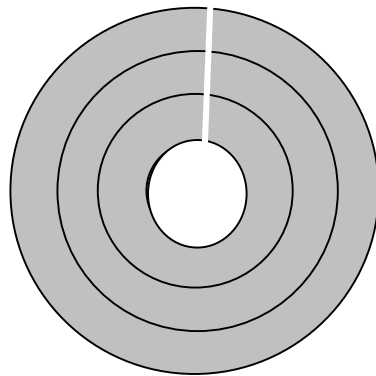




NEW SPIRAL INSULATION PIPE MACHINE

MANUAL



GUANGZHOU SHING-HARNG PLASTIC
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Patentee : Hu Shing-bun
Taiwan patent No.: M 317529
China patent No.: ZL 2005 2 0063895X
ZL 2007 2 0050394.7

I N S T R U C T I O N

1. This machine is designed for manufacturing the third generation thermal insulation pipe called spiral insulation pipe (scientific name: Multi-layers foam thermal insulation pipe).
2. The machine and its product had received the patents. Taiwan machine patent No. : M 317529, China machine patent No.: ZL 2005 2 0063895X; Compound spiral insulation pipe patent No.: ZL 2005 2 0063895X, Spiral insulation pipe No.: ZL 2007 2 0050394.7.
2. The spiral insulation pipe is applied to air-conditions system and heating hot water pipeline system for fireproof and heat preservation, to city water and anti fire pipeline for prevent freezing, and to condensation water and refrigeration pipeline for cool preservation.
3. Type SH-120 machine produces the 1.2m length spiral insulation pipe; Type SH-150 machine produces the 1.5m length spiral insulation pipe.
4. The machine can produce PE, EVA, XPE sheet material of the spiral insulation pipe, the diameter of the insulation pipe respectively from 1/2 " to 8 " , and its thickness range from 15mm to 100mm or more.
5. The surfaces of spiral insulation pipe include aluminum foil, PE skin , and color surface, etc.
6. The machine also can provide the plastic spring for our patent product *SOFTWELL* Negative Ion Mattress.

TECHNICAL DATA

1. The thickness of the sheet material ranges from 2mm to 20mm; the thickness of spiral insulation pipe is from 15mm to 100mm or more.
2. The mini diameter of tube core is $\Phi 22$ mm, the max diameter is $\Phi 219$ mm.
3. Rating voltage: 1 Φ ,220V or 2 Φ ,380V, enclosed with circuit diagram.
4. Variable frequency speed motor: YCT112-4B, 0.75KW;
Frequency: 60HZ/50HZ.
5. Heating pipe: 1.5~3kw.
6. Dimension(Type120): L2150 \times W1450 \times H1400mm.
7. Air pressure: 4kgf/cm²
8. Weight: 326kg \pm 5%

Well-assembled machine for export could be easily installed and adjusted,and move on the level.

CONSTRUCTION

The machine is consisted of the frame, roller, heating pipe, variable frequency motor, speed-down device and other parts. Enclosed 13pcs tube cores (e.g.: 1).

Parts Table

No.	Name	Type
1	Motor	0.75KW 220V/380V
2	Transducer	1.75KW 220V
3	Grounded switch	220V 16A
4	Contactora	S-P 11A 220V
5	Pilot	AD16-22D/S
6	Push button	Φ 22
7	Push switch	PB-3
8	Fuse	RT18-32
9	Reverse switch	HY2-8
10	Level switch	Φ 22
11	Heating pipe	24001W
12	Heating board	400/220V
13	Cylinder	SC63-200
14	Magnetic valve	4V220-8
15	Adjustable press valve	KAW2000-02
16	Electric box	30×20×40cm

O P E R A T I O N

1. The machine requires two workmen to operation.
2. Choose proper tube core and the sheet material.
3. Turn on the power switch (8) and heating switch (1-7), pilot light on, then setting temperature heating time about 10-15 minutes.
4. Test the rotate speed by the roller's variable frequency motor.
5. Adjust the distance between the heating pipe (12) and roller (10) by the valves (15、16、17) .
6. Adjust the distance between the tube core (9) and roller (10) by the valve (11).
7. Start working as the temperature reaches 100~120°C .
8. Put the sheet material into the slot (9) about 2~3CM.
9. Close the heating pipe (12) against the inside of sheets, turn on switch (18) and press button (15); press the heating pipe button (15) when reaching the demanding thickness, heating pipe (12) withdraw automatically, turn off the roller switch (18) , cut along the slot (9) with the heating knife, take out the tube core, then cut the uneven ends of the pipe, finally the spiral insulation pipe is produced out.
10. Before operation, workman shall be under our firm training about 36 hours.
11. Enclose each copy of the front view and side view (eg:1,2) .

C A U T I O N S

1. Beware of the heating pipe in operation.
2. Be sure providing even pressure between the heating pipe and sheets to meet ideally among the layers of the sheets.
3. Be sure that rotate speed and melting speed keep same steps.
4. Keep sheet material in the dry and clean condition.
5. Be sure the electric wiring is grounded.

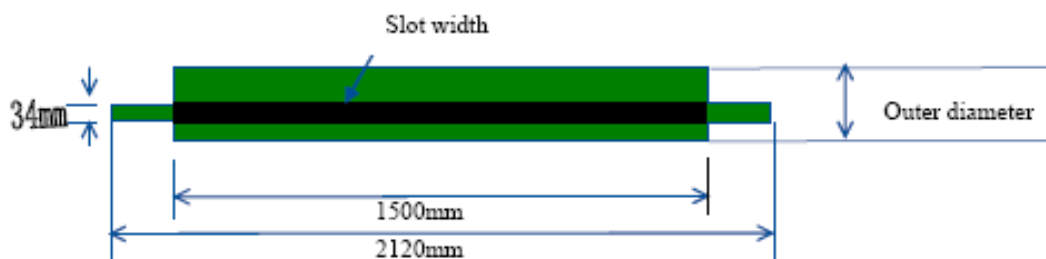
M A I N T E N A N C E

1. Lubrication to Bearing once per month.
2. Lubrication to Speed-down device once per half year.
3. Clean the surface of the heating pipe.
4. Turn off the power after working.

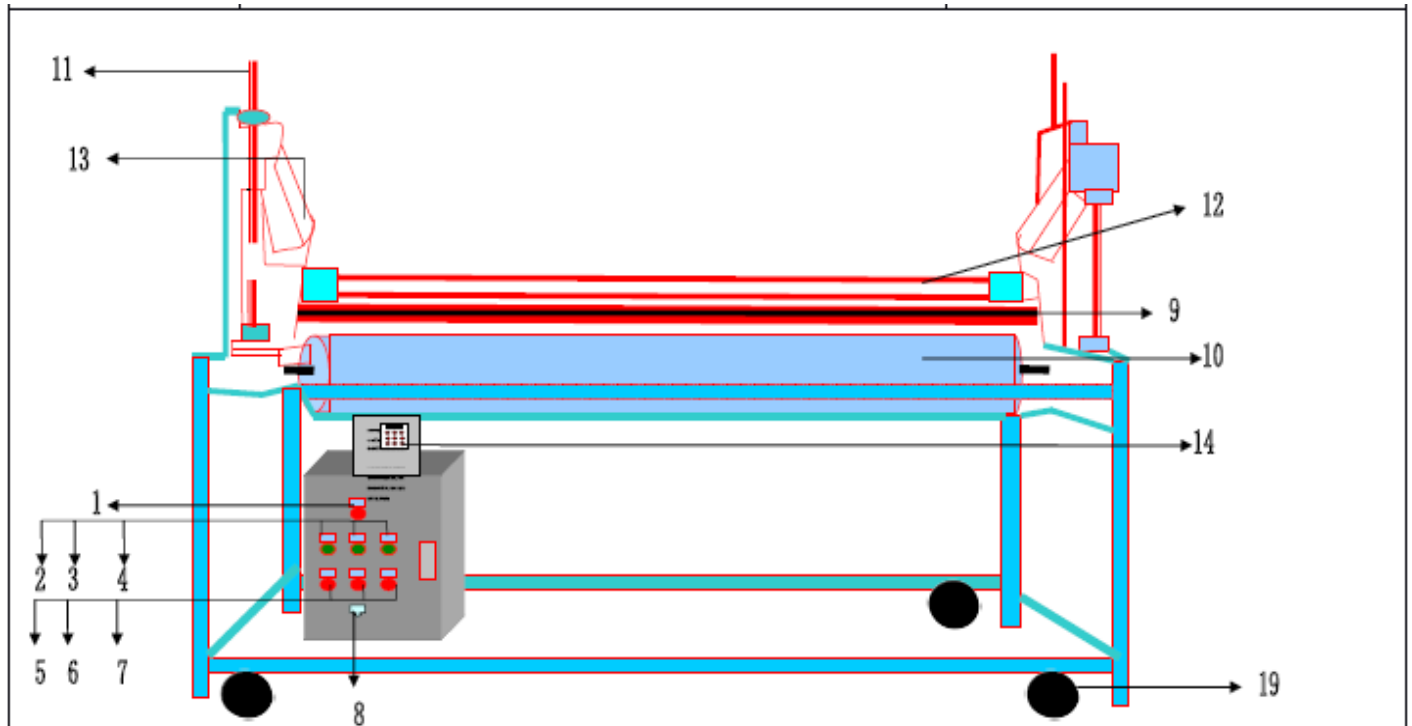
Tube Core Specification Table

No.	Type	Dia mm	Dia inch	Qty (pcs)	Slot Width mm	Length mm	Outer dia mm	Total length mm
1	DN15	Φ22	1/2"	1	10	1500	34	2120
2	DN20	Φ28	3/4"	1	10	1500	34	2120
3	DN25	Φ34	1"	1	15	1500	34	2120
4	DN32	Φ43	1-1/4"	1	15	1500	34	2120
5	DN40	Φ48	1-1/2"	1	15	1500	34	2120
6	DN50	Φ60	2"	1	15	1500	34	2120
7	DN65	Φ76	2-1/2"	1	15	1500	34	2120
8	DN80	Φ89	3"	1	15	1500	34	2120
9	DN100	Φ114	4"	1	15	1500	34	2120
10	DN120	Φ133	4-1/4"	1	15	1500	34	2120
11	DN125	Φ140	5"	1	15	1500	34	2120
12	DN150	Φ169	6"	1	15	1500	34	2120
13	DN200	Φ219	8"	1	20	1500	34	2120
Total				13pcs				

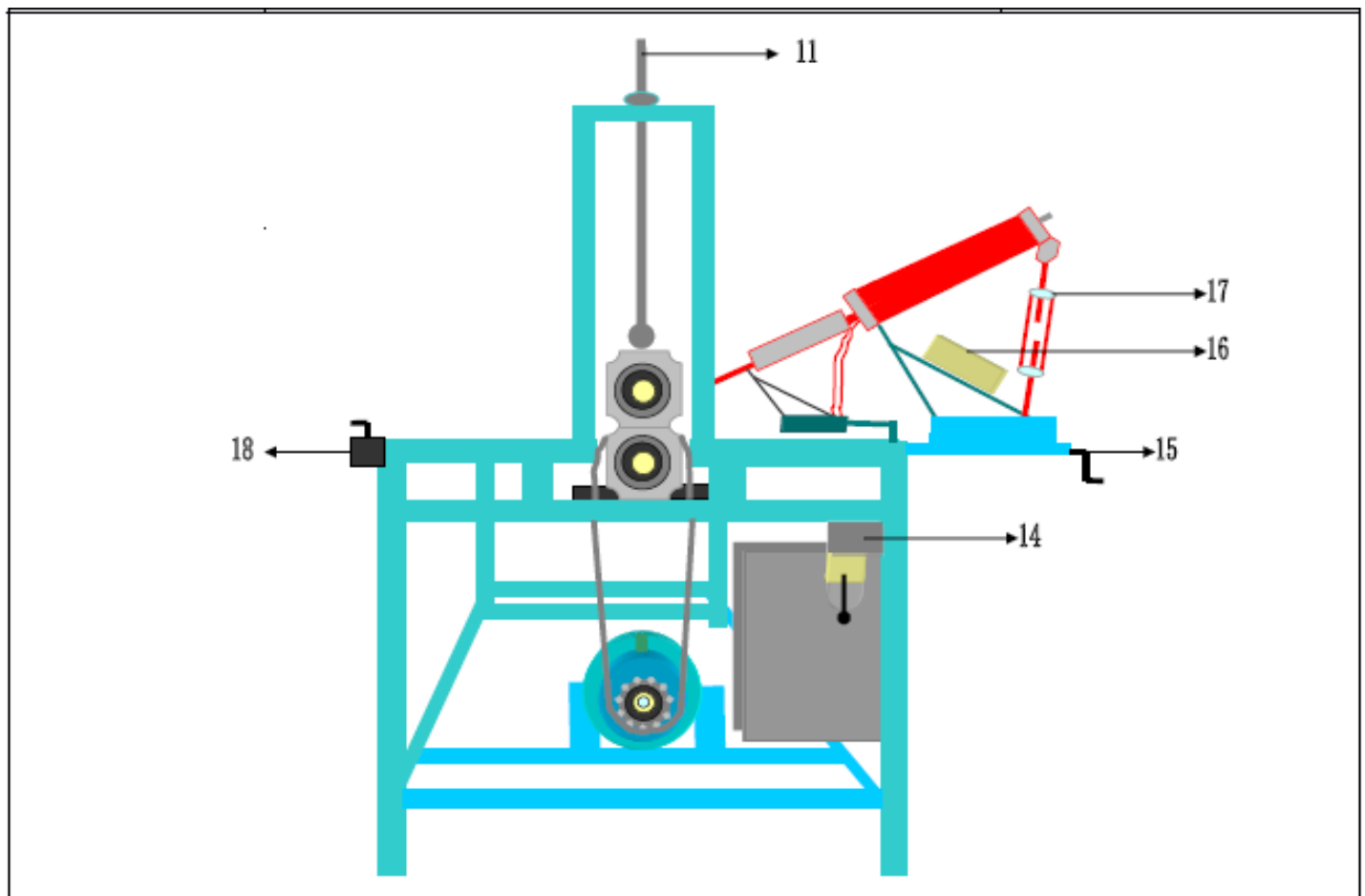
Remarks:



Front View

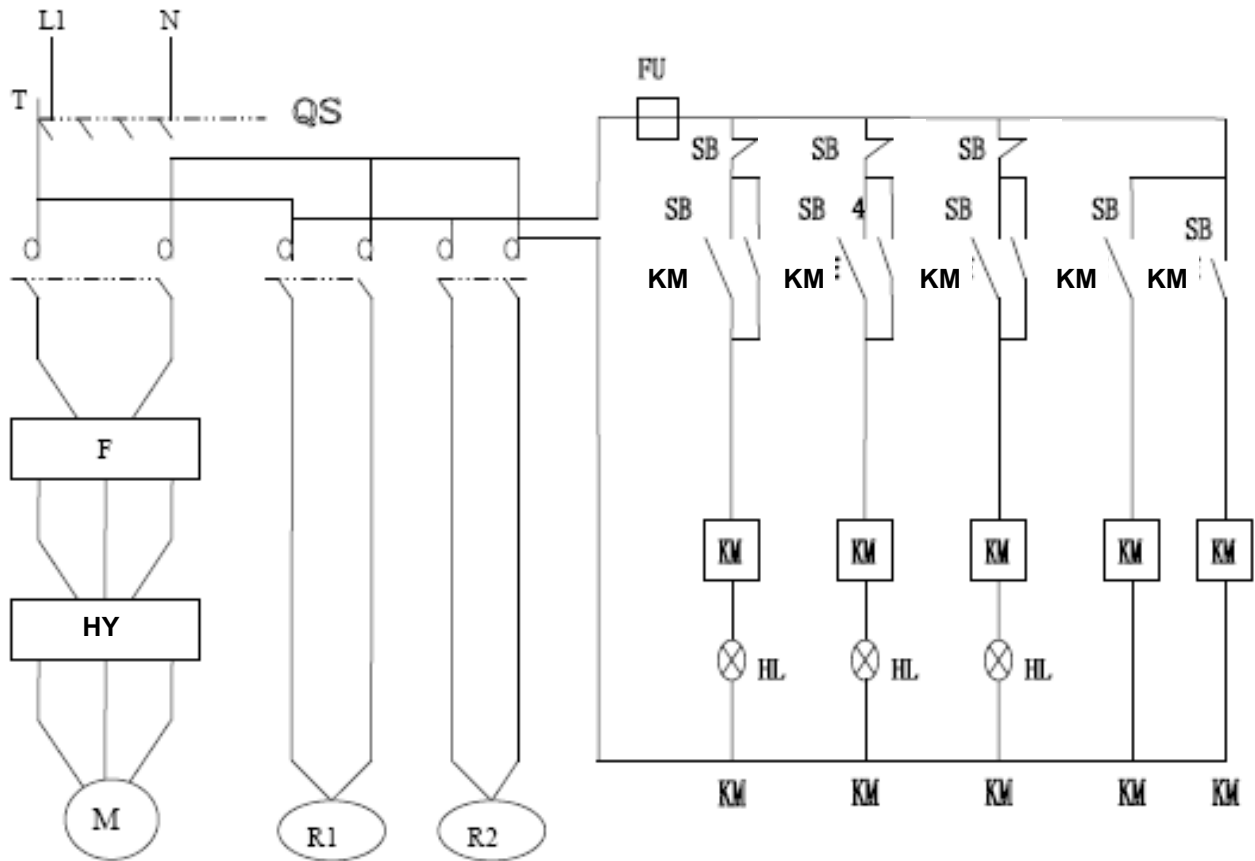


Side View



1.Pilot	2.Roller button	3.Heating pipe button	4.Heating knife button	5.Roller stop button	6.Heating pipe stop button	7.Heating knife stop button
8.Power	9.Tube core	10.Roller	11.Adjusting screw	12.Heating pipe	13.Heating pipe control button	14.Transducer
15.Heating pipe valve(forward, backward)	16. Cylinder Valve	17. Heating pipe(up, down)		18. Roller reverse switch		19. Wheel

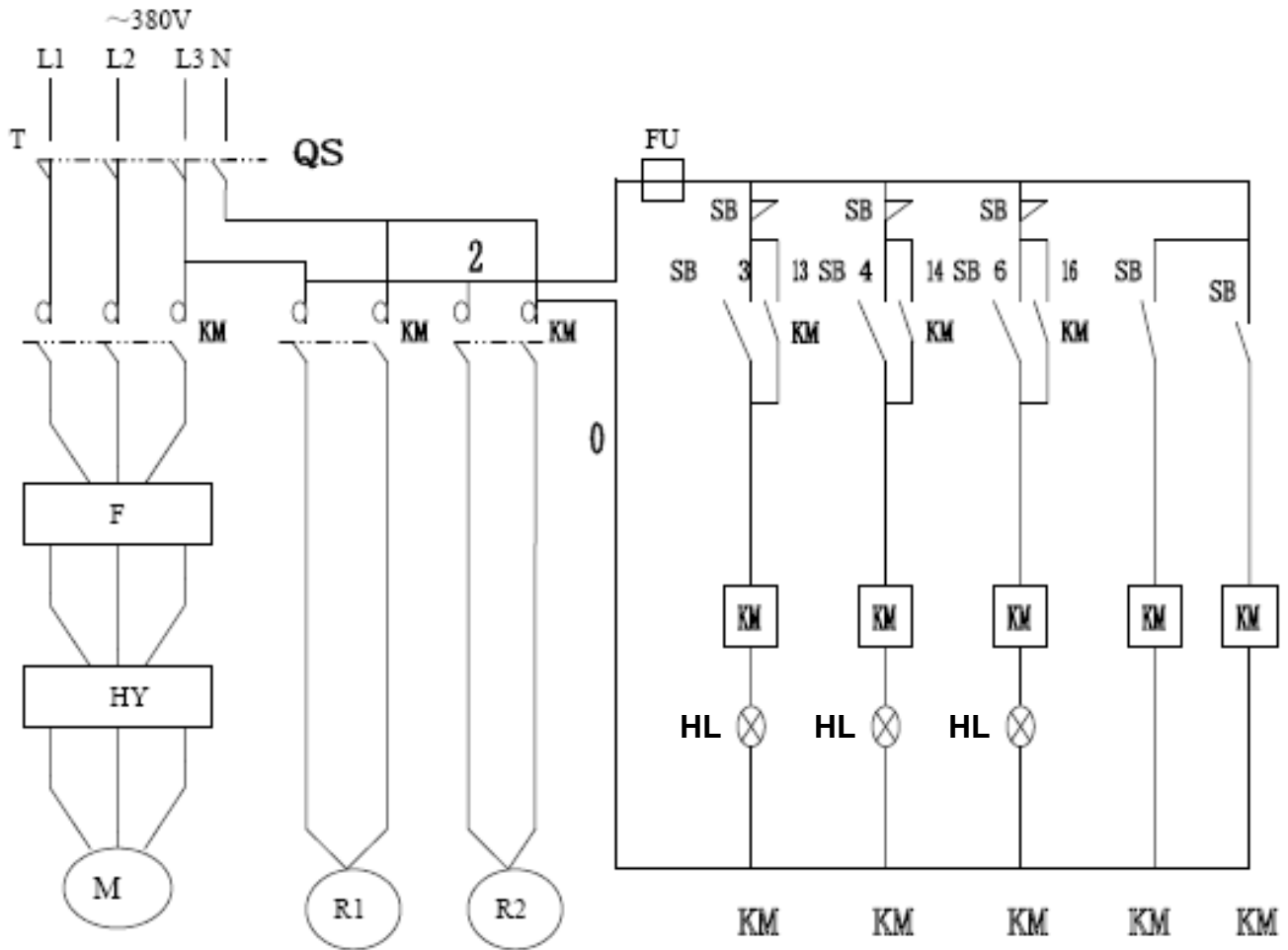
Circuit Diagram (220V)



Remark:

Mark	Title
QS	Grounded Switch
FU	Fuse
M	Motor
L	Positive line
N	Negative line
F	Transducer
R1	Heating pipe
R2	Heating knife
HY	Reverse switch
KM	Contactors
HL	Pilot
SB	Push Button

Circuit Diagram (380V)



Remark:

Mark	Title
QS	Grounded Switch
FU	Fuse
M	Motor
L	Positive line
N	Negative line
F	Transducer
R1	Heating pipe
R2	Heating knife
HY	Reverse switch
KM	Contactor
HL	Pilot
SB	Push Button