



## H-TC50K 曲面烫金机使用说明书



H-TC50K Cylinder Hot Stamping Machine

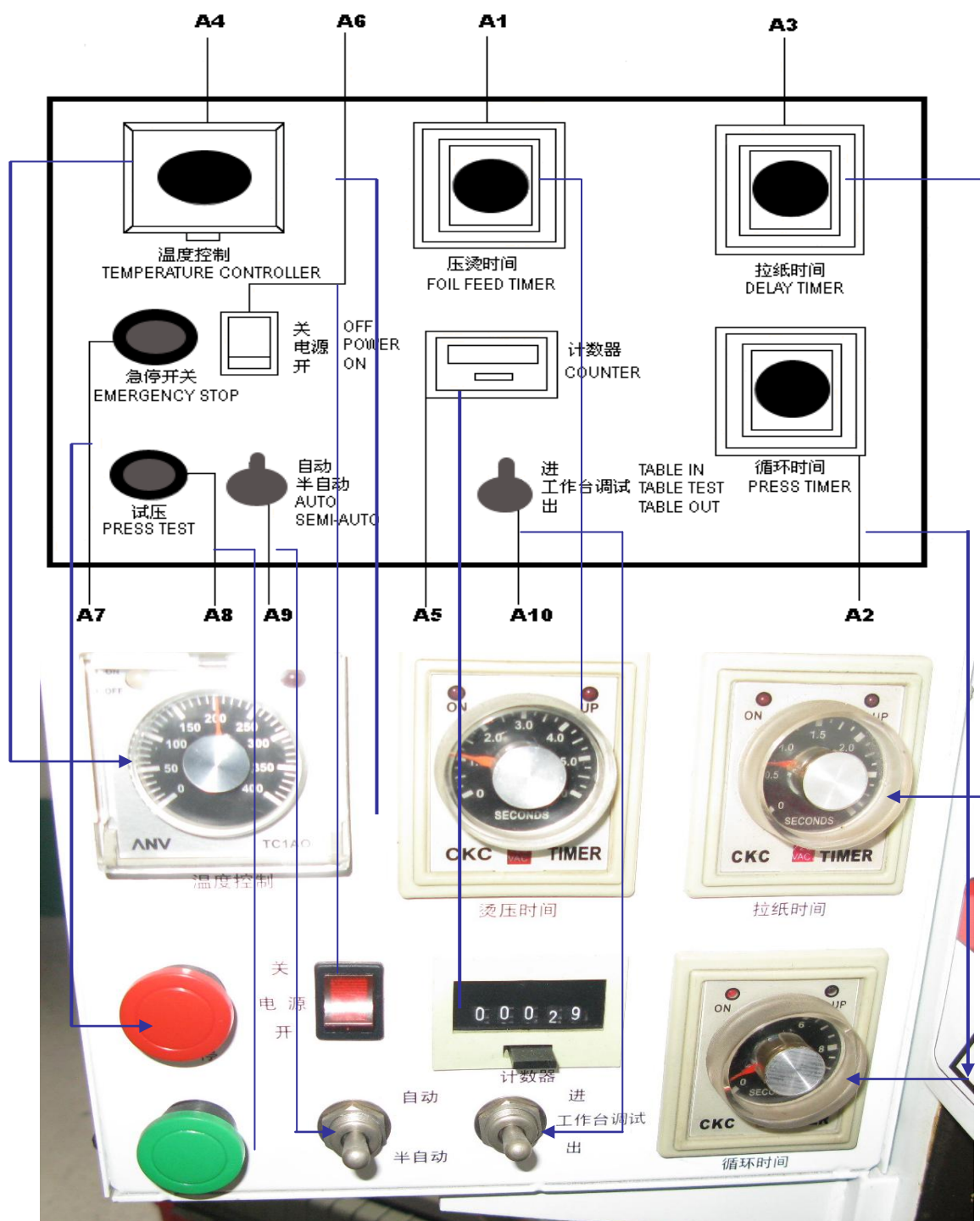
# Operation Instruction

- H-TC50K 曲面烫金机操作面板说明

H-TC50K cylinder hot stamping machine operation panel instruction

| NO: | 名 称 Description                      | 功 能 Function                                                                                                                                                                                          |
|-----|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A1  | 压烫时间器<br>Stamping time controller    | 当烫金机设定在直压状态时，用以调校及控制压烫时间。<br>Adjust stamping time from contacting products to leave                                                                                                                   |
| A2  | 循环时间器<br>Circulation time controller | 作自动操作时，设定两个工作程序之间的间歇时间。<br>Set up the intermission time between two runs                                                                                                                              |
| A3  | 拉纸时间器<br>Foil length controller      | 控制烫金纸走纸长短。<br>Controlling stamping foil step length                                                                                                                                                   |
| A4  | 温度控制器<br>Temperature controller      | 调节及控制烫金所需温度，温度表数调好后，等待预热。当左上角灯号（ON）第一次熄灭时，即表示烫机已达所需温度并自动保持该温度。<br>Set up and adjust stamping temperature. After the lamp at the left corner is on, the temperature is ok and begin to start stamping. |
| A5  | 计数器<br>Enumerates                    | 显示烫印数目,按下方复位按钮,显示数字复位为零。<br>Display stamping products number.                                                                                                                                         |
| A6  | 电源开关 power                           | 烫金机电源总开关. Power switching of total machine                                                                                                                                                            |
| A7  | 急停按钮<br>security button              | 按下止按钮烫金机立刻停止动作,机头回升最高位置.用以停机及紧急时用. Press it the machine stop running in danger, the stamping head raise up.                                                                                           |
| A8  | 试压按钮<br>Test button                  | 手按按钮机头压下保持下压状态.放开按钮机头回升.试机及上电版时用. Press down, head keep contacting with products; release it the head raise up.                                                                                       |
| A9  | 设自动制<br>Automatic switching          | 设定烫金机作自动或半自动操作。<br>Set up automatic or half-automatic operating                                                                                                                                       |
| A10 | 工作台开关<br>Working table switching     | 将该开关拨下,工作台会移至最左位置并停留不动,以便检修及校机. 正常动作时必须把开关拨至向上位置。<br>Turn down it, working table move to the left position and stay so that maintain and adjust machine . Please turn up it when machine runs.        |

图一: H-TC50K 操作面板简图

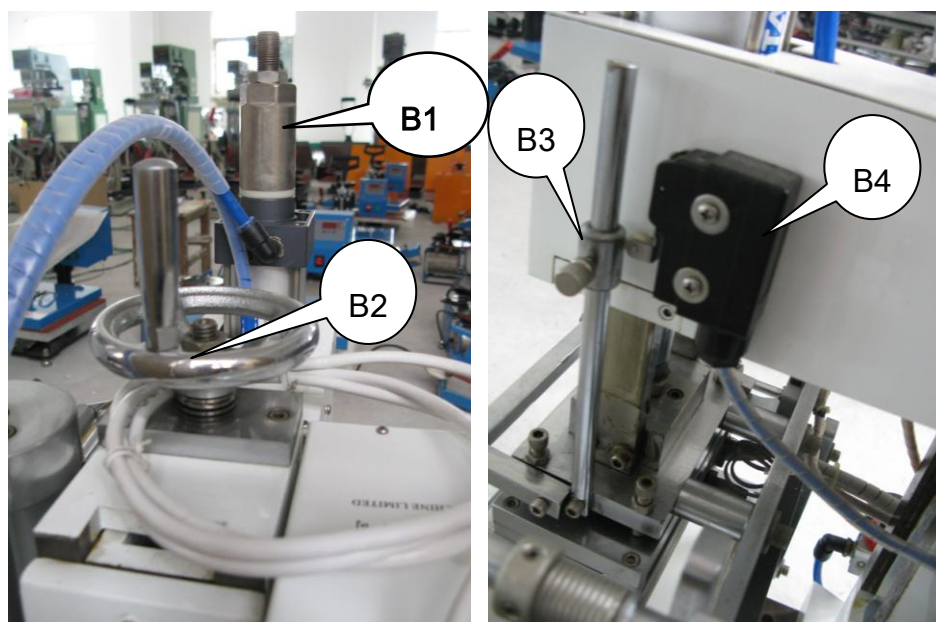




- H-TC50K 曲面烫金机结构说明
- H-TC50K cylinder stamping machine part instruction

| NO | 名 称<br>Description       | 功 能<br>FUNCTION                                                                                                                    |
|----|--------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| B1 | 调节螺母<br>Adjustment screw | 调节电版(19)与印件之间的高度.调节前须松开及调节后上紧上方之锁紧螺母.(小幅度调校).<br>Adjust the height between upper plate and working table. Micro-breadth adjustment |
| B2 | 手轮<br>Hand wheel         | 调节电版与印件之间的高度.调节前须松开及调节后须上紧锁紧螺丝.(大调度调校).<br>Adjust the height between upper plate and working table. More-breadth adjustment        |

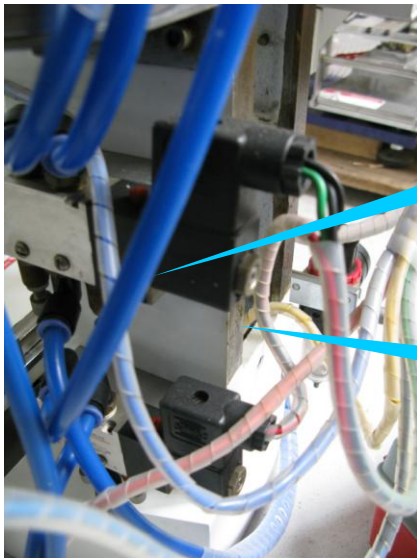
|    |                           |                                                                                                                                                                                                                    |
|----|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B4 | 启动开关<br>Startup switching | 当凸轮压及该启动开关,即自动活动工作台.<br>Shuttle working table move automatic when oval wheel contact it.                                                                                                                           |
| B3 | 凸轮<br>Oval wheel          | 机头下压过程中,凸轮压及启动开关(B14),活动工作台(B16)开始左移以进行滚烫.凸轮安装位置要与电版钻压及印件位置配合,以选择最佳启动活动工作台时间.<br>When the head press down, the oval wheel press close to startup switching (B14), shuttle working table move to left for stamping. |





|     |                                                         |                                                                                                                                                               |
|-----|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B5  | 压纸棍<br>Pressing roller                                  | 与卷纸轴(B6)配合拉送烫金纸.<br>Drag stamping foil with B6                                                                                                                |
| B6  | 卷纸轴<br>Foil roller                                      | 与压纸棍(B5)配合拉送烫金纸.<br>Drag stamping foil with pressing axis(B5).                                                                                                |
| B7  | 升降调速开关<br>Speed adjustment<br>switching of up-and- down | 调节该调速阀下方两枚旋钮,可调节机头升降速度.一枚调升,一枚调降,顺时针加速,逆时针减速,请按需调校.<br>Adjust it to reduce or add speed of up-and-down head                                                   |
| B8  | 集纸轴<br>Collecting foil axis                             | 收集烫金后废纸<br>Collecting useless foil after stamping                                                                                                             |
| B9  | 工作台调速阀<br>Working table speed valve                     | 调节该调速阀下方两枚旋钮,可调节活动工作台(B16)走台速度,一枚调节左移速度,一枚调节回程速度,顺时针调快,逆时针调慢.<br>Adjust it to add or reduce the working table speed.                                          |
| B10 | 右定位杆<br>Right locating rod                              | 与左定位杆(B17)配合锁定烫金纸安装位置.<br>Locking stamping foil with left locating rod( B17)                                                                                  |
| B11 | 锁紧螺母<br>Locating screw                                  | 共四枚,两枚在机座右面,两枚在机座左面.松开该四枚锁紧螺母,拧动调位螺母(B12)可调校工作台前后位置,同时亦可移动工作作轻微角度调校,调校完毕须上紧该四枚锁紧螺母以定位.<br>Adjusting working table is ok and locating working table position . |
| B12 | 调位螺母<br>Adjustment screw                                | 用以调校工作台前后位置,调校前须松开及调校后上紧机座两侧四枚锁紧螺母(B11) .<br>Adjust the position of working table                                                                             |
| B13 | 开机按钮<br>Startup button                                  | 同时按动该两按钮,即启动烫金机.<br>Press two button together the machine start running.                                                                                      |
| B14 | 行程调位<br>Adjustment distance                             | 调校印程长短.<br>Move its position to adjust stamping distance.                                                                                                     |
| B15 | 印程限位<br>Switching distance                              | 烫金机作滚时,当工作台左移至印程调位(B14)之调位杆及该印程限位,工作台即停下左移,机头回升,工作台回至最右位置.<br>When working table move pressing it(B14), stamping head will be raise up.                       |
| B16 | 活动工作台<br>Shuttle working table                          | 烫金机作滚时,活动工作台会自右向左移动,配合夹具各电版砧令圆型印件均转动以作烫印.<br>Move form right to left and finish cylinder stamping.                                                            |
| B17 | 左定位杆<br>Left locating rod                               | 与右定位杆(B18)配合以固定烫金纸安装位置.<br>Locating stamping position with B18                                                                                                |
| B18 | 进气总承<br>Air switch                                      | 供应烫金机用气压装置.如果在透明杯中看到积水,请拉下下方排水制排水,并注意经常排水.<br>Provide compress air and cleaning it.                                                                           |
| B19 | 电版砧<br>upper aboard                                     | 固定电版,传送温度压力进行烫金.<br>Install stamping plate to stamp.                                                                                                          |

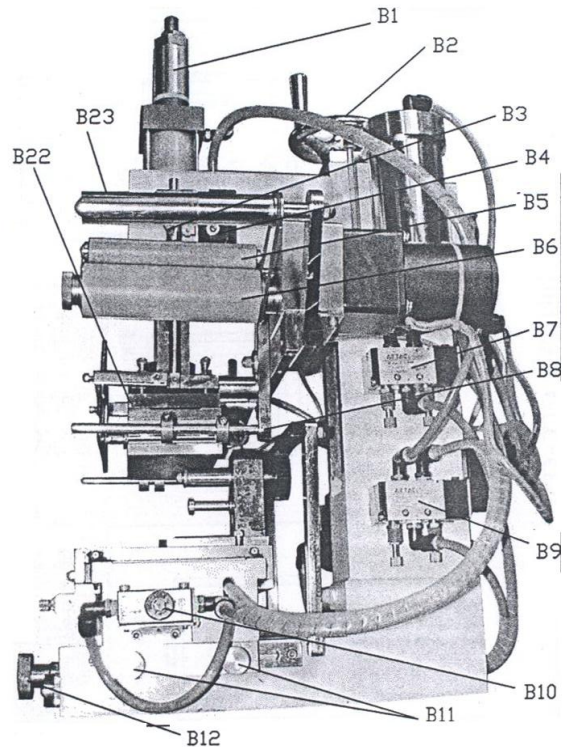
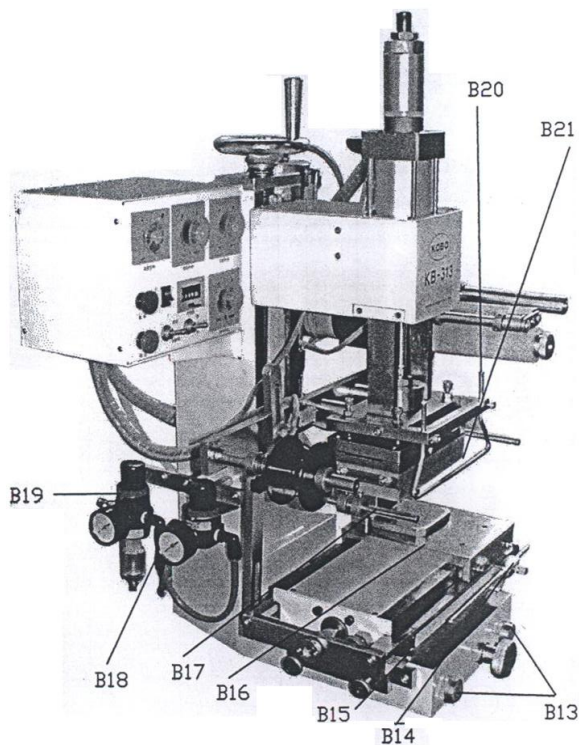




B7

B

|     |                   |                                                                                         |
|-----|-------------------|-----------------------------------------------------------------------------------------|
| B20 | 发热板<br>Heat plate | 内藏发热体,发出热力传至电版砧(B19)以作烫金.<br>Provide heat source                                        |
| B21 | 烫金纸档圈<br>loop     | 固定烫金纸. Locating stamping foil                                                           |
| B22 | 护栏<br>Safety rod  | 安全装置,操作时,当操作者手部触动该护栏,即停机,机头立刻回升最高位置.<br>Protecting operator to avoid hurt by heat head. |



图二: H-TC50K cylinder hot stamping machine part instruction

## H-TC50K 型全自动圆型烫金机操作

### H-TC50K cylinder hot stamping machine operating instruction

## 第一章 开机前工作

### Pre-working

- (一) 参阅附图二, 将空气压缩机气后接至进气总承(B18)之入气口, 将调压旋钮向上拉, 然后顺时针或逆时针方向旋转即可调整气压. 顺时针加压, 逆时针减压, 正常值应在  $5 \text{ kg f/c m}^2$  左右. 操作时要经常注意在透明杯中观察是否发现积水, 如果发现积水, 拉下下方排水钮便可排水.

**Connecting compress air to B18, pull air switching and adjust air press at  $5 \text{ kg f/c m}^2$ . When you find water in optical cup of air switching, please drainage by opening switching.**

- (二) 把脚踏开关插到烫金机电箱背后的脚踏开关插座上.

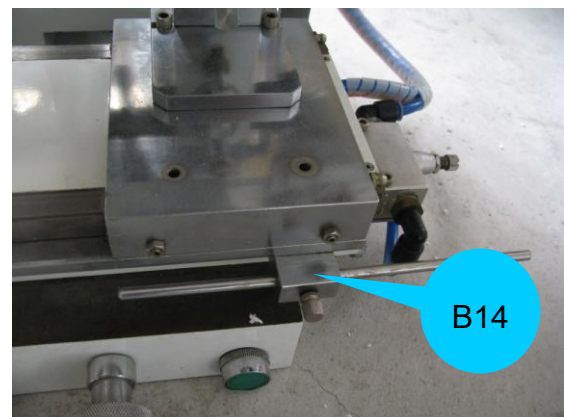
**Insert foot switching to the back of stamping body.**

- (三) 插上电源.

**Insert power supply**

- (四) 如需校机, 请把电箱上设自动制(A9)时, 拨至半自动位置.

**Testing machine, need set up machine to half-automatic position.(A9)**



## 第二章 上电版

### Install electricity plate

- (一) 烫印圆型印件时, 由于印件在操作过程中转动, 通常使用耐热矽胶板或矽胶模作电版式进行烫印.

**Suggest using silicon rubber plate or model plate when you need stamping cylinder products.**

- (二) 上电版方法. **Usage of installing electricity plate**

1. 活动工作台应在最右位置, 工作台面须清洁及无杂物.

**Keep shuttle working table at left position and keep working table cleaning.**

2. 调校机头高度至手按试压按钮(A9)时, 电版砧(B19)紧贴工作台面.

**Adjust stamping head height still pressing closely working table surface when pressing test button(A9).**

A.调校高度 Adjust height



调校手轮 (B2) 可大幅度调节电版砧与工作台之间高度, 调节前须松开及调节后须上紧机身背后两枚锁紧螺丝, 调校调节螺母 (B1) 可小幅度调节电版砧与工作台之间高度, 调节前须松开及调节后须上紧上方之锁紧螺母. 调校高度以当手按试压按钮 (A9) 时, 电版砧紧贴工作台面为合.

**Turn hand wheel(B2) to reach a correct height. the standard height is the electric plate closely contact working table when you press testing button (A9).**

## B. 调校平衡度 Adjust balance

电版砧压下至紧贴工作台时, 顺便观察电版是否四面均匀地紧贴工作台. 否则须调校发热板上方调整上四角之四枚高整螺丝. 把过分紧贴工作台一角之螺丝逆时针调高, 把未能压及工作台一角之螺丝顺时针调低, 直至电版砧四边均匀紧贴工作台. 调校前须松开及调校后须上紧该四枚螺丝下方之锁紧螺母.

**Observe if the electric plate contact working table when the stamping head is down. Please adjust the screw so that keeping balance press.**

## C. 调节温度 Adjust temperature

把温度控制器 (A4) 调至 100° °C, 约五分钟后, 当左上角灯号 (ON) 第一次熄灭后, 即表示电版砧已达所需温度并自动保持该温度 (由于是自动恒温控制, 烫金期间, 可以看到该灯号经常亮熄交替).

**Adjust temperature (A4) at 100°C, wait for 5 minutes. The lamp at the corner turn off , stamping temperature is ok. This lamp will turn on and turn off in the process of stamping.**

## D. 上电版 install electric plate

在电版背面均匀涂上烫金胶水或贴上双面烫金纸, 背面向上把电版放在烫印位置 (请尽量用电版砧中心位置进行烫印), 手按压按钮 (A8), 令电版砧紧压放在工作台面之电版约 20 秒放开试压按钮电版便已上好贴在电版上.

**Coating heat glue or adhere two-side tape on the back of stamping plate. Place on the position of stamping products (stamping with the centre of electric plate), press button (A8), keep electric plate pressing on working table for 20 seconds. Plate will adhere onto the upper aboard.**

# 第三章 印件位置及工作程序的调校

## Adjustment of product position and stamping procedure

### (一) 调校起印点位置 adjust beginning stamping point

由于烫印圆型印件时, 印件会被夹具带引转动, 所以印件放置位置须在电版砧压及印件时, 电版的最右处与起印点紧贴为全. **When stamping cylinder products, it will move round with the jig, please put the product one place where the right of electric plate attach closely the point begin printing.**

#### 1. 高度调校 the height of stamping head adjustment

机头高度须调至手按试压按钮时, 电版砧以适当压力压及印件为合. 请友阅第一章中有关调校机头高度的说明作出调校.

**Adjust the stamping head height so that it can contact products by a fitness press.**

#### 2. 工作台调校 working table adjustment

工作台座两边各有两枚锁紧螺母 (B11), 松开该四枚螺母, 拧动调位螺母 (B12), 可调校工作台前后位置, 同时亦可移动工作台作轻微角度调校. 调校完毕须上紧四枚锁紧螺丝.

**There are four pcs locating screws at the end of machine (B11), untie them, turn adjustment screw (B12)**





to adjust the position of working table. After adjustment, locked them.

### (三) 工作程序的调校 **procedure adjustment**

#### 1. 印程调校 **stamping distance adjustment**

烫印圆型印件一般都采用滚压操作, 因而需要作印程调校.

**You must adjust stamping distance when stamping cylinder products.**

1. 把压烫时间制 (A1) 向右拧开.

**Turn stamping time controller (A1) to right**

2. 把凸轮 (B2) 位置设在当电版砧压及印件的同时, 凸轮亦刚好压及启动开关 (B4), 活动工作台立即开始左移, 滚烫开始.

**Move oval wheel(B2) to contact startup switching (B4)when electric pressing product, shuttle working table begin to move to left.**

3. 烫金机作滚烫时, 当工作台左移至印程调位 (B14) 之调位杆触及印程限位 (B15), 工作台立即停止左移, 机头回升, 工作台回至最右位置, 请根据印程所需调校调位杆位置.

**When shuttle working table touch the switching (B15) of (B14), it stop immediately. Please adjust the correct position according to product diameter.**

#### 2. 印刷速度调校 **stamping speed adjustment**

- A. 调节升降调速阀 (B5) 下方两枚旋钮, 可调节机头升降速度. 一枚调升, 一枚调降, 逆时针加速, 顺时针减速, 请按实际情况作适当调校.

**Turn the screw of speed adjustment valve (B5).**

- B. 调节走台调速阀 (B9) 下方两枚旋钮, 可调节活动工作台 (B16) 走台速度. 一枚调节左移速度, 一枚调节回程速度. 逆时针调快, 顺时针调慢, 工作台左移速度快慢即等于压烫印件的时间快慢, 压烫时间以印件质地及印出效果而定. 印出图案整体着色过深至边界模糊, 要加快左移速度; 印纹残缺, 要延长左移速度.

**Turn the screw of speed adjustment valve to adjust working table speed. One is used to adjust left moving speed; the other is used to adjust return speed. Accelerate the speed when appear border of picture blurring.**

#### 3. 温度调校 **temperature adjustment**

- A. 由于通常用矽胶板或矽胶模压烫圆型印件, 所需温度较用金属电版高, 一般在 200℃ 以上, 用温度控制器 (A4) 设定烫印温度后, 等待试预热, 当左上角灯号 (NO) 第一次熄灭, 即可进行烫印.

**The stamping temperature of silicon rubber plate higher than metal plate. Set it at 200℃, wait the lamp turn off, start stamping.**

- B. 印件质不同, 所需需不同, 请根据印出效果作调校. 温度过高印痕着色会越界至模糊; 温度不足着色不匀. 温度由低调高, 则待灯号熄灭便可进行烫印. 如果温度由高调低, 则需待灯号重亮后方可烫印. 降温比升温需要较长时间, 请耐心等待.

**Different product substrates need different temperature. Please according to stamping result adjust the temperature .**

- C. 烫金纸不同, 所需温度不同请参阅供应商意见及实践中修正.

**Different stamping foils need different temperature.**

#### 4. 压力调校 **pressure adjustment**

印出印纹过深, 表示压力过大; 印纹过浅至不完整, 表示压力过小. 调校调节螺母 (B1) 以修正. 顺时针方向调校减少压力; 逆时针方向调校增加压力. 调校前要松开及调节后要上紧上方之锁紧螺母.



Too deep of impression display too weight pressure; incompletely impression display too light pressure.  
Please adjust screw(B1) to ameliorate.

#### 5. 全自动的设定 automatics operating set up

A. 将设自动制 (A9) 拨上到自动位置, 设定烫金机作全自动操作.

**Set up (A9) to automatic operating position.**

B. 调校循环时间器 (A2) 至自动操作循环时间配合烫印要求.

**Adjust circulation time controller (A2) to automatic circulation time cooperating stamping .**

#### 6. 平压的设定 used flat stamping

A. H-TC50K 采用滚烫方式. 如果作平面直压烫印时, 可将凸轮 (B3) 推至最高位置, 甚至拆去, 目的是使机头下压时启动开关 (B4) 不被触动, 活动工作台不会移动, 可作直压烫印.

**H-TC50K can use by flat stamping. Move the oval wheel (B3) to the top position or remove. Thus working table keep stillness.**

B. 将工作台开关 (A10) 拨下, 工作台会移至最左位置并停留不动. 气缸把横栏顶至最左, 中间会看到一枝调位丝杆, 把丝杆上调位螺母旋至最左位置, 拨上工作台开关 (A10), 活动工作台会停留中间位置以便进行直压. (同样办法可调校活动工作台的左右位置)

**Press down working table switching (A10), working table will move to left position and keep stillness. You can see one screw rod , turn the bolt on the screw rod to left position, press up working table switching (A10). Working table will stay on the center position .**

C. 调校压烫时时器 (A1) 以设定压烫印件的时间.

**Adjust stamping time controller (A1) to set up stamping time**

## 第四章 安装烫金纸或热转印纸(请参阅附图三)

### Install stamping foil

(一) 把烫金纸或热转印纸放入左面上纸架

**Install stamping foil to left frame.**

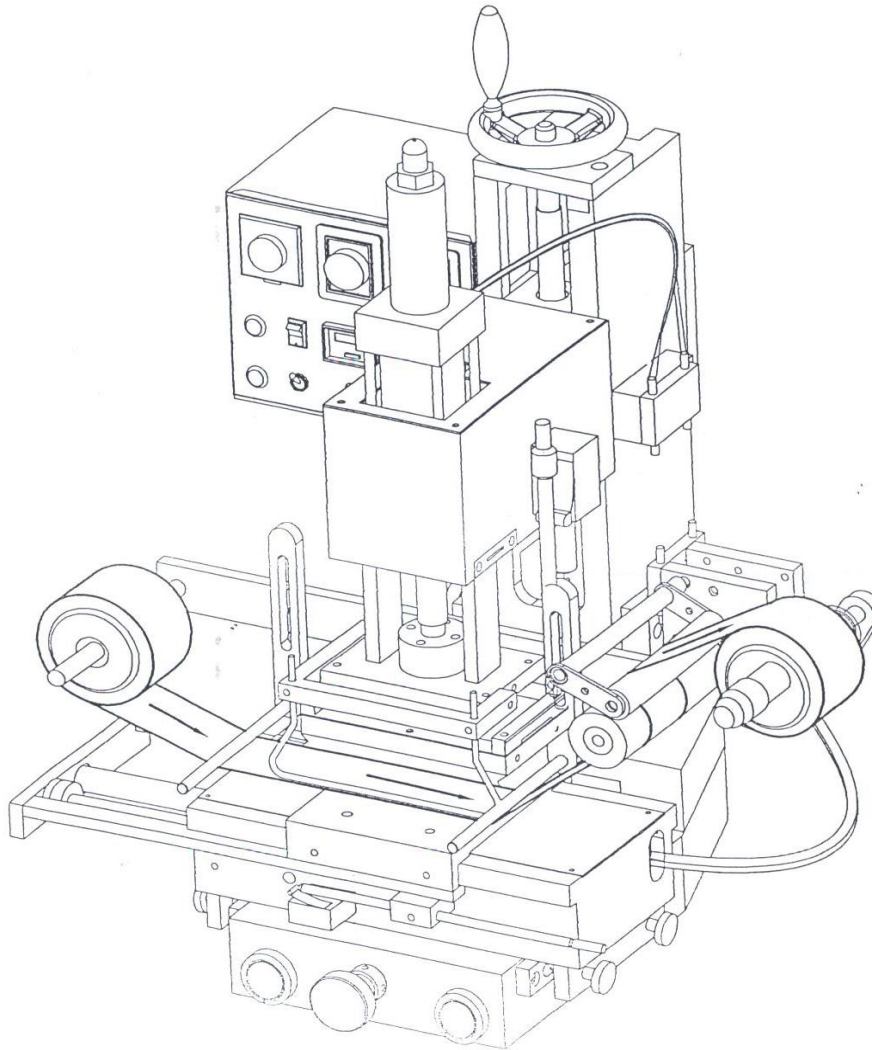
取出烫金纸档圈 (B21), 套入烫金纸或热转印纸, 再装回档圈, 上紧档圈螺丝, 烫金纸便已装好. 注意烫金纸安装位置必须与电版位置配合.

**Take out loop (B21), install stamping foil and return loop. Please notify stamping for must cooperate electric plate.**

(二) 拉纸上架 pull the stamping foil on the roller.

先绕过定位杆 (B17), 跨过右定位杆 (B10), 通过压纸棍 (B7) 旁限位杆, 左压纸棍与橡胶卷纸轴 (B8) 之间穿过, 将烫金纸卷在集纸轴 (B6) 上, 再用弹片卡住.

**First writhe through locating rod(B17), cross pass right locating rod(B17), pressing roller, rubber axis(B8).**



**注意:**

4. 烫金纸着色面必须向下.

**Surface colored of stamping foil must against down**

5. 烫金纸安装位置以远离电版砧而又不影响动作为最佳.

**Stamping height keep further from electric plate.**

6. 由于是滚烫, 烫金纸压及印件时间有先后之分, 在不影响活动工作台运作的情况下, 左定位杆要尽量装得比右定位杆低, 目的是使压烫时后压及印件的烫金纸远离电版砧, 以免电版砧热量烘至变质而影响烫印效果.

**Keep left locating rod a lower position than right locating rod so that heat from electric plate can not impact stamping quality.**

7. 在印刷过程中烫金纸有可能走位而偏身卷纸轴两端. 如出现此毛病, 请查看下列各点:

**When stamping foil appears deflection, please observe below items:**

- A. 卷纸轴、右写位杆、左定位杆及装烫金纸档支架是否全部互相平行?

**Check if parallelism of all axis**

- B. 左右定位杆之挂臂是否紧固?

**Check if lock the left and right rod installed stamping foil**



(三) 调节拉纸长度 **adjust foil step length**

接纸时间器 (A3) 用以控制烫金后烫金纸走纸长度. 顺时针方向旋转旋钮, 送纸长度由短至长, 请按烫印需调校走纸长短. 把时间控制器调至零, 则不会自动走纸.

**Time controller(A3) used to control step length of stamping foil, please according to products adjust it. When you set it zero, automatic feed foil will stillness.**

烫金机要完成烫印任务: 需要根据相应的产品进行烫金要素的整合才能完成: 包括:

- 制作合适的夹具: 将产品和夹具安装在工作台上;
- 根据客户提供的烫金文件制作烫金铜锌版或者硅胶版并用高温胶纸或者高温胶水粘贴到上烫板上;
- 选择适合产品材质的烫金纸并安装在烫金机上;

Finishing Hot foil stamping task need all items below to be done:

- Making appropriate fixture and install it on the working table of hot stamping machine
- Base on customer stamping document, Making copper-ZN metal plate or silicon rubber plate or silicon plain stamping plate and install it onto the upper heat plate of stamping machine;
- Choose correct stamping foil and install;



高温胶纸  
High temperature tape



烫金纸  
Stamping foil



硅胶版  
Silicon rubber plate



烫金夹具  
Stamping fixture model