OPERATION MANUAL

SHORT CYCLE LAMINATION PRESS

WINTER SOLID TA series

WARNING!

The operator must thoroughly read this manual before operation.
Keep this manual for future reference.

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I. Manual

i. User manual using

Who will operate this machine should be master the user manual, and must understand the operation procedure, safety operation, maintenance etc which this user manual introduce, please put the user manual near the machine in order to read expediently.

ii. Copyright of manual

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II. Safety device and safety measures

i. Must be installed the safety protection equipment before operate the machine and may sure working under the safety condition.

ii. All safety protection equipment can't move or open when the power have not shut down.

iii. Can be operate the machine just only when this safety protection equipment under normal condition.

iv. Make sure nobody will be injured when the machine start.

v. Every light error or mistake should be pay attention to it, and check the machine carefully.

vi. Refer to the electrical install and maintenance should be operate by the electrician who master the machine working.

vii. Check the electrical equipment on time, and teal with the loosen or broken electrical in time，forbided to check and maintain the machine with power. when check or maintain the machine should be close the power, and leave somebody to check the general power switch, make sure the maintain-man safety.

viii. This machine should be lay on the falt floor make sure the worktable on the level to prolong the life of the machine.

III. Mark and warn the language of the safety

The warning language of this mark means to request the user while operating this machine bed must provision obeying up ,the words that neglect will cause human body hurt .

This mark means the temperature to is very high after heating, can't touch directly, otherwise will be burned .

This mark means at press the plank press toMat match, can't the handle knob put into, otherwise will be pressed the wound.

This mark means when the machine switch on the electricity don't open that part, otherwise get an electric shock.

This mark means while opening the machine pay attention to safety, otherwise will cause the accident trouble.

IV. Main using and feature

i. Model of machine

This machine is suitable for middle furniture or small man-made board, secondary process to use hot adhere the furniture board, building separation board, wooden door (that

man-made plywood and every kinds man-made adhere) Such as plywood, MDF, the surface decoration material of shaving board: decoration cloth, fine board, metal screen, man-made and natural plywood, natural sheet, conjoin flower. It also can be drying and flating the single board, flating and finalizing color decoration wood chip.

ii. Main feature

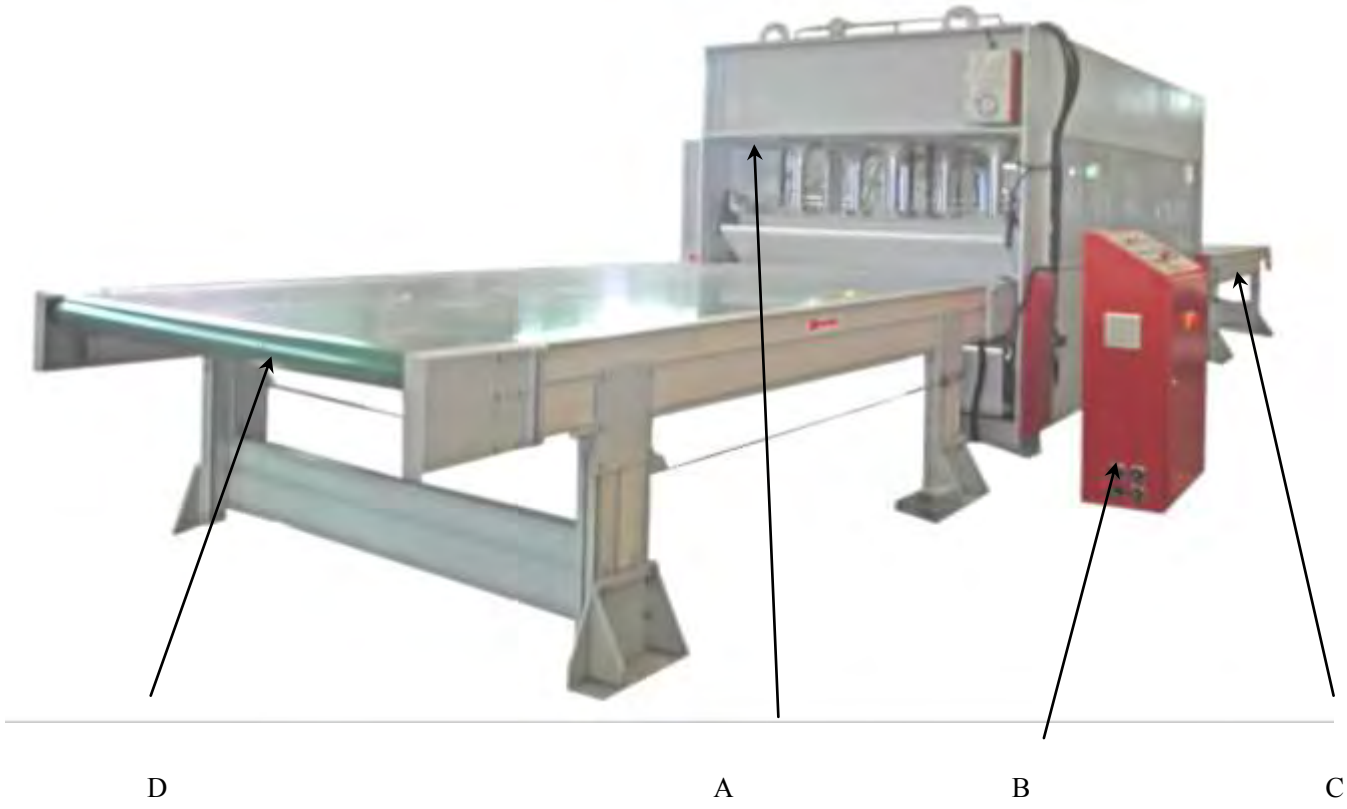
On the outside of the machine to compose blank, feeding, discharging. The max limitation to reduce the flaw because of man-made decoration to make rift and overlap .It also can safety the different description workpiece to lamination with two faces, especially for the workpeice. It also has advantage of high hot pressing temperature, hot pressing time short, feeding quick etc. In order to make sure the quality of the workpiece and improve the working efficiency.

The adjustable parameter of the machines is very wide. Control procedure reasonable to satisfy the requirement of every kinds lamination.

V. Main technology parameter

No.	Description	Parameter	Note
1	Max pressure	200t	
2	Opening between pressing boards	300mm	
3	Pressing board dimension	4000x1800X65mm	
4	Closed speed	60mm/s	
5	Q.ty of cylinder	Main cylinder 15pcs, fleetness cylinder 2pcs	
6	DIA of oil cylinder	15-Φ90mm 2-Φ85mm	
7	Oil cylinder travel	350mm	
8	Max pressure index	20mPa	
9	Hydraulic power	5.5kw	
10	Driving power	1-4kw 1-2.2kw 2-0.75kw	
11	Heating power	72kw	
12	Driving speed	20m/min	
13	Max temperature	120°	
14	Overall Dimension	13600x2500x2450mm	
15	Weight of machine	20660kg	

VI. Outline diagram of machine



A-Main body B-Electreic box C-Belt out-feed fram D---Belt r feeding fram

VII. Structure of machinery

i. Body structure

The machinery is compose of body board–pressing, hydraulic pressing, heating and electric parts, pusher section etc. The body is made of soldered standard material with nice appearance compact structure and good tension.

ii. Board pressing structure

All board are solid, and the oil holes inside the board are formed by drilling deeply with good leakage proof and pressure durability both sides of board are well polished by flat grinder to ensure the stamped work piece flat smooth .Both two direction under the worktable are furnished with synchronized geared bar to keep the pressing board stable when it moves up and down.

iii. Feeding-in section

The feeding section is compose of Feeding frame, feeding belt, driving roller and reduce motor. Feeding frame is welded by the strong enough steel .It is install the 10mm MDF on the surface of feeding frame .It is avoid the feeding belt attrition with the metal surface and effect the lift of the feeding belt. The feeding belt is made with the imported high quality PVC material which is 4mm thickness .Its surface is green, inside is net which to avoid the roller smooth .It has the endrue to mill and prelong advances. The driving roller is made with the thickness enough to made. It is very strong and same the center. The reduce motor is made by TaiWan .The power is 0.75Kw. rate is 1:20 .

iv. Pressing board feeding section

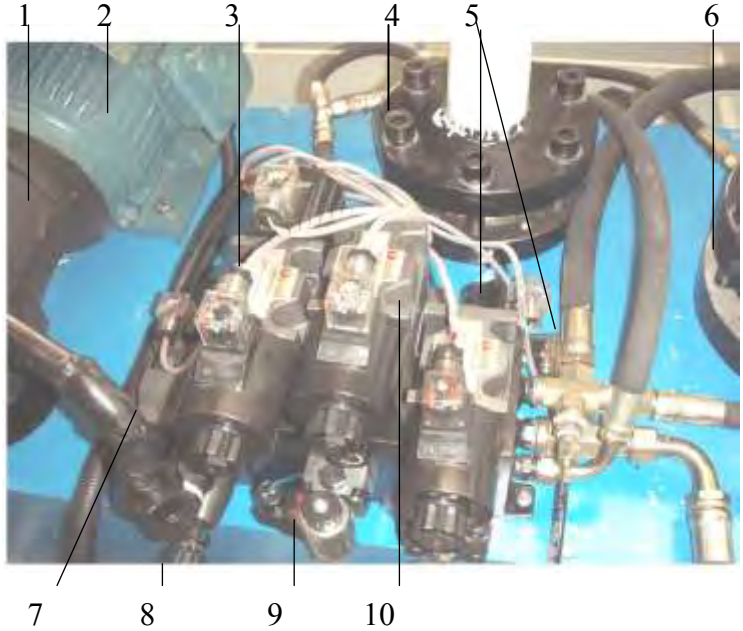
The pressing board feeding section is to send workpiece which receive from feeding frame into the presses machine and send out the workpiece which finish procedure .It is compose of High model, driving roller, reduce motor. To made the high temperature model cycle driving, It is endure the high temperature and milling.

v. Feeding-out section

It is compose of feeding frame, driving belt and reduce motor .The front 15 pc roller mainly driving the reduce motor. and the feeding section is reduce the labor in order to improve the working effective.

vi. Hydraulic section

The hydraulic press system consists of oil-tank, pump oil –cylinder and hydraulic Press control valve .the turbo pump is used to control the oil current and the piston pump is used to control the oil current and the piston pump is used to transmit oil and start press, the hydraulic press pump is driven by an engine to transmit oil and start press and the hydraulic press control valve is with compact structure stable functions in the hydraulic press system the current valve control the max pressure which acts as a safety protection unit to protect the oil pump against over-loaded pressure of the machinery .The single current reserving valve makes the board produce anti-pressure for the purpose of reserving to keep the machinery moving stability. The pressure meter is for displaying the pressure valve.



1——oil pump :provide to the hydraulic system

2——Motor：Drive the low flow gear wheel and high flow impeller pump

3——electromagnetic vavle ： For control the rise up and down

4,6—Liquid vavle：To provide the oil for the system quickly

5——Check valve ： To unload the high pressure

7——Eletromaganetic valve

8——Flow vavle

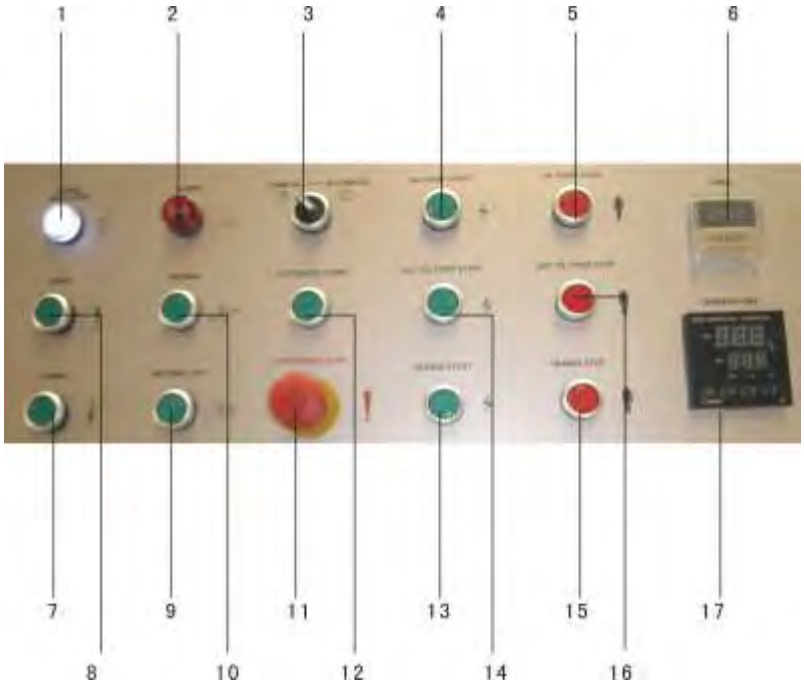
9——Electtromagnetic ball valve

10——Hydraulic single vavle

vii. Electric structure

The electricity part consists of main circuit and control circuit, the main circuit contains a current breaking unit which protects the whole circuit against overload or short –circuit the alternating current unit and heat-relay unit protect the whole circuit against low-load and overload. The control circuit consists of alarm thermomater control panel pressure board hold –pressure timer and control button .The whole circuit is designed reasonably with characteristics of safety and easy of peration.

A. Control panel



1—Power indication: This lamp bright means has connected with power.

2--alarm: when you hear alarm ,platen will rise up.

3—Manual/Automatic button: Choose this hand move button, every step operation should be operate by operator, Choose the auto button, every moving of the machine auto operating.

4—oil pump start button: press this button, oil pump start.

5—oil pump stop button: press this button, oil pump stop.

6—Timer: The timer means will show the workpiece tighen to the setting pressure .the hold pressure meter will start timing and show the digists.

7-lower button: Press this button, the pressing board lowering.

8—Raise button: Press this button the pressing board rising.

9—Material out button: Press this button, the feeding belt will be send out the workpiece which after procedured.

10—Feeding button: Press this button, the lamp bright, workpiece send into presses.

11—Emergency stop button: Press this button all the moving will be stop

12—Automatic start button: Choose this auto switch and press this button the machine start auto.

13—Heating start button: Press this button, lamp bright, heating board start heating,

14—Hot oil pump start button: Press this button, hot oil pump start.

15—Heating stop button: Press this button, heating stop.

16—Heat oil pump stop button: Press this button, oil pump stop.

17—Temperature controller: This temperature show the temperature which after heating, in order to keep the temperature.

B. Case

1------Switching power supply: Provide direct current of the electromagnetic valve.

2——Intermediate relay, to control the communication contactor heating .

3——Time relay, feeding time adjustment

4------ Time relay: adjust the time of release of pressure

5----- Phase sequence protector：For the phase error, phase lack protection of power supply

6--------insurance tube : To protect the 24v voltage short-circuit over current ,control circuit and electromagnetic valve.

7------ Circuit breaker: control feeding frame and the short circuit protection

8—— Control transformer: For Isolation control and step-down

9—— Inverter: used to control the mainframe out-feeding

10—— Inverter: used to control the front belt conveyor feeding frame

11——Inverter: after used to control the out-feed frame

12-----Programmer: used to control the system programming

13-----Breaker: control of hot oil pump and the short circuit protection

14——Breaker: control of oil pump and the short circuit protection

15,16,17---Breaker: control the heating system of three group.(each of heating group heating power is 24kw)

18------Communication contactor:used to control the mainframe out-feeding

19------ Communication contactor: used to control the belt converoy feeding frame.

20------ Communication contactor: used to control the out-feed frame

21——Communication contactor: used to control the hot oil pump.

21a——Thermal relay: used to protect the hot oil pump motor overcurrent and over load

22—— Communication contactor: used to control the oil pump

22a——Thermal relay: used to protect the hot oil pump motor overcurrent and over load

23------- Communication contactor: to control the heating group 1
24------- Communication contactor: to control the heating group 2
25------- Communication contactor: to control the heating group 3

VIII. Loading and transportation g of machine

i. Transportation

When transport must be fixed the machine firmly, make the pressing section under the tighten condition (the tighten pressure is about 2-5 Mpa) do the prevent shine and rain measure. When loading should be operate by the professional

ii. Transport and stock environment requirement: Transport and stock should be during -25℃～55℃ .If Under more than 55℃ but less than 70 ℃ environment, the machine can not working over 24 hours

iii. Loading

1). When loading the machine should be evacuate people and set the safety protection

2). Use the crane or electrical forklift which weight enough to loading the machine. During the whole loading procedure should be make sure the machine is steady, when the machine lifting, forbidden around anyone (The right picture is the forklift loading)

iv. After loading put away all the safety device loading tool and temporary device

IX. Some parts description of machine

i. Timer

There are three kinds of set for opion (hour “H” minute “M” second “S”)on the digital pressure –holding timer ,the operator may select according to practical requirements .when you select “H” you may adjust the button to “H” then use your hand to press the small touch button (the button marked “-”means drcrease the value , “+”means increase the value)on the pre-set digital switch and setthe needed

time you can set “minute” or “second” in the same way (Notes:The time of this timer range from 0.01second to 99hours and 99minutes.

ii. Temperature controller

iii. Temperature controller

There is a “temperature screen ”A on the up right side of The temperature controller, the low side is the button of SET(Confirm button)up and down button

A— set key

B— choice key

C— “+” key

D— “-” key

Setting temperature of pressing board

Press the SET key “1” over 5s the parameter enter into the procedure and will be reback after finish. Press SET key, the unit value will be twist, at that time you can modify with the Key “3”or “4”,press the SET key to confirm and back to the normal .If pass 20 seconds still no moving, it will reback to the normal (Note: Press the SET key over 5s it will enter the parameter directly to the operation procedure then reback auto.)

iv. Pressure meter connector

1—pressure setting indicator

2—system pressure indicator

3—setting button for pressure

The meter is used to the pressure and indicate the system pressure, before start to operate this machine, must firstly press down the setting system working pressure for actual needing.

v. Balance device of pressing board

A——Gear strip tighten screw

B——Balance gear strip

C——Bearing seat

For the baalane device of platens is compose of lengthwide and transverse .It is use for keep the platens balance when liftign up .When the gear strip and gear wheel milling or loose ,gear

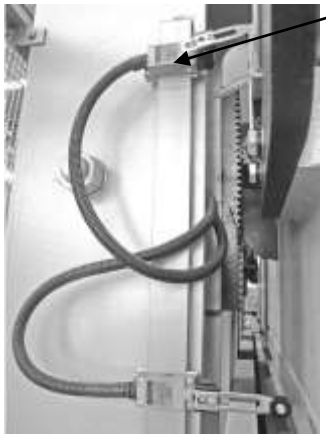
wheel will match the gear strip and palten can not lifting up even more will damage the cylinder .So when you find the platens lifting not very steady or unbalance ,you should be check the balance device

Adjustment of low pressing board level: During operating the machine the front, back and right and left appear height and low unbalance, you can adjust as the following:

a.First loosen the screw “A”on the balance strip then tighten the pressing board rising .

b.Tighten the screw “A” Then downing the pressing board is OK .

(1)、 Platen limit switch



There are two limit switches of platen. On the above is the up limit stroke switch: When the worktable lifting meet this switch,it is no longer rising; In the low position is the down limit stroke switch,before touch this switch ,the worktable depends on its own weight falling fastly ,Once touch switch, the worktable is start to slow down, so conducive to the protection the platen.

(2)、 Pull emergency stop switch

There is install cord emergency stop switch on the feeding, discharging, It is use to emergency stop when there is danger. When there is danger during operating, the operator can not press the emergency stop switch on the panel with hand or far away the panel, you can draw this switch by hand, the whole machine will be stop operation.

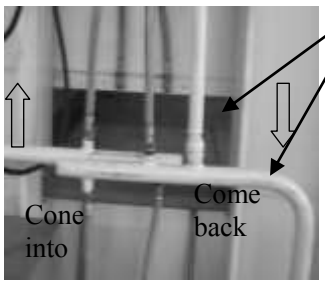
(3) Heating case

A——Electricity heating pipe

The heating pipe of the heating case is 6Kw ,Because the

layers is different the quantity of the heating pipe is different .The heating pipe is install on the heating case directly .If need to replace the heating pipe ,you should be shut off the general switch and give out the guide oil .

(4) Connecting of channel and pressing board



A——Pressing board

There is one oil inlet and oil intake on every layer, among that the soft pipe and the corresponding oil in iron pipe connected to make the oil cycle during the pressing board and heating case to keep the pressing board constant temperature.

X. Install, debug and operation of machine

i. Install debug

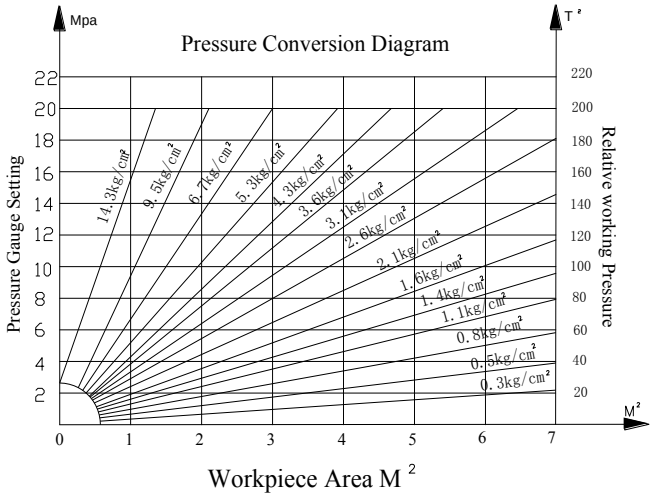
A. Environment required of install the machine: The requirement environment of install machine: 1.Install dimension: 13600x2500x2450mm 2. temperature: -10°C～55°C 3.Atmosphere humidity :85% 4.Height above sea level: hereinafter1000M.

B. Lay out of machine: The machine should be lay out on the flat concrete. After lay out the machine, adjust the level of the machine to make sure the front ,back ,right and left four point on the same height

C. Distribution: According the distribution of the required, connect into the voltage, current and frequency on the power terminal.

D. Make sure the correct direction of the hydraulic system oil cylinder and heating pump motor: Press the raise button, if the pressing board rising that means the rotating direction of motor is correct, if not you have to change any tow phase wises during the three phases wises to get the correct direction.

E. Setting the working pressure: According the workpiece area, to check the relative pressure

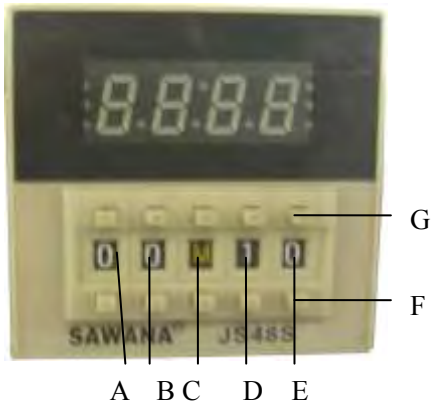


ii. First make sure how many intensity of pressure will be required on the workpiece area according the workpiece required.

iii. To measure the length, wide of the workpiece and count the area of the workpiece

iv. According the workpiece to make sure the intensity of pressure should be on the workpiece, from the relative line on the chart (If there is not any intensity on the chart you can draw by yourself) there is an intersection of the intensity pressure and workpiece area anis of ordinate. and the crosswise axis line corresponding left value pressure is the red pointer setting, and the right side value is the general pressure value.

F. Setting time



A——The digital from 0 to 9 can be adjusted

B——The digital from 0 to 9 can be adjusted

C——Selection of time model

D——The digital from 0 to 9 can be adjusted

E——The digital from 0 to 9 can be adjusted

F——"+"means increase

G——"-"means reduce

The time can be setting according the actual

a. First select the time model "Hour H, Min M, Second S"

b. Then set the required four digital from "0-9"

If the time model choose as "Hour H "the four digital setting value is "99H99", that the actually time is "99.99" hour, if the four digital key setting value as "00H03" the actually pressure holding is "0.03"hour (If the time setting model is "Min M or second S"The back value hour should be change as " M" or "S"

c. The time Max value can be set to "99.99 hour "， the min is 0.01S

d. After time, you send the workpiece to the feeding table

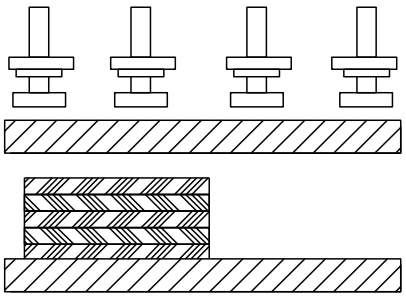
G. Temperature setting of pressing board (Please check the description point2

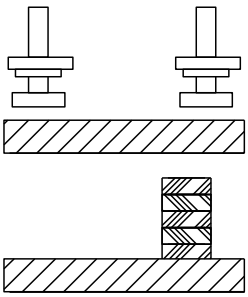
temperature controller)

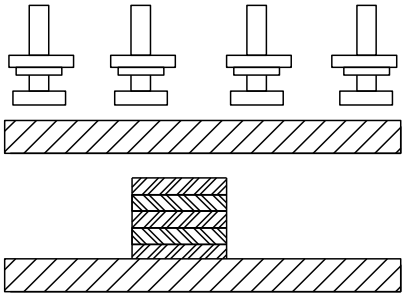
H. Workpiece layout

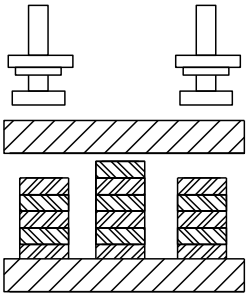
Before add the pressure on the workpiece ,you should be choose the correct layout place according the actually dimension ,Forbidden add the pressure on the workpiece when the right left and front ,black unbalance

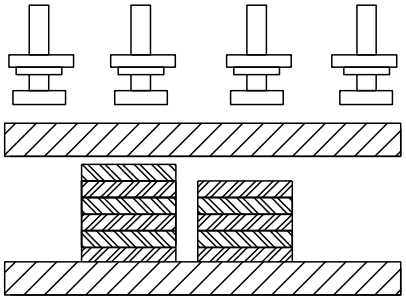
1. Workpiece layout wrong sketch map

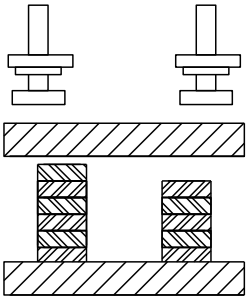






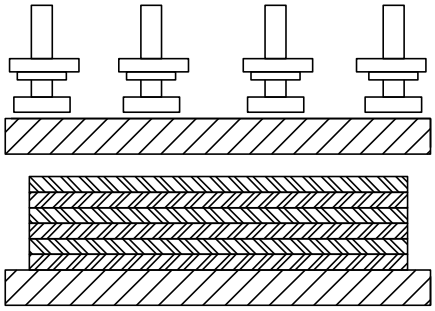


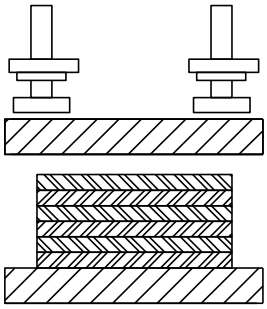


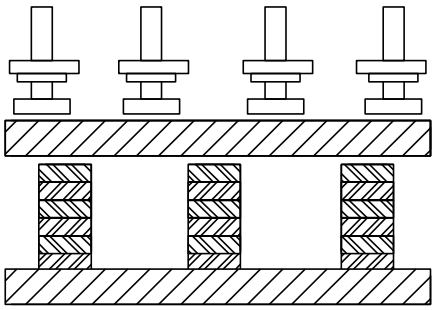


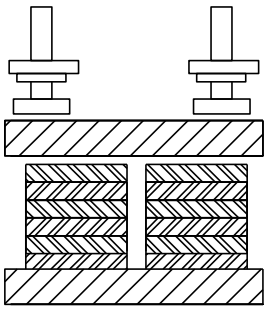
Note:Anyway how many layer of the machine Every layer forbidden to working the workpiece with unbalance or will be damage the machine seriously .

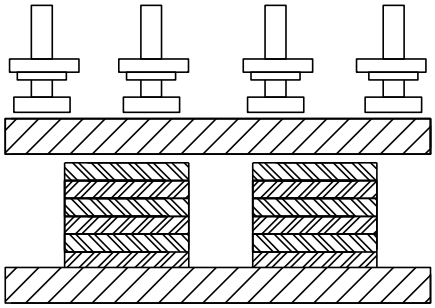
2.Workpiece layout correct sketch map











Note:Every layer has to lay out the workpiece with the correct position.

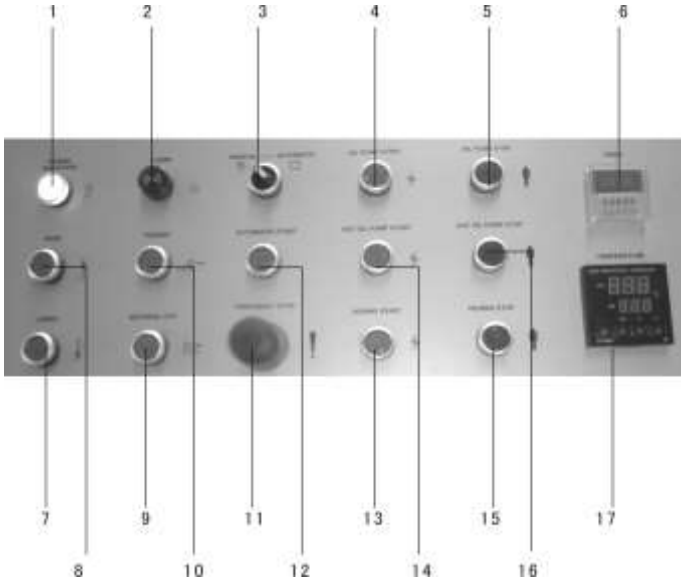
ii. Operation

A. Safety checking before operate the machine

Before operate the machine must be check once of the machine carefully to make sure operation safety

- **a.** Check every safety protection device correct, firmly or not
- **b.** Check every rotating, connection section firmly or not
- **c.** Check the hydraulic system pressure normal or not
- **d.** Check the oil pump, hot oil pump rotating normal or not
- **e.** Check the pressing board raising steady, firmly or not
- **f.** At last operate the machine without anything and check the whole procedure correct or not.

B. Manual operation



1.Connet power ,power lamp “1” bright

2. According the size of the workpiece and the requirement of craftwork to set the suitable pressure， and setting the time on the pressure meter “A”
3. Timer “6” to adjust the timer
4. Press again the heating start button “13” ,that will show the actual temperature “6” on the platen
5. When attain the setted temperature ,please lay the workpiece with correct direction .
6. Press the rise up button “8” platen will rise up
7. When the platen attain the setting pressure ,Timer “6” will start to timing
8. After time ,platen will open auatomaticly (Also can press the button “2” to open the platens)

C. Automatic operation

When choose automatic switch, the workpiece must be to the photoelectric position to block the light, click on the "8" automatic start, the feeding frame began to feed. When all workpieces be transmission to the press by conveyor belt .low table start rise up and and pressure to the set pressure, the timer is starting timing, when to set the time after the platen automatic falling, falling meet stroke switch an automatic operation procedure is completed

XI. Failure and solution

When checking the machine you find the failure as the following ,you can deal with it as the following solution at first .If follow the solution also can not solute the problem,please assist from manufacturer

Failure	Reason	Solution
Press the button but machine can not operate	General power or control power closed	Open the power
	Power short of phase	Check and repair
	Breaker can not close	Open the electricity case and close the breaker
	The connector does not work or hot relay break	Check the circuit whether break or overload and repair
	Hydraulic system control electromagnetic valve break	Replace the electromagnetic valve
	Pressure meter connected point can not touch very well	Check and repair
	The Mid relay break	Replace the mid relay
Suddenly short of power when the machine working normal	Short circuit or breaker trip	Check the motor isolation qualify or not .and whether connect the earth wires or not close the breaker
	Overload to make the hot relay short circuit	Check the circuit and adjust the hot relay recover
The motor start but can not raise the pressure and the noise from oil pump is very lound	Oil pump break	Replace the oil pump
Oil liquid make the air	Oil pipe leakage	Tigthen or replace the connector
	Liquid is very low	Add oil to the normal liquid
	The mode of hydraulic oil is wrong	Replace the suitable hydraulic oil
Oil pump heating or no	Oil pump damage	repair or replace the oil pump

enough pressure	There is dirty inside the overflow valve	Clean ,repair or replace overflow valve
Pump motor does not rotating	Power short of phase	Check the three phase of voltage
The oil leakage form the high side to the low	Loading circuit can not move	Check the electrical circuit,if it no problem ,please repair or replace the exchange vavle

XII. Maintenance of machine

i. Daily maintenance

A. Keep the machine clean, keep every driving section and connect section lubricant.

B. Forbidden to put anything on the machine.

C. Check the oil condition into the oil case every week and add in time.

D. Check the oil circuit leakage or not and repair in time every day.

E. Check the valve and pole and the screw on the pressing board loosen or not every day, if loosen fixed in time.

F. Check the lifting balance gear wheel and strip on the pressing board using condition every day.

ii. Maintenance during operating

A. Operate the machine correctly, forbidden working over the original designed working range.

B. Put the workpiece correctly, forbidden dislocate.

iii. Check the machine every week

A. Before operate, please check every driving section and safely device correct or not, and operate the machine without anything, in order to check every moving correct or not.

B. Check every month, and especial check every fitting and other limit switch using condition lubrication etc, and check the safely protection fitting irmly or not and adjust and replace.

C. Check the oil cylinder, oil and hydraulic system using condition, especially for the oil whether need to replace, the oil circuit whether leakage oil condition, the pressure normal or not of the system.

iv. Maintenance when stock the machine

A. When you do not want to use the machine, please clean it and add lubricant on every driving section and package the machine.

B. Put the machine on the dry place and avoid to shine directly.

v. Selection of hydraulic :ISO-VG68# resist milling hydraulic oil

Or model: HF-2 46# resist milling hydraulic oil

DTE 26 resist milling hydraulic oil

Caltex: rando Hd 68 resist milling hydraulic oil

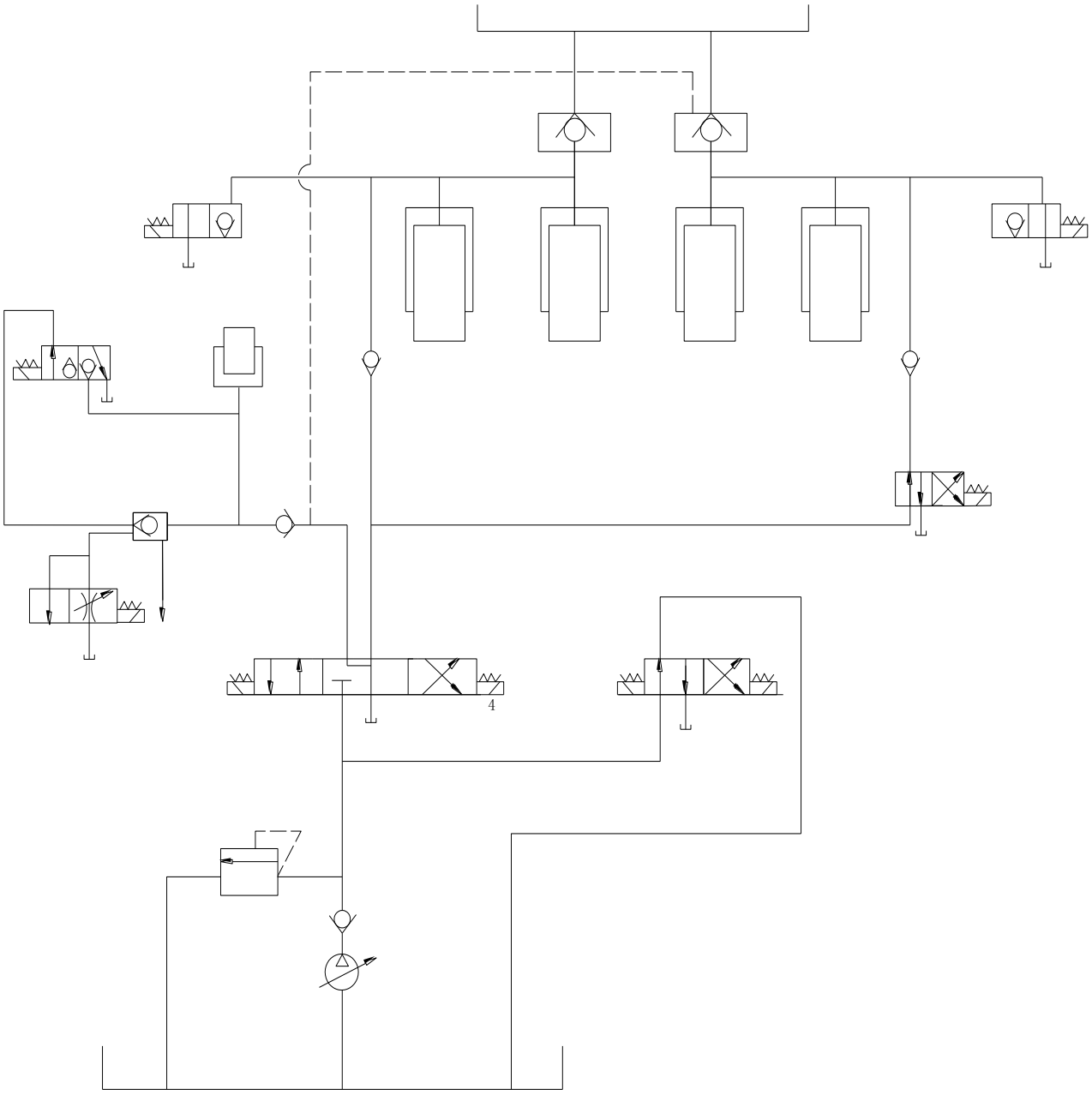
Esso: nuto H68 resist milling hydraulic oil

Shell: Tellus oil 68 resist milling hydraulic oil

vi. Guided heating oil opl:N32 or Caltex :Texatherm 32 guided heating oil

vii. Lubricant of balance gear wheel: the common bearing oil fat or Caltex :Meropa 68 lubricant fat .

XIII. Hydraulic principle diagram

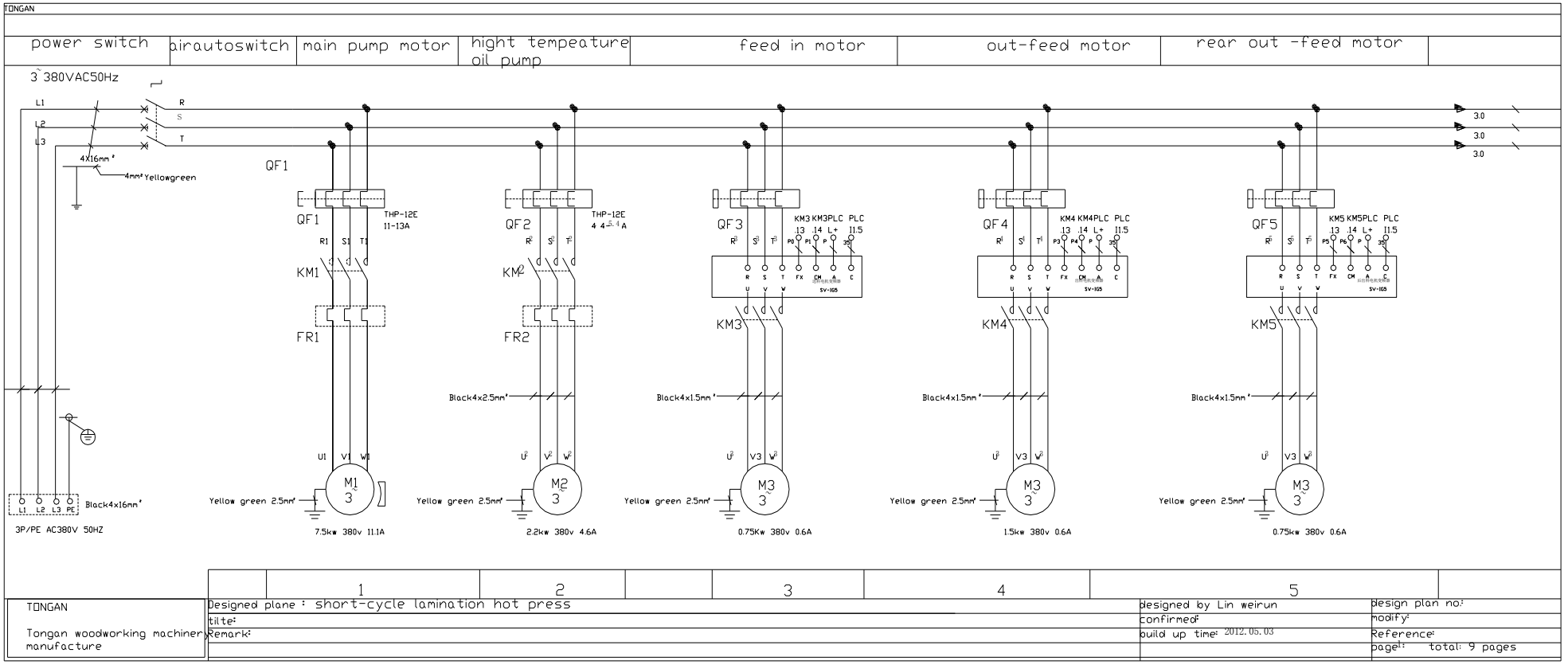


XIV. Detail list of hydraulic device

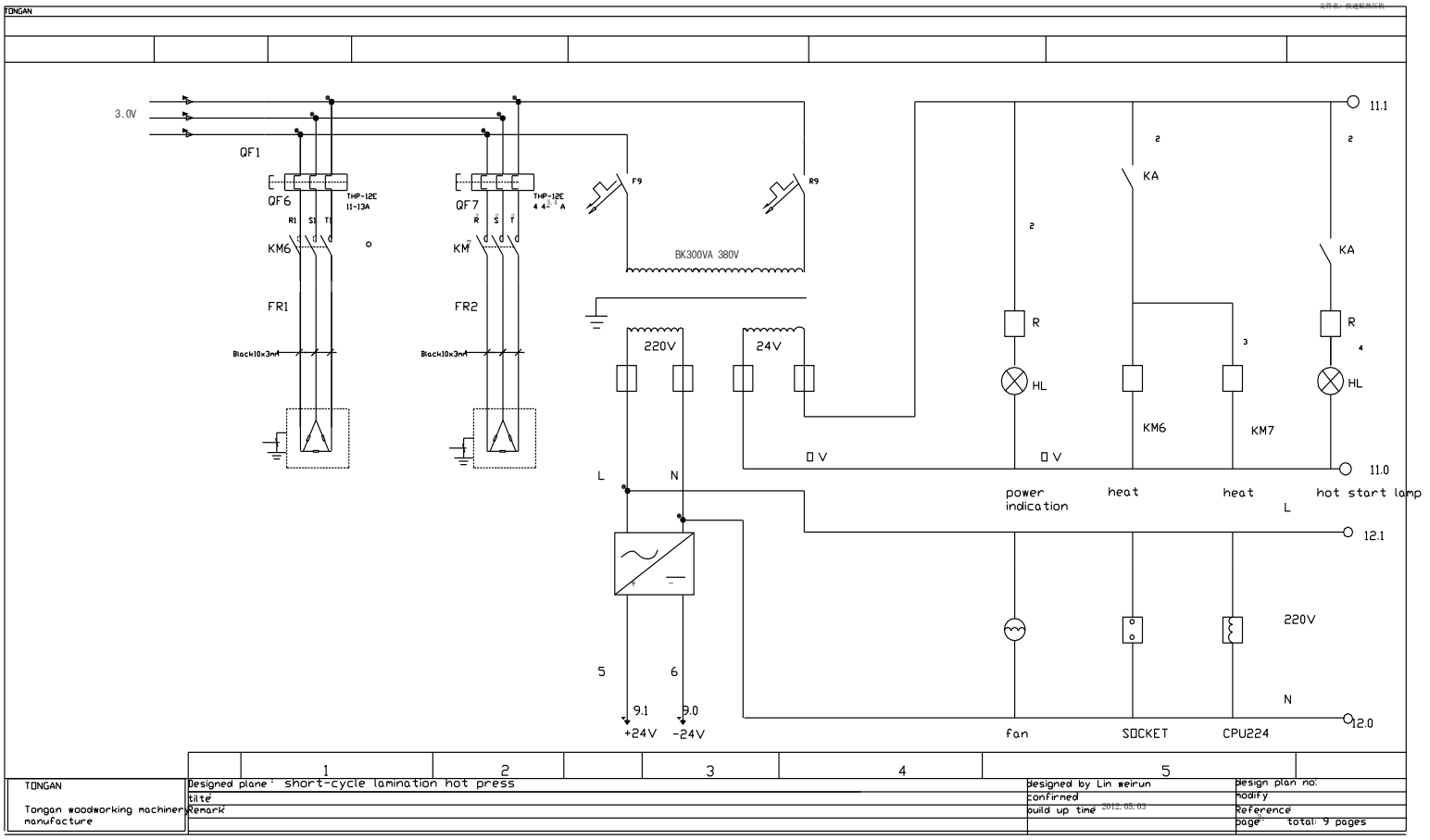
No.	Description	Model	Q.ty
1	Motor	7.5HP-5.5KW	1set
2	Oil pump	V23-A3R	1set
3	Electromagnetic valve	DSG-03-3C4	1pc
4	Electromagnetic valve	DSG-03-2B2	2pcs
5	Overlying overflow valve	MRV-03A-K3	1pc
6	Overlying overflow valve	MRV-03P-K3	1pc
7	Overlying overflow valve	MTCV-03W-1	1pc
8	Single sequence valve	CV-03G-50	2pcs
9	Tubular single valve	CV-04T	1pc
10	check valve	V2067	1pc
11	Liquid single valve	PCV-03G-05	1pc
12	Surge check valve	PF100	1pc
13	Oiler	QUQ2	1pc
14	Filter	MF-12	1pc
15	Liquid meter	YWZ-100T	1pc
16	Electromagnetic ball valve	23QDF-6B	1pc
17	Overlying overflow valve	MTCV-03B-1	1pc

XV. Electrical principle diagram

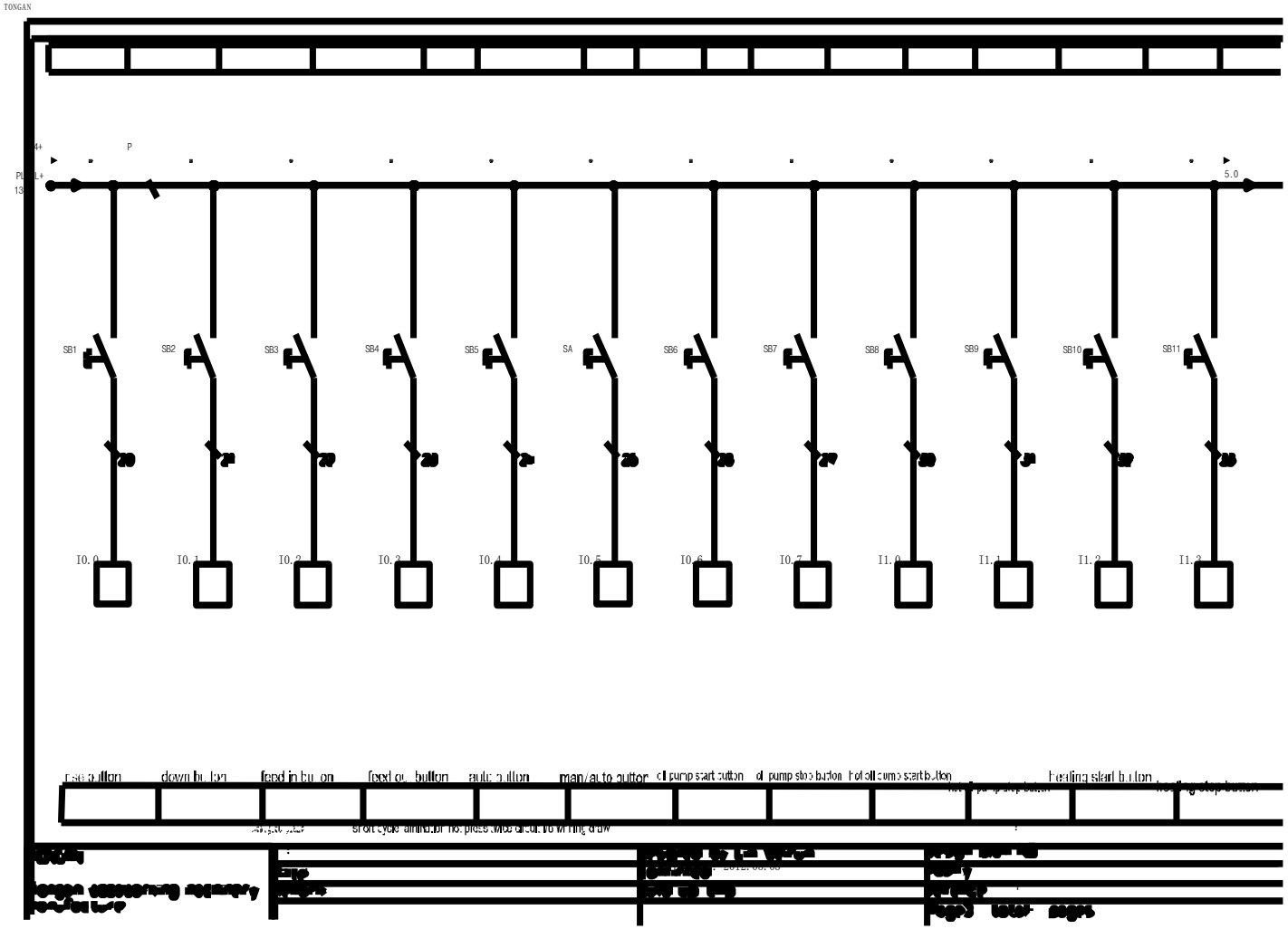
i. Main circuit



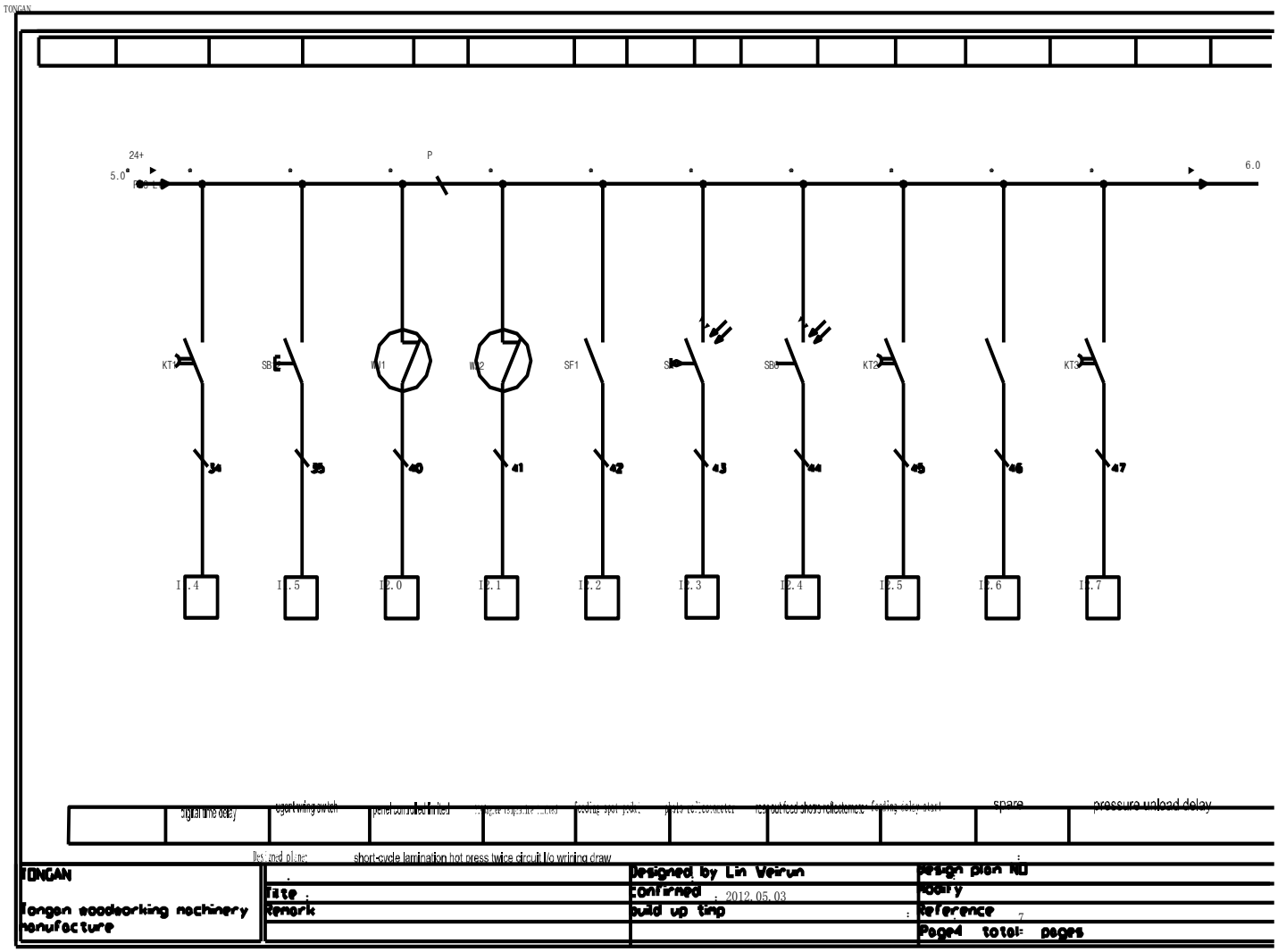
ii. Control circuit(1)



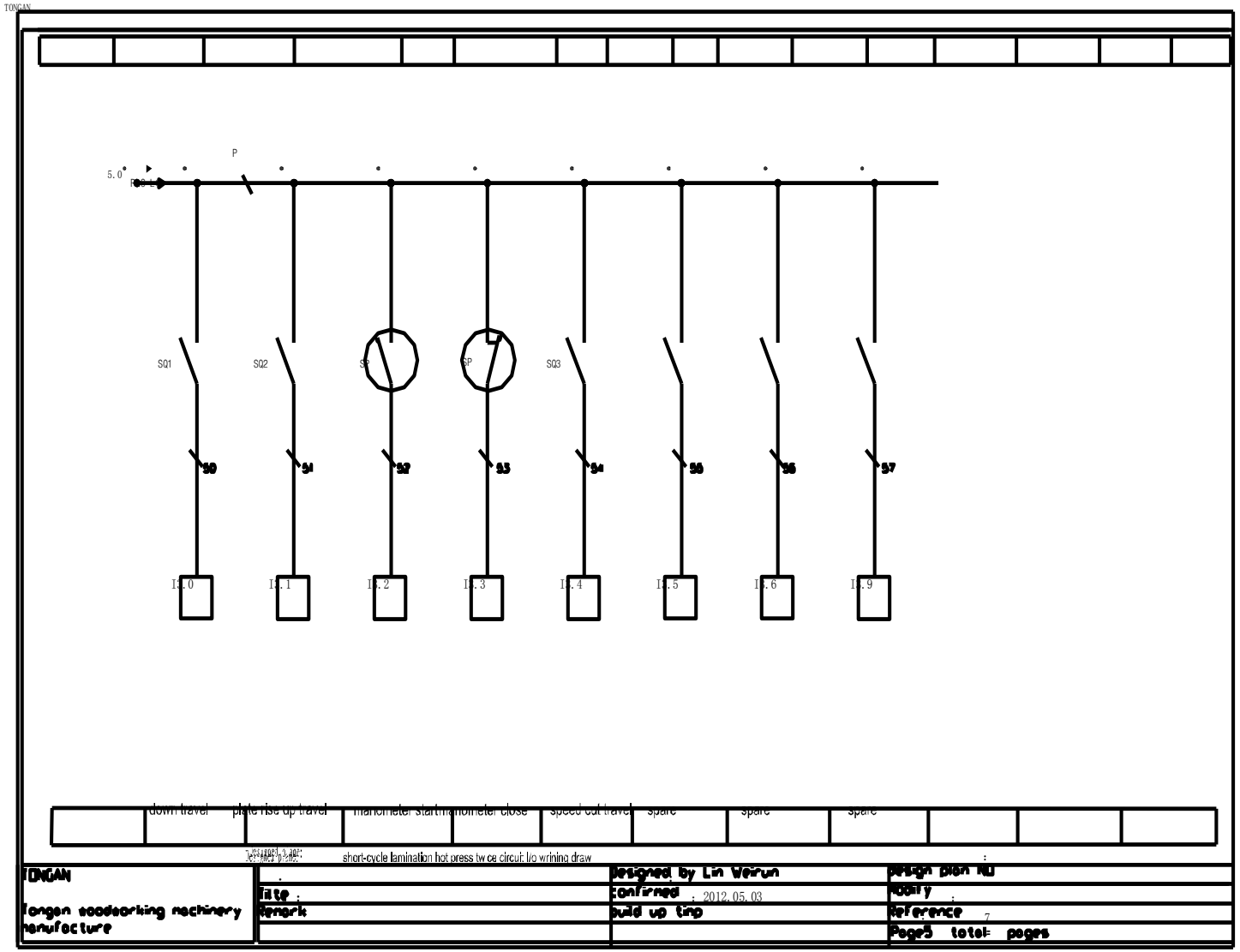
iii. Control circuit(2)



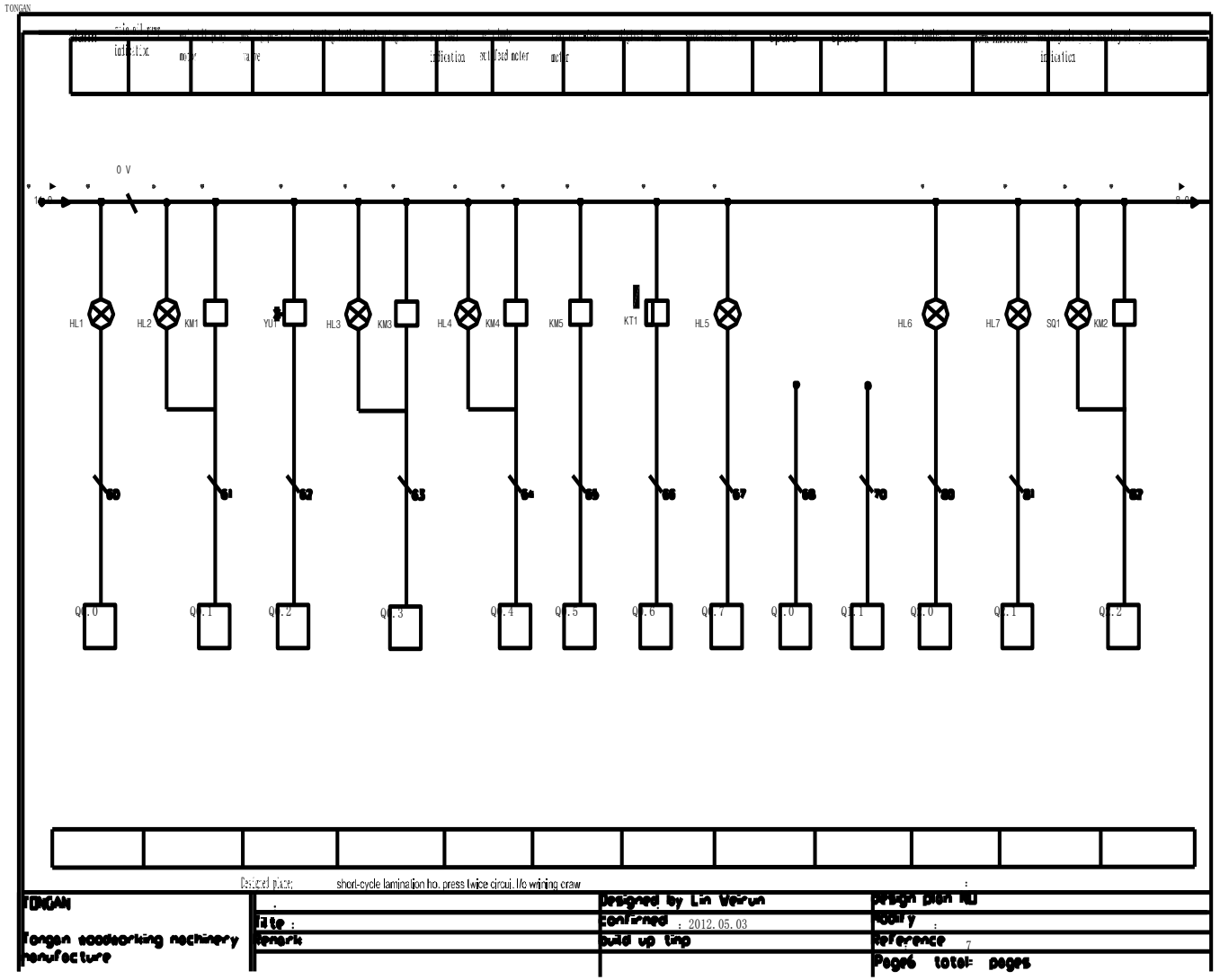
iv. Control circuit(3)



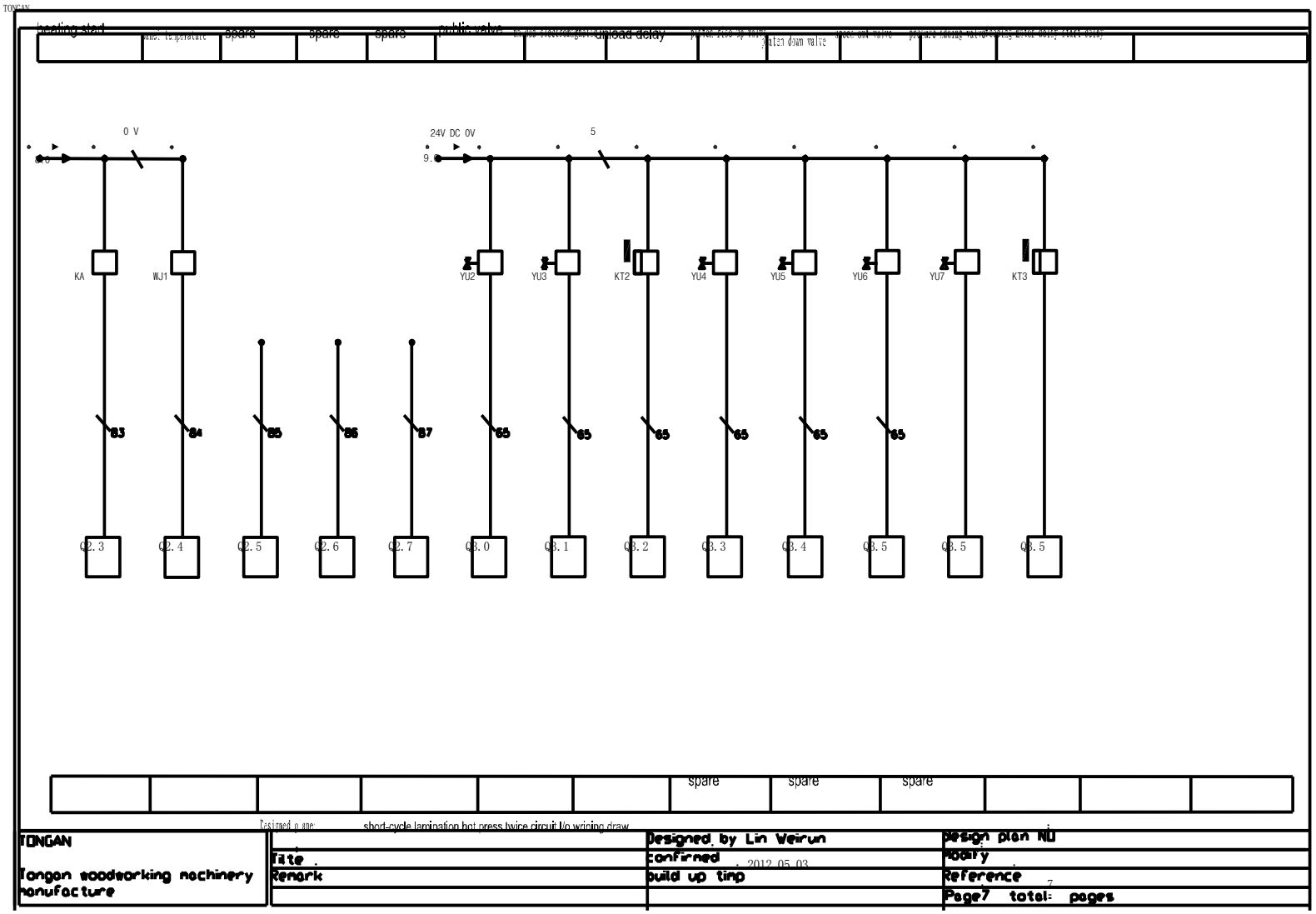
Control circuit(4)



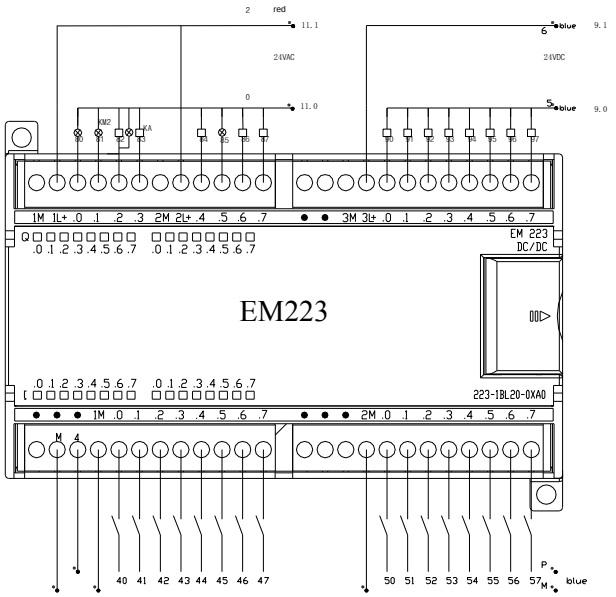
Control circuit(5)



Control circuit(6)



Control circuit(7)



40-hydraulic lifting photocell
41-feeding motor photocell auto valid
42-heating start
43-heating stop
44-hydraulic lifting table pedal up
45-heating group 1
46-heating group 2
47-feeding frame spot start

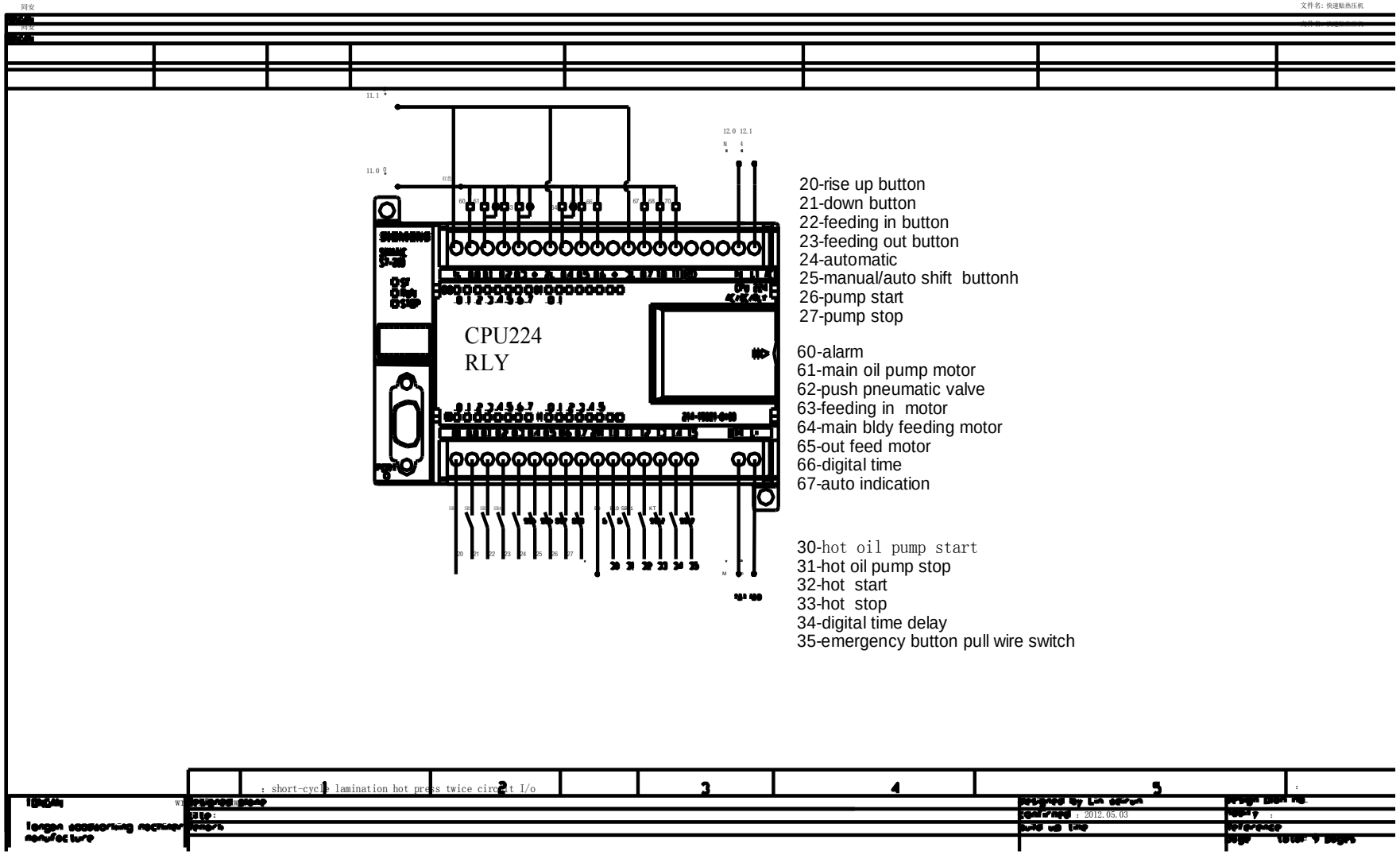
50-down travel limited
51-platen rise up limited
52-pressure meter switch on
53-pressure meter switch off
54-sped reduce valve
pedal down

90-public electromagnetic valve
91-pressure unload 1 electromagnetic valve
92-pressure unload time relay
93-platen lift up electromagnetic valve
94-plate lift down electromagnetic valve
95-speed reduceing valve
96-pressure adding valve
97-feeding in relay

80-rise up lamp
81-down lamp
82-heating pump start
83-heating start lamp
84-

TONGAN
Tongan woodworking machinery manufacture
Designed plane : short-cycle lamination hot press twice circuit I/o
Wiring draw
Remark:
designed by Lin weirun
confirmed
build up time: 2012.05.03
design plan no:
modify
Reference
pages 8 total: 9 pages

Control circuit(8)



XVI. Detail list of electrical device

NO	Description	MODEL	Q. ty
1	AC connector	2510 24VAC	1pc
2	AC connector	0910 24VAC	4pcs
3	Hot relay	JRS09-25 18A	1pc
4	Hot relay	JRS09-25 10A	1pc
5	AC connector	SP-40 40A24VAC	2pcs
6	AC connector	SP-60 60A 24VAC	1pc
7	Travel switch	8108	4pcs
8	Red button	LA39-01	3pcs
9	Green button with lamp	LA39101 24VAC	8pcs
10	Emergency stop	LA39101	1pc
11	Shift switch	LA39	1pc
12	Power start indication	AP-22 24VAC	1pc
13	Power switch	S-145-24	1pc
14	Air switch	DHC 32A	1pc
15	Air switch	DHC 40A	3pcs
16	Air switch	DHC 60A	1pc
17	Fuse seat	RT18-32 4A	3pcs
18	thermocouple	2 meter	1pc
19	Temperature adjuster	WZA50-300℃	1pc
20	Temperature	AZ208 24VAC	1pc
21	Digital time relay	PH48SH 24VAC	1pc
22	Control transformer	BK380 415/220 24 C220V=180VA 24V=120VA	1pc
23	Mid relay	24VAC	1pc
24	Combinate switch	40A	1pc
25	Photoelectricity switch	E3JK	2pcs
26	Pull switch		1pc
27	fan	220V	1pc
28	filter		1pc
29	Wring board	UT2 2.5 ㎡	150pcs
30	Wring board	100A 3P	1pc
31	Wring board	60A 3P	2pcs

32	Fixed	2.5 ㎡	8pcs
33	End plate	2.5 ㎡	4pcs
34	Air plugs	13 15A	5pcs
35	Air plugs	5 10A	2pcs
36	Guide socket	ZP 10A	1pc
37	Alarm	CBZ-30 24VAC	1pc

Pressure conversion diagram