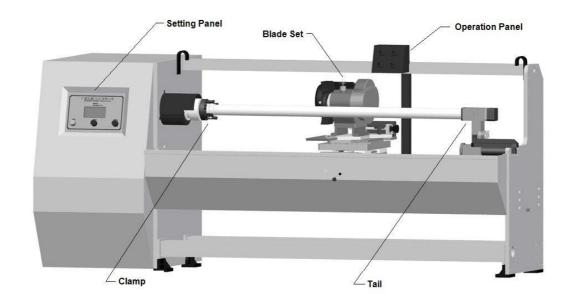
# **Operation Manual**

# Auto Slicing Machine (Model: GS-701 & 702)



Editor: Alex Hsieh Date: 2009.05.15



## Specification:

Description	Model GS-701	Model GS-702
Working width	1600 mm	1600 mm
Cutting diameter	300 mm	150 mm
Cutting speed	20 – 30 cuts/min	20 – 30 cuts/min
Internal diameter of paper core	76mm	76mm
Cutting width	3~1600mm	3~1600mm
Main shaft drive motor	3.7Kw	3.7Kw
Round blade drive motor	2.2Kw	2.2Kw
Circular blade (max. available)	350 mm dia.	300 mm dia.

# **General Facilities for running machine:**

1. Electricity: 380V, 3 phrase, 50/60 Hz

Power consumption: 6 Kw
 Compressed Air: 5 Kgf/cm²

## **Working Condition:**

1. Working temperature: 0 – 40 C degree (no freeze)

2. Moisture: below 80%RH

#### **Notice:**

- △ Please do not make any modification on the machine without our advice.
- △ Please do horizontal adjustment before running the machine,
- △ Please use the lifting instrument when moving the machine,
- ∆ To prevent screw, iron chippings, any other conductive objects, oil or water enter the machine.
- △ To (electric) earthling the Auto Cutting Machine credibly. The earthling resistance should be less than 100 ohm.
- $\triangle$  Do maintenance, cleaning and lubricating the machine frequently.
- △ Please don't strike or touch any aculeate items.

#### For Operator:

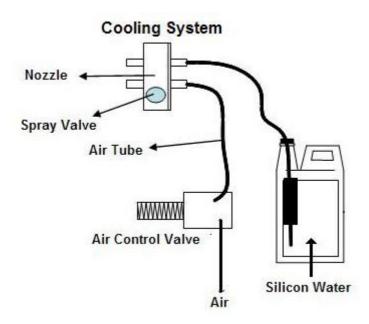
- 1. The operator should not have long hair.
- 2. The operator should not wear wide and loose clothes.
- 3. The operator should not clean the blade in feeding.
- 4. The operator should not clean the main shaft in rotating.
- 5. Please switch-off the power when cleaning and maintain the machine.
- 6. Do be careful to the sharp blade when changing or cleaning.
- 7. Do not beat the machine heavily at will.

#### Installation:

- 1. Do use folk lifter or crane when moving the machine.
- 2. Do avoid heavily strike. Do height adjustment, horizontal adjustment and leveling after locate the machine. After the machine had been installed properly with earthling, then, connect electric cable, the cable should not less than 2.5 M². The earthling resistance must be lower than 100 ohm.5 Kgf/cm². To switch ON the power, check the rotate direction of main (cutting) shaft. To check blade set smoothly feeding; if not feeding, then may change the pole of power cable. To mount the circular blade. After fixed the blade, use "dial gauge" (in tool box) to adjust the rotating balance. There are 4 screws for adjusting the balance, fine adjustment and be careful the sharp blade. To adjust the Feeding limit: be carefully and fine adjustment. Usually, the blade should cut 3-5 mm more into (PE) plastic tube (on cutting shaft). Or may NOT cut-off he log roll. Also, be careful, DO NOT cut too much into the plastic tube, or the blade may cut the metal shaft..

#### **INTRODUCTION OF MAIN DEVICE:**

#### **▲** Cooling System:



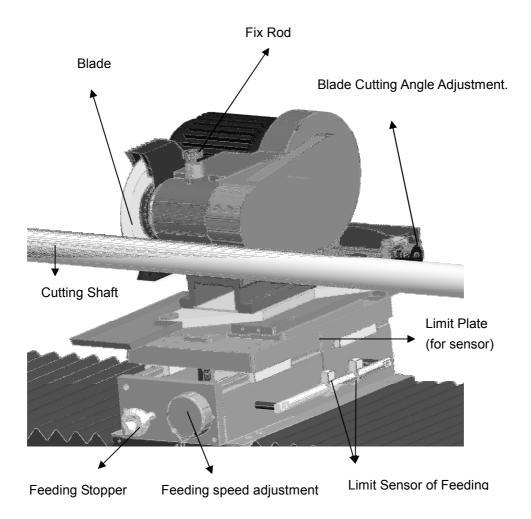
This cooling system should be used when running the machine, which not only for cooling the blade but also for cleaning the blade. Sometimes, when the tapes was coated too much glues on tape, after cut, the tape edges may be oozing and stick few quantity on the blade, thus silicon water will release the glue from the blade.

Do not use only general water, due to water may affect the quality of tapes.

#### **Adjustment:**

- 1. To connect Air tube and fill the silicon water to storage container.
- 2. To set "spray valve" at middle position, then, manually feeding the blade, to check the water is spraying or not, then, fine adjustment the valve for suitable quantity.
- 3. There is a leveling line on storage container, the quantities of silicon water must fill over leveling line, or the water may NOT spray out.
- 4. In case, only spray out Air without water, then, may something plugged in tube or nozzle, please clean it.
- 5. In case, there are too much glues stick on the blade without cleaning, the machine (main shaft) may stop naturally, due to the inverter was "over load".

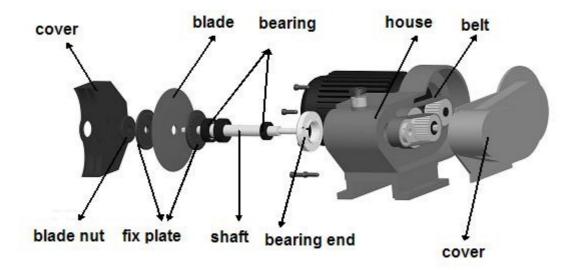
#### ▲ Blade Set



#### Remarks:

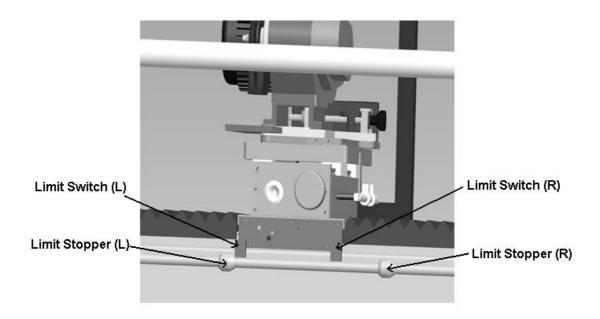
- 1. Fix Rod: which used when change the blade (for re-grinding), to fix the blade shaft and easily loose the lock nut (of blade).
- 2. Usually, need not change the cutting angle of blade, however, if the diameter of materials (log roll) was bigger and telescope after cut, then may change the blade angle to correct the telescope. The angle may be adjusted within 3-7 degree, depend on the materials, try few times.
- 3. There are 2 electronic limit sensors to limit the blade feeding. Also, there is a feeding stopper to limit the feeding. Thus, at first, do adjust the feeding stopper, then, do adjust the (forward) sensor.
- 4. When the blade was return and reach "return sensor" position, the full set will stop there.
- 5. Feeding speed adjustment: clockwise will get fast speed, un-clockwise will slow the feeding speed. Please do small change when adjusting. Also, soften log roll may cut fast, and hard log roll should be slow feeding, or the blade may be jumping (vibrating).

#### ▲ How to change and adjust the balance of the blade:



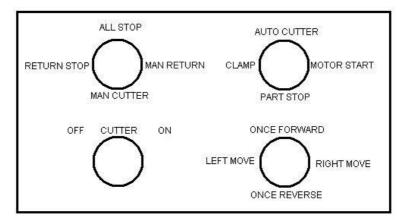
- 1. When change a new blade, just remove the cover, blade nut and fix plate, then put it back one by one.
- 2. After fixed the blade, use a "dial gauge" (in tool box) to adjust the rotating balance. There are 4 screws on the "Fix Plate" for adjusting the balance, fine adjustment and be careful the sharp blade.

#### ▲ Moving limit control of blade set:



- 1. Limit Stopper(L): When the "Blade Set" is moving and touch the stopper (L), full machine will switch-OFF. In such situation, the operator should move the "Stopper (L)" to left side until you can switch ON again. Then, to move the blade set to right side. Then, the stopper (L) should return to original position again.
- 2. Limit Stopper(R): When the "Blade Set" is moving and touch the stopper (R), full machine will switch-OFF. In such situation, the operator should move the "Stopper (R)" to right side until you can switch ON again. Then, to move the blade set to left side. Then, the stopper (R) should return to original position again.
- 3. Limit Switch(L): When the "Blade Set" is moving and touch the limit switch (L), , after few seconds, the blade set will move back to "0" position, then, the "Push Pin" will truncate and "Tail" will swivel down. Then, the operator can remove cut pieces and insert a fresh Log Roll.
- 4. Limit Switch(R): When the "Blade Set" is moving and touch the switch(R), the "Blade Set" will stop to move.

#### **▲**Operation Panel:



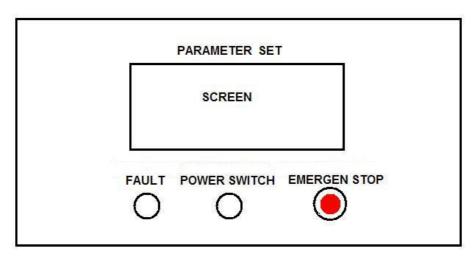


#### Remarks:

- 1. **ALL STOP**: when used, the main (cutting) shaft and blade set will stop, the clamp and tail will open (release).
- 2. **MAN RETURN**: when used, will manually return the blade set, when used this motion, the blade (set) will move to right.
- 3. **RETURN STOP**: to stop the motion of "MAN RETURN".
- 4. **MAN CUTTER**: when use this motion, the blade (set) will feed manually.
- 5. **AUTO CUTTER**: when used, the blade will feed automatically, after completed the cutting, the blade (set) will shift to next cutting position (pre-set) automatically then continue the cutting (feeding) motion again.
- 6. **CLAMP**: when used, the gripper will hold the materials (log roll).
- 7. **MOTOR START**: when used, the main (cutting) shaft will start rotating.
- 8. **PART STOP**: when used, the main shaft and blade set will stop, but the clamp and tail still lock.
- 9. **ONCE FORWARD (REVERSE)**: when used, the blade will move to next cutting position (pre-set the cutting width on/by SET Panel). "FORWARD" will move to left and "REVERSE" will move to right side.
- 10. **LEFT (RIGHT) MOVE**: when used, the blade will move to left (right).
- 11. **OFF/CUTTER/ON**: this switch for switch ON/OFF the motor of blade.

#### **©TO OPERATE THIS CUTTING MACHINE:**

After electric wire connected, switch ON "POWER SWITCH", the "POWER SHOW" will be lighting.

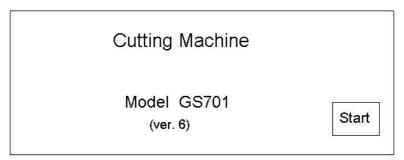




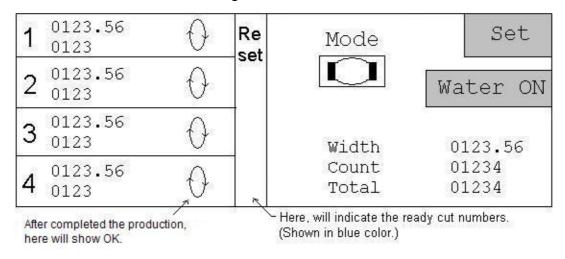
- 1. SCREEN: This is a Touch Screen: the operator can use his finger to key-in all of parameters for running the machine. (Remarks: should NOT use any sharp piece on this screen, or may be damaged.)
- 2. POWER SWITCH: for switch ON/OFF the electric power for this machine.
- 3. FAULT: when any problem was coming, the machine will stop and alarm, and "FAULT" lamp will be lighting. The actual situation of problem may found out (shown) on screen.
- 4. EMERGEN STOP: When push this button, the cutting operation will be stopped cutting shaft and blade set both will be stopped.

#### **PARAMETER SET: (touch screen)**

1. After electric wire connected, switch ON "POWER SWITCH", the screen will show as follows:



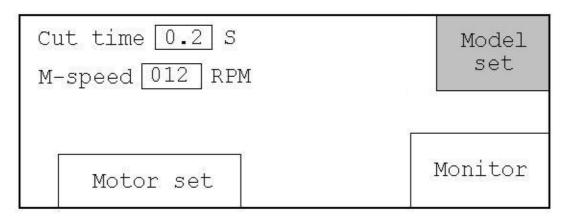
2. To touch "Start" enter to "Page 1".



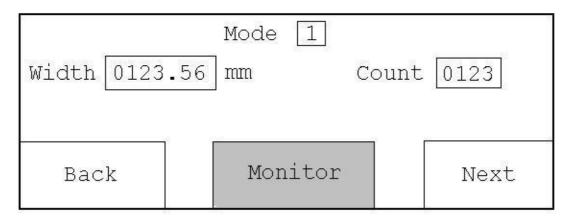
The number 1, 2, 3, 4 which shown 4 kinds of cutting mode, after this, the digits is shown the cutting width and cutting times (number of cut). In cutting process, the mode 1, 2, 3, 4 will show in blue color to indicate the exist cutting mode, after completed the production, the end will "OK".

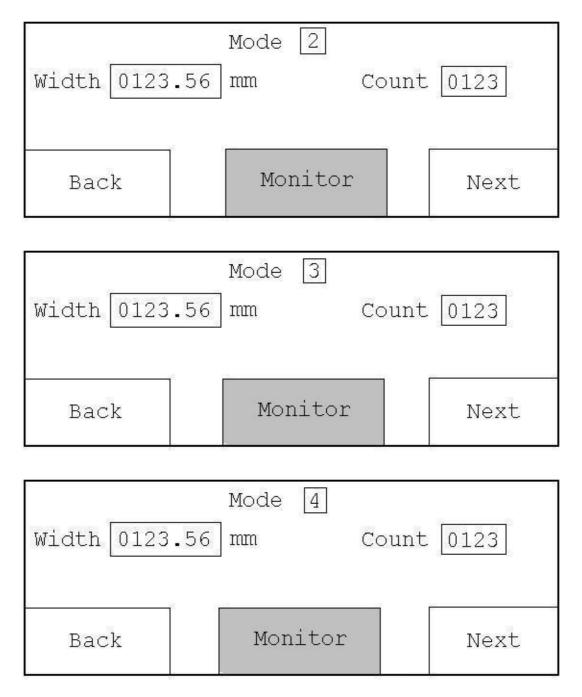
- [1] First, select a mode. To touch "Mode", then key-in the required mode number. After completed, then touch ENT (Enter) and cutting mode will proceed. Or, to touch CLR (cancel) and stop the cutting mode.
- [2] Width: shown exist cutting width; the unit is mm.
- [3] Count: shown ready cut times (cut number).
- [4] Total: shown pre-set cut times.
- [5] Water ON: when touch this button, the cooling water will be spraying.
- [6] Re-set: when touch it, the ready cut times will "ZERO" counting (fresh), and re-calculate the cut times again.
- [7] Set: when touch it, will enter next page 2.
- [8] After completed a cutting mode, the screen will show "Cutting Finish, Please reset". (also see "Other indication on touch screen", in last page of this manual.

3. After touch "Set" on page 1, the screen will enter to "page 2":



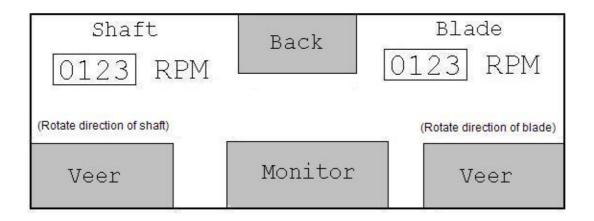
- [1] Cut time: when the blade reach the cutting shaft, the blade should deeply 1mm cut into PE tube (outside of cutting shaft), also the blade should stop for a while until the tape roll completely be cut. Thus, need SET the cut time (stop time). Could be 0.1 9 seconds. . To touch digit button, then key-in the required number (unit is second). After completed, then touch ENT (Enter) and cut time will proceed accordingly. Or, to touch CLR (cancel) to stop and change again.
- [2] M-speed: shown the moving speed of blade set. To touch digit button, then key-in the required number (unit is RPM). After completed, then touch ENT (Enter) and cut time will proceed accordingly. Or, to touch CLR (cancel) to stop and change again.
- [3] Motor set: to touch this button, will enter to "Page 3" for setting motors. (the details, please see Page 3)
- [4] Monitor: when touch this button, the screen will go back to "page 1".
- [5] Model Set: when touch this button, the screen will enter to "Mode Page". As follows:





- [5-1] Mode 1: shown the exist setting mode.
- [5-2] Width: to SET the cutting width (the moving distance of blade set). To touch digit button, then key-in the required number (unit is mm). After completed, then touch ENT (Enter) and cut time will proceed accordingly. Or, to touch CLR (cancel) to stop and change again.
- [5-3] Count: to SET the cut times (number of cut). To touch digit button, then key-in the required number (unit is RPM). After completed, then touch ENT (Enter) and cut time will proceed accordingly. Or, to touch CLR (cancel) to stop and change again.

- [5-4] Back: when touch this button, the screen go back to last page.
- [5-5] Next: when touch this button, the screen enter to next page (mode).
- [5-6] Monitor: when touch this button, the screen will go back to "page 1"
- 4. After touch "Motor" on page 2, the screen will enter to "page 3":

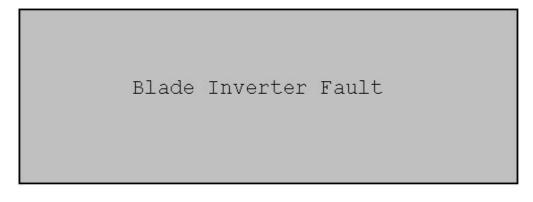


- [1] Shaft: to SET the rotating speed of cutting shaft. To touch digit button, then key-in the required number (unit is RPM). After completed, then touch ENT (Enter) and cut time will proceed accordingly. Or, to touch CLR (cancel) to stop and change again.
- [2] Veer (left side): to SET the rotating direction of cutting shaft. Just one touch, the direction will be changed.
- [3] Blade: to SET the rotating speed of cutting blade. To touch digit button, then key-in the required number (unit is RPM). After completed, then touch ENT (Enter) and cut time will proceed accordingly. Or, to touch CLR (cancel) to stop and change again.
- [4] Veer (right side): to SET the rotating direction of blade shaft. Just one touch, the direction will be changed.

\*

5.	Other indication on touch screen:		
	Oil Protection		
WI ***	nen indicated, it means the hydraulic pump was "Over Load", please check.		
	Cutting Finish		
	Please Reset		
	nen indicated, it means the cutting job was completed, please reset.		
	Shaft Inverter Fault		

When indicated, it means the cutting shaft was "Over Load", please check.



When indicated, it means the blade shaft was "Over Load", please check.

servo System Fault

When indicated, it means the servo system was "Over Load", please check

In case, the screen is appearing "PASS WORD", then push "EMERGENT STOP" button for more than 1 minute, the screen will appear as follows:



The original pass word is 6688.

After key-in the pass word, the screen will appear as follows: (present SET)

BLADE REPAIRE MOTOR

CUTTING TIME BLADE HOLDER SPEED

\* \*

#### 6. NOTICE:

Please note, the following factors will affect the cutting efficiency and cutting quality. However, the actual cutting quality which depend on be cut material.

- [1] The rotating speed of blade.
- [2] The feeding speed of blade.
- [3] The cut time (stop time) of blade.
- [4] The rotating speed of cutting shaft.
- [5] The sharpness and cutting angle of blade.
- [6] For bigger diameter roll cutting, which may telescope of tape roll, the operator may adjust the angle of "Blade Set".
- [7] Cutting Speed: Set the moving speed of blade set at (0-100), if the required figure over the range, it will indicate user it's wrong number.
- [8] Attention: The blade may be shaking, if practice at high speed.
- [9] maintenance the blade: Do maintenance the blade timely, do sharp the blade, or the blade may be damaged easily. (The cutting angle of blade which depends on raw materials and roll diameter.)

------ END -----