order of the sweep lines. If it longitudinal sweeps, establishes the first line to sweep direction.

Right left: If it longitudinal sweeps, establishes the first line to sweep direction. If it crosswise sweeps, establishment the order of the sweep lines.

To XY after eng: Laser head pauses on the appoint position after the end of crave. X towards right increases, Y downward increase takes the top left-hand corner as the zero point.

Scan delay, cut delay: The time-gap of the computer transport the instruction to the engraving machine when sweep or crave. The value is smaller and the speed is quicker. But if you want to suspend operation quickly please increase this value let the transport speed match with the machine execute speed.