BE A ROBOT SPECIALIST IN 2 DAYS

WELCOME TO HYROBOTICS NEXIA SERIES ROBOT TRAINING PROGRAM !

Place : HYRobotics in St.Louis MO.
Time : Reservation Required.
(Mon ~ Fri. Sat is available)
Robot : NEXIA-100S with HYNC-700
(Shown Double Arm Model)

What this robot can do for your molding

1. *Basic Take out operation.*
2. *Manual, Step by Step, Full Auto.*
3. *J Motion in Mold.*
4. *Position / Speed Change in Auto.*
5. *Add Position in Step.*
6. *Add Motion in Step.*
7. *Add Spare Output.*
8. *Add User Input.*
9. *Add User output.*
10. *Insert Molding .*
11. *Stacking.*
12. *Cooling.*
13. *Inspection and Separation.*

* 80 Step Program per Mold can be created with 99 mold memory

TRAINING COURSE	4. Basic Operation Course , Simple , Intermediate and High end Set up Course			
	3. Basic Operation Course , Simple Set Up and Intermediate Set up Course			
	2. Basic Operation Course with Basic Set Up course			
	1. Basic Operation Course			
TRAINING SUBJECT	Power on	Basic Structure of Robot Program	J Motion in Mold	Add User Output
	Open Mold File	Standard Take out Motion, 4 Step	Add Position	Add User Input
	Step Cycle	Manual	Add Motion	Insert Molding
	Edit Step	Step Cycle	Edit/Delete Step	Stacking
	Auto	Auto	Position Change in Auto	Cooling
	Stop	I/O Check		Inspection / Separation.
		Stop		
		Error Recovery		
		IMM Inteface		
DAY REQUIRED.	2 Hours Required	1 Day Required	1 1/2 Day Required	2 Day Required
COST / PERSON	Call			
	Call			
	Call			
	Call			

Higher number course will include low number course. Training will be performed with a NEXIA-100S series robot with HYNC-700 Touch Screen Controller by English or Korean. Switch, LED will be used IMM Molding Machines Interface. User input/ Output. Insert Molding and Stacking Signal will be used by also Switch and LED. Stacking location will be showed by simple Paper with Pen to find location for each stacking or insert picking position. St.Louis Lambert Airport pickup and drop is available by HYRobotics.

All information is subject to change without notice.

HYROBOTICS CORP. (www.hyrobots.com)
5988 MID RIVER MALL DR. ST.LOUIS MO 63304, USA
Tel : 1-636-447-6440,636-578-6059, Fax : 1-866-232-5594

HELLO ROBOTICS !

(Automation for Plastics Injection Molding)

SAM LEE

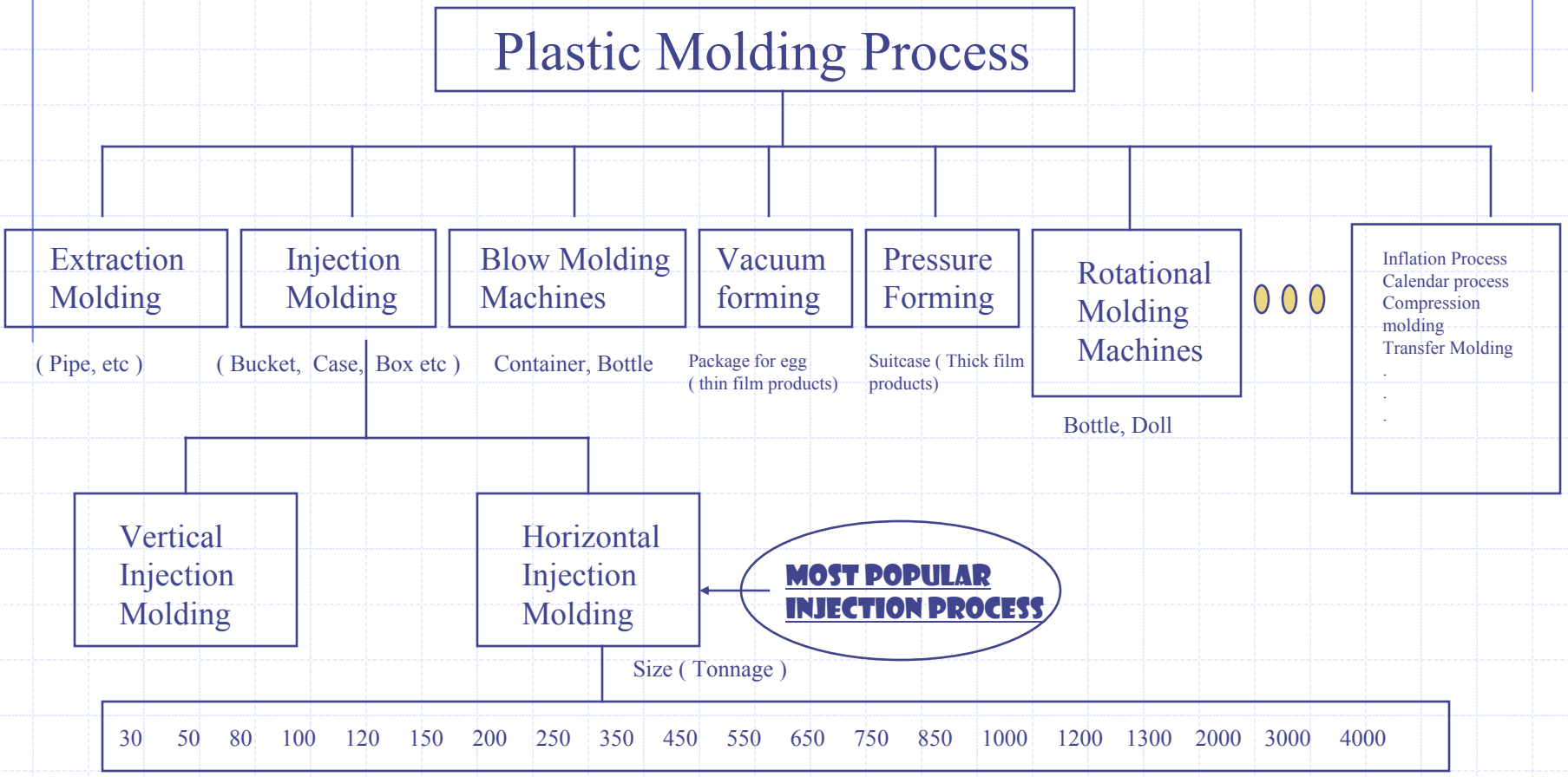
HYROBOTICS CORP.

Contents

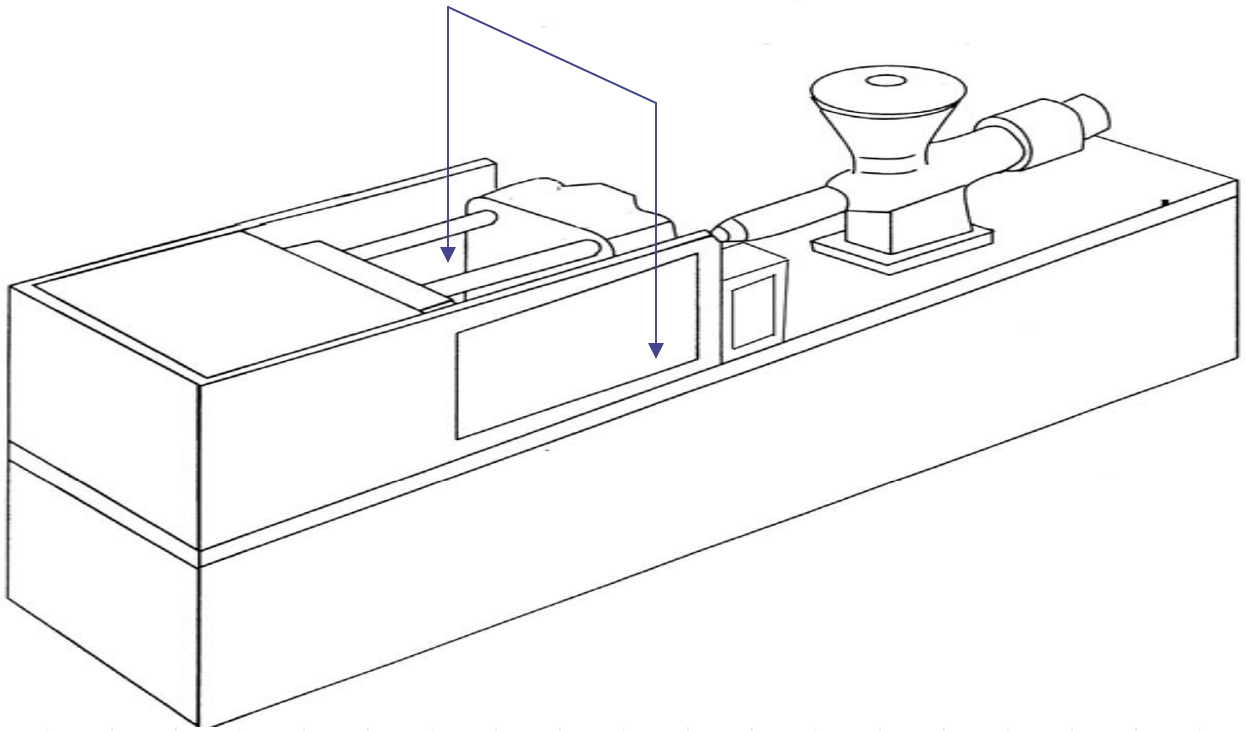
- General Molding Process.
- Horizontal Injection Molding Process.
- Robot Application Inside of the Mold.
- Robot Application Outside of the Mold.
- Simple Robot Programming.
- Full Servo Robot Programming.
- Molding Machine and Robot Interface.
- Automation Video Samples.
- Conclusion.

General Molding and Process

The word " Plastic" means substances which have plasticity , and accordingly anything that is formed in a soft state and used in a solid state can be called a plastic. The main plastics forming methods are shown as belows



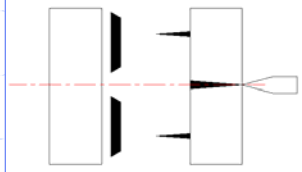
Horizontal Injection Molding Process



Robot Applications inside of the Mold

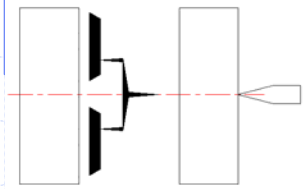
Two Plate Mold

Sprue Picking Only



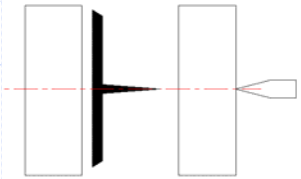
Sprue Picking with Part Dropping

Sprue and Parts Removal



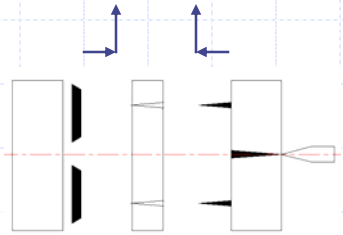
Sprue Picking with products connected

Part Removal

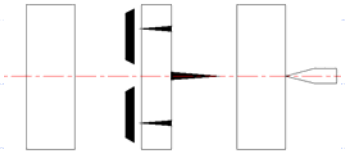


Part removal with the sprue or without the sprue

Three Plate Mold

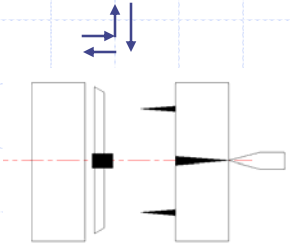


One arm removes the part, the other picks the sprue

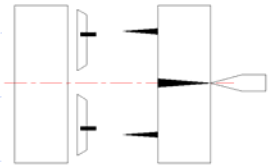


Sprue and Part Removal at the same time (Double Arm)

Insert Operation



Parts Removal and 90 Deg flip and Insert one insert in the mold, Sprue picking.

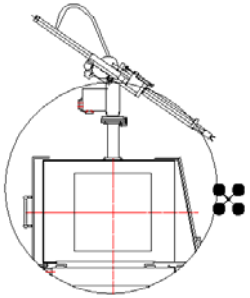


Parts Removal and 90 Deg flip and Insert multi insert to the mold, Sprue picking.

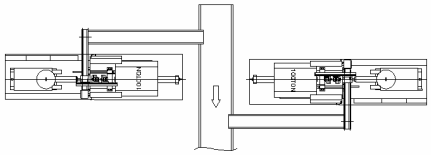
In Mold Label, Space Limitation, Core, Etc.

Robot Applications outside the Mold

Simple Operation

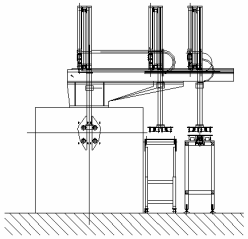


Taking out the Sprue from the mold and dropping it.
(Inside of the mold, Conveyor , Box)

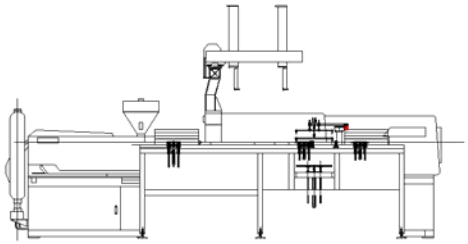


Remove Parts, 90deg Rotation and Placing the parts (Conveyor, Box)

Deburr and stacking

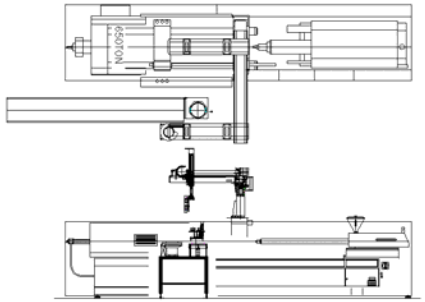


Remove the parts from the mold place on the deburr station and move it to conveyor



Place the parts directly in boxes on the stacker

Insert Operation



Pickup the inserts from the loading station (Parts feeder or table) remove product, insert the inserts in the mold , and place the products on the conveyor.

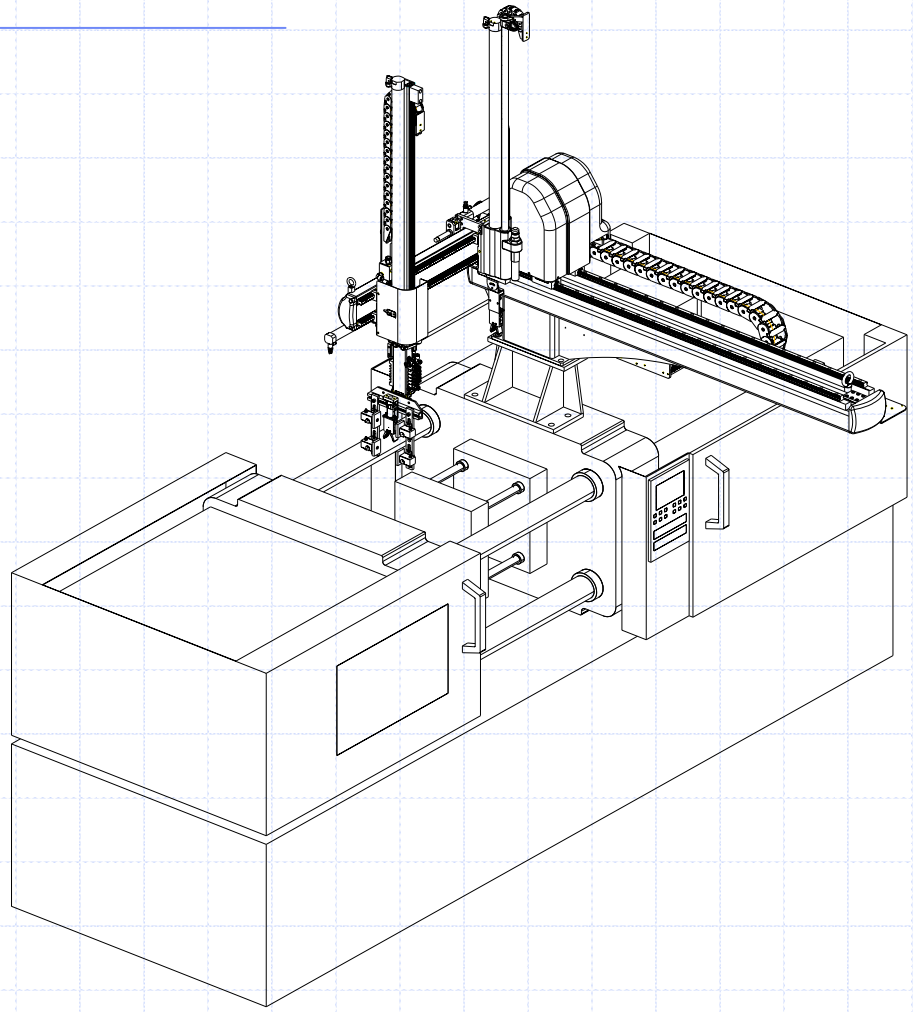
In Mold Label.

Inspection.

Robot Programming for Plastics Molding Summary

1. Motion Selection. (Choose Number)
    1. TOPIII, Old Generation Robot
2. Mode Selection. (Pick the option is in each mode)
    1. TOPIV, HIT, VECT, MACH Series Robot
3. Step Motion (Add Position / Motion)
    1. NEXIA, HYBRID Servo Robot
4. Fully Programmable or Custom made Program
    1. Articulated Robots.

Simple Robot Programming 1 ! Mode Selection.



Pick Operation

Arm : Double arm or Single Arm
Descent Position : Nozzle or Clamp
Motion Style : U or L
Operation : Vacuum, Chuck, Gripper
Release : In Mold, Conveyor, Grinder

Robot Interface

From IMM to Robot

- Mold Open Complete
- Injection or Mold Close
- Full Auto
- Safety Door Closed

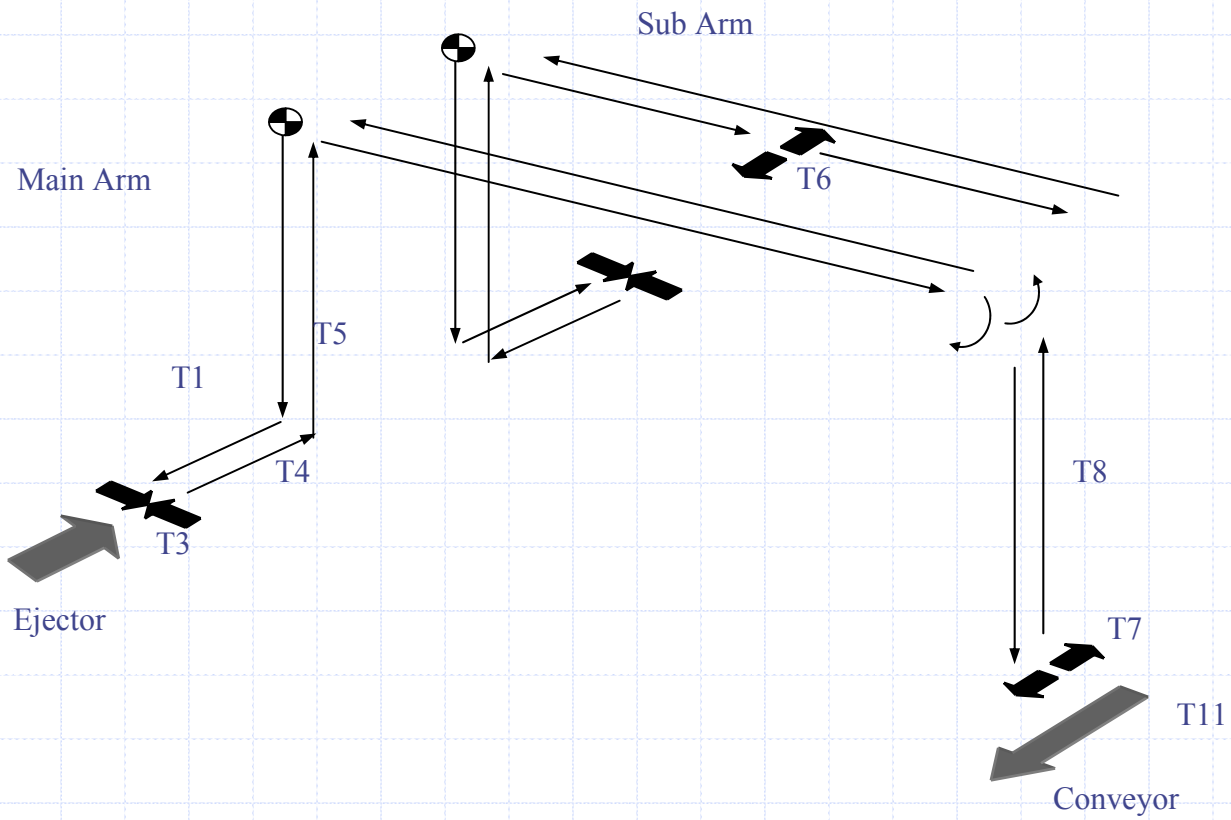
From Robot to IMM

- Robot is Clear (Mold Open/Close Interlock)
- Robot is in Eject Position (Ejector Interlock)

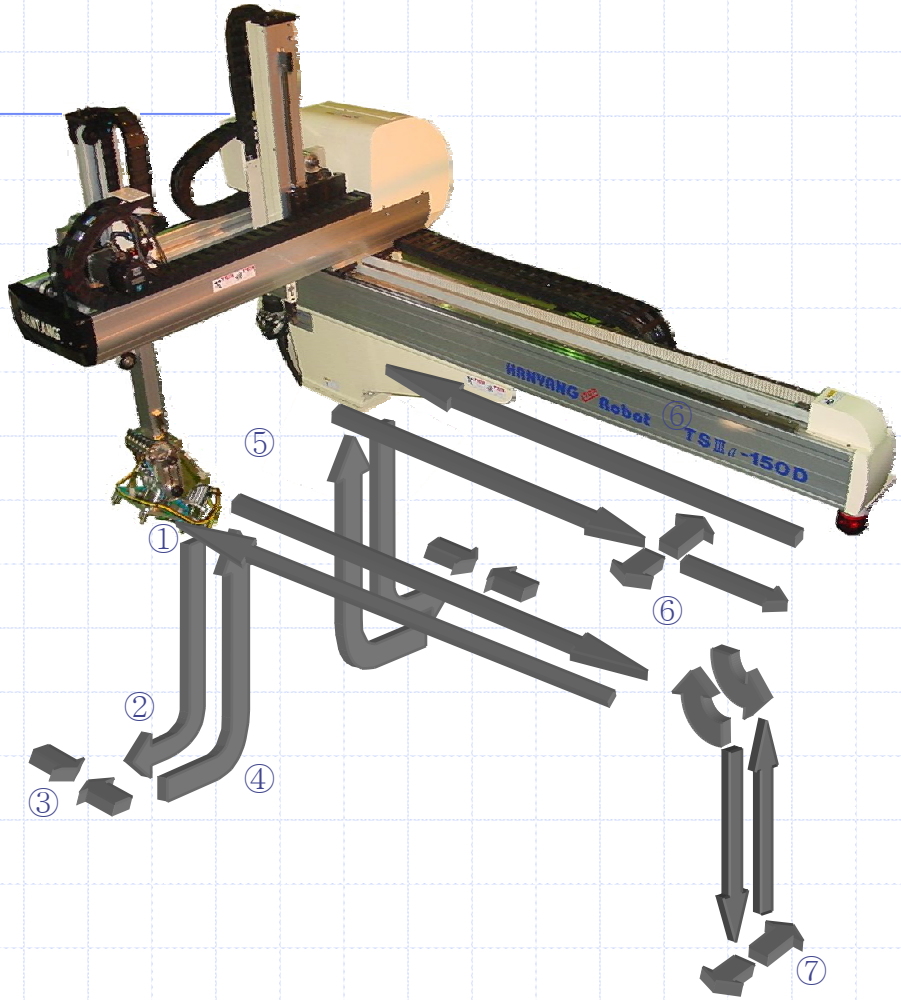
Others

- E-Stop, Conveyor, Reject Signal,Etc

Simple Robot Programming 2



Full Servo Robot Programming .



4 Safety Position we can't change.

- Waiting Position
- Parts take out position
- Robot Clear Position
- Release Position

Add Position / Motion

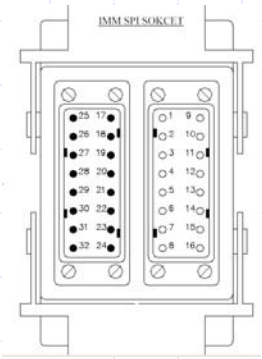
- Add Any Position and Motion in addition of 4 Safety Point
- Insert grip (Stack Insert Gripping), Horizontal, Vertical.
- Chuck 45 Deg Chuck Rotation with Servo Wrist. (Core)
- Insertion and part take out
- Inspection or De-burring
- Reject or Stacking (Horizontal, Vertical)
- Other automation.

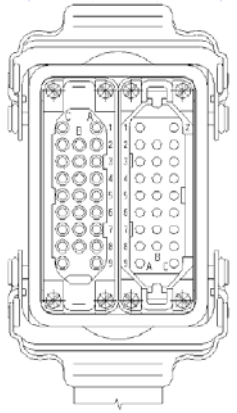
Additional Robot Interface

- Core Control, Inspection Start / End , Insert loading, ready, Stacking Ready. (Extra input / output)

Robot Interface

1. Without SPI
    1. Mold Open Complete, Safety Door Close, Injection, Full Auto.
    2. Robot is Clear, Ejector Interlock, Core,
    3. European Molding Machine (x), Asian Molding Machine (Ok)
2. SPI (Euromap 12, 62)
    1. 16 pin for IMM, 16 pin for Robot
    2. Total 32 Pins (Male / Female)
3. Euromap 67
    1. 25 pin for IMM, 25 pin for Robot
    2. Total 50 Pins (Male / Female)





NEXIA ROBOT CONTROLLER

HYNC-700

SAM LEE

HYROBOTICS CORP.

1. HYNC-700

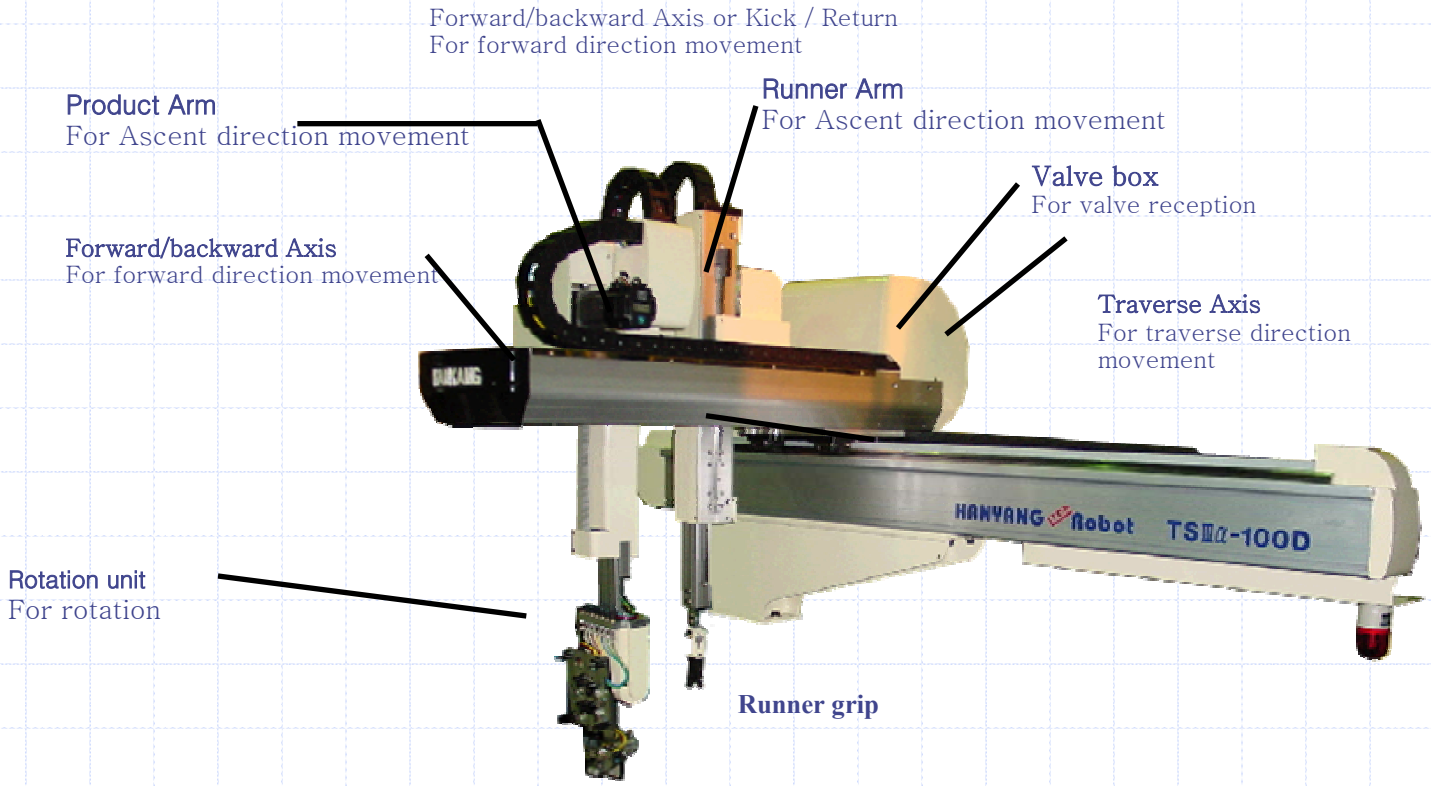
- SIMPLIFIED WINDOWS BASED USER INTERFACE COLOR TOUCH SCREEN ROBOT CONTROLLER FOR PLASTICS INJECTION MOLDING AUTOMATION.
- KNOW-HOW ACCUMULATED RESULT OF INJECTION MOLDING ROBOT AUTOMATION SINCE 1980.
- CUSTOMER(FIELD TECHNICIAN) ORIENTED EASY/TEACH ROBOT PROGRAMMING REALIZATION FOR INJECTION MOLDING AUTOMATION APPLICATION.
- SIMPLIFIED VARIETY TASKING ROBOT CONTROLLER , VACUUM, CHUCKING, GRIPPING UNLOADING , INSERT MOLDING , PALLETIZING AND PALLETIZIED INSERT LOAINDING.
- WINDOWS BASED COLOR GRAPHIC USER INTERFACE WITH TOUCH SCREEN
- APPROVED BY NORTH AMERICA MOLDERS SINCE 1998.

2. ROBOT MAIN COMPONENTS

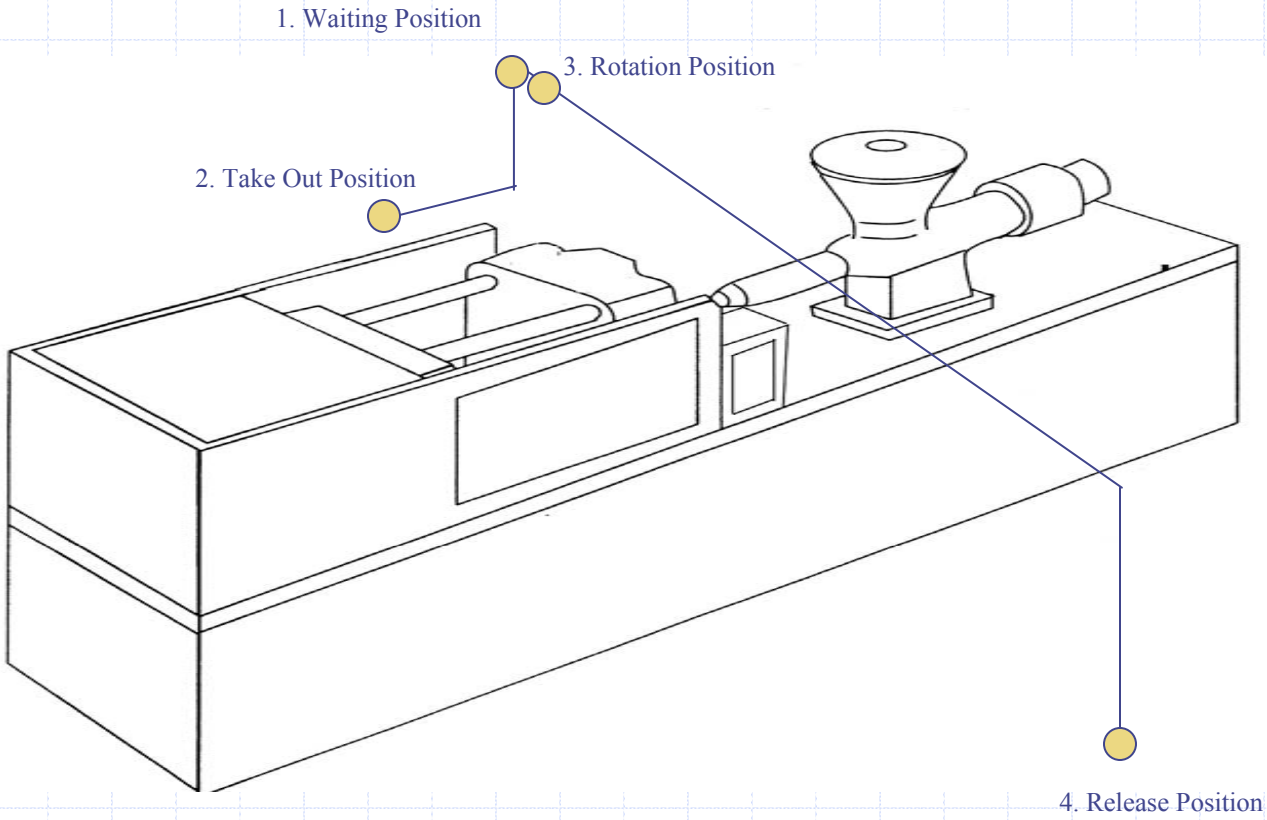
Robot Main body

Remote Controller and Stand

3. Robot Body/Axis Name



4 BASIC POSITION : 4 Position : HYNC-700



This 4 Basic Position is related with IMM and Other Interface like stacking or conveyor

5. What is 4 Basic Position

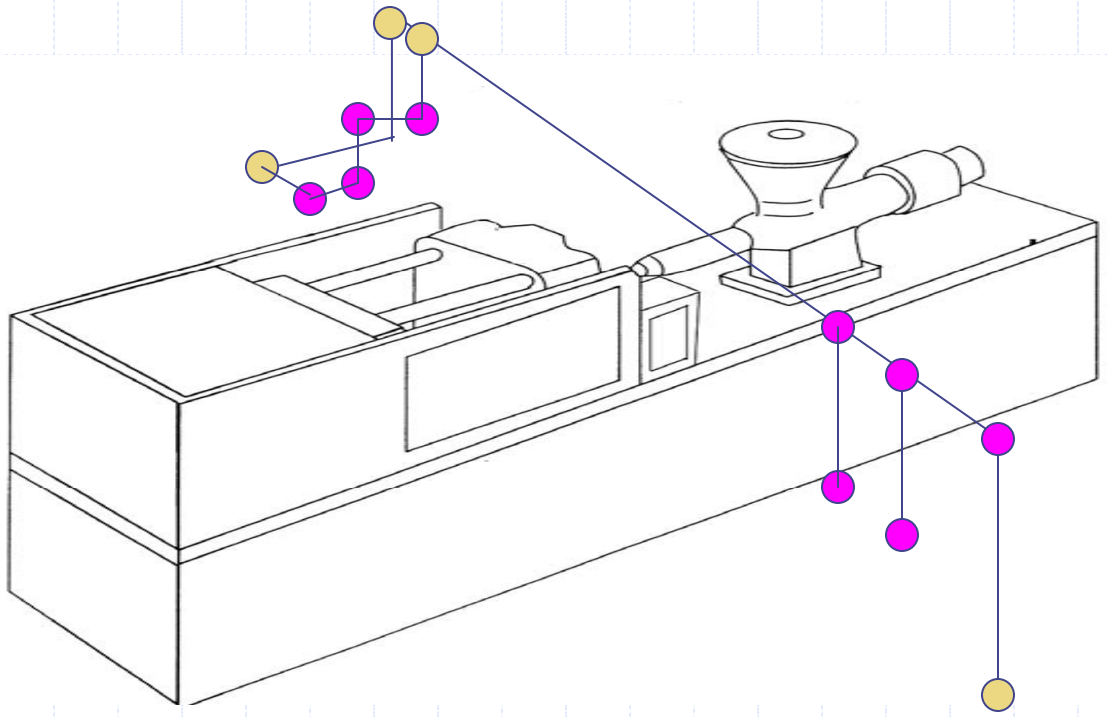
- 1. Waiting Position
  - Robot Waiting Position until Mold is fully Open after molded parts
- 2. Take Out Position
  - Robot arm will go down from Waiting Position and move kick or reach to this position for suction parts or grip parts
- 3. Rotation Position
  - After Grip parts robot arm will move back and go up to Rotation Position (This position will initiate next molding cycle)
- 4. Release Position
  - Robot arm will move traverse and down and release parts

Can we add additional position between these step ? Yes.

6 Additional POSITION :

4 Basic Position

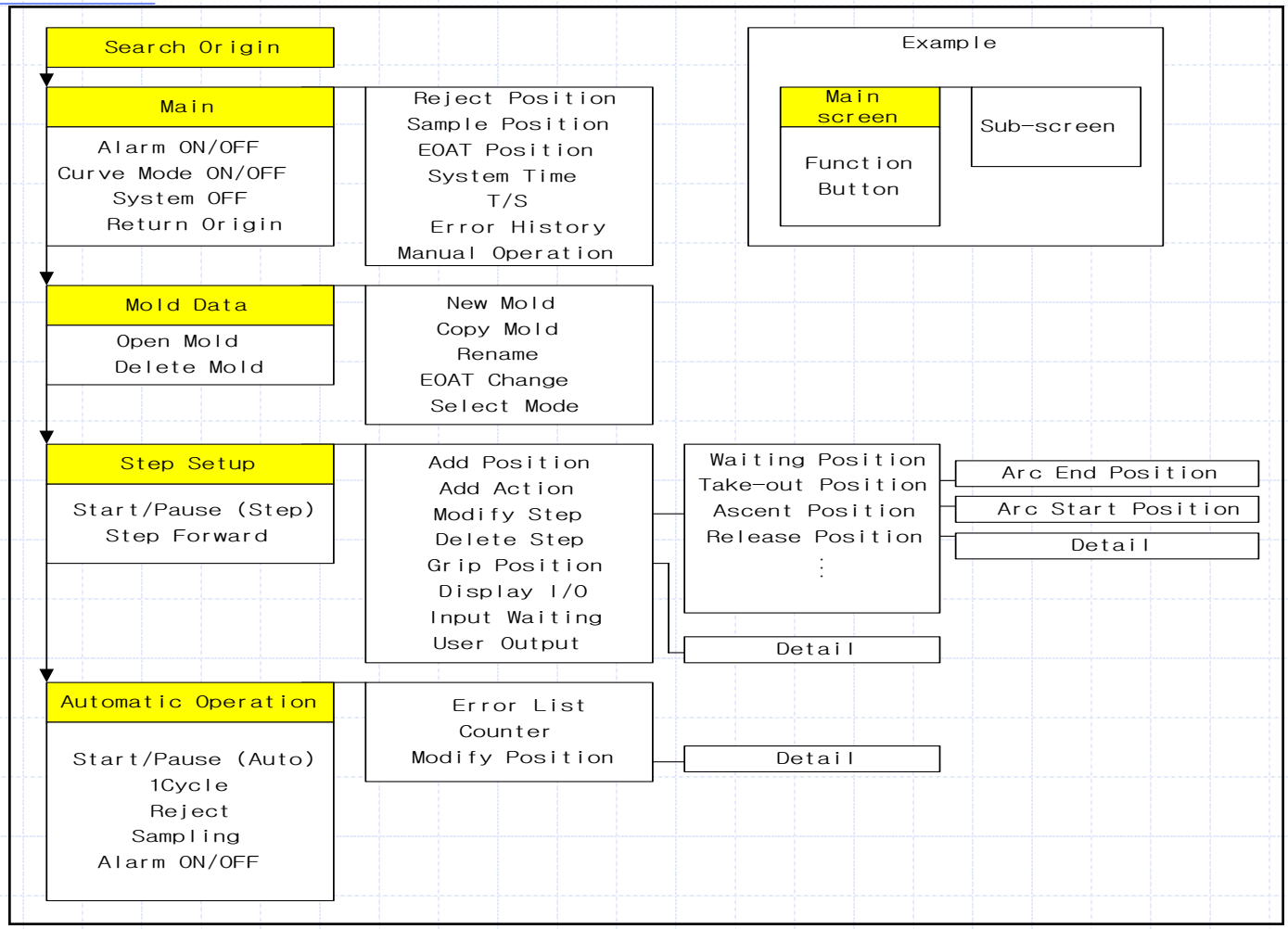
Additional Position



4. Release Position

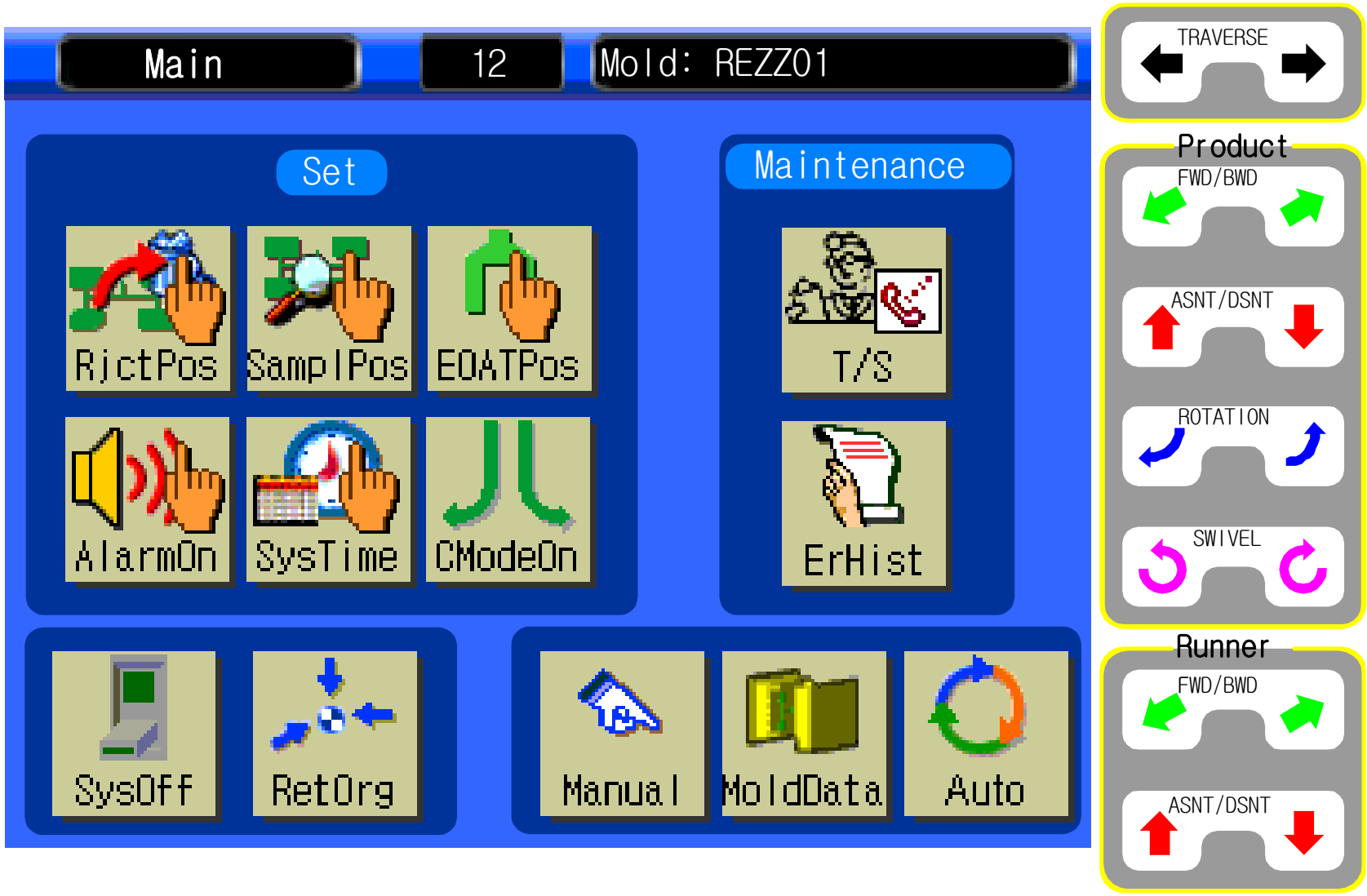
This 4 Basic Position is related with IMM and Other Interface like stacking or conveyor

7. Inside of Program



8. Screen Description

1. Main Screen



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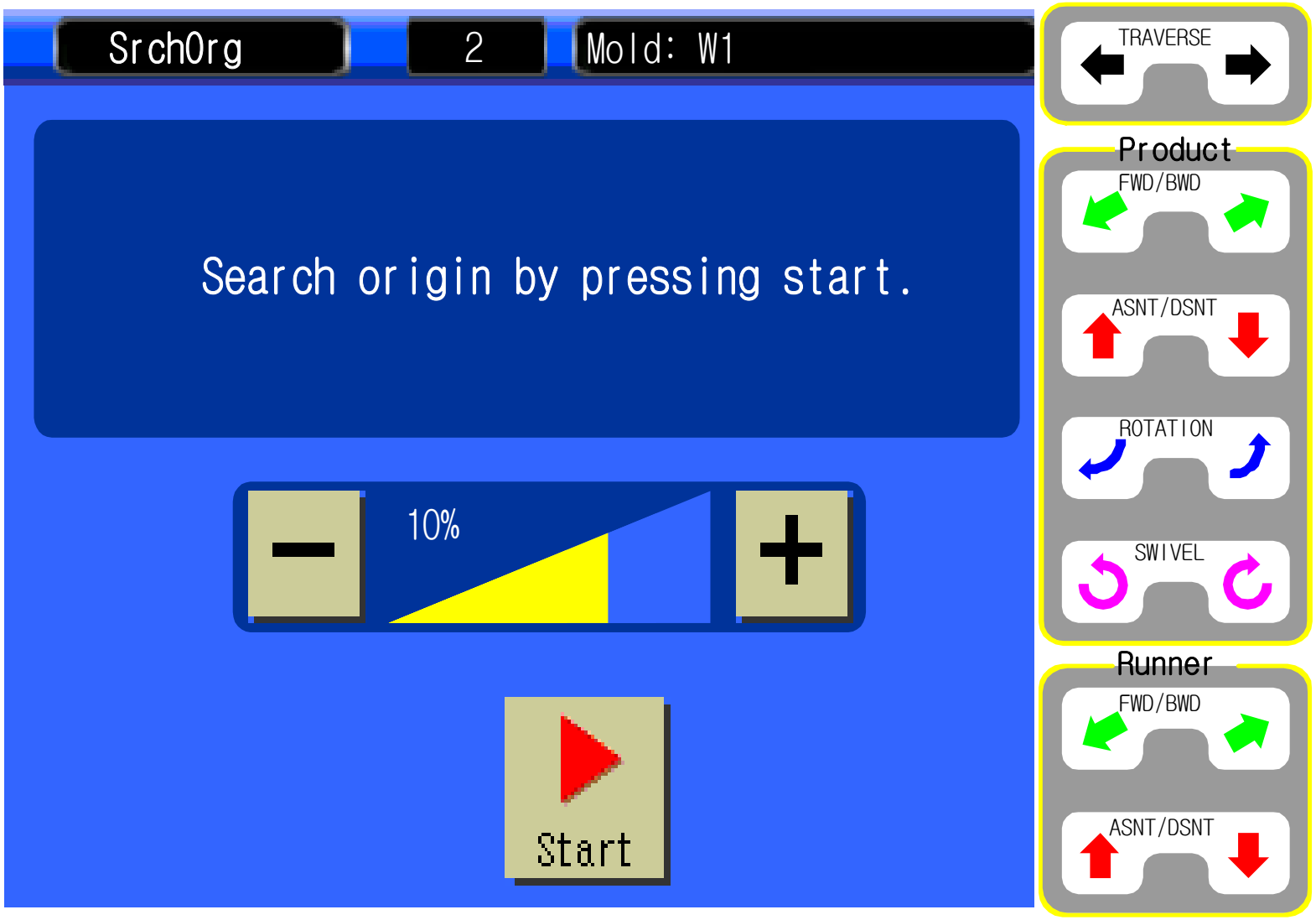
2. Servo Origin



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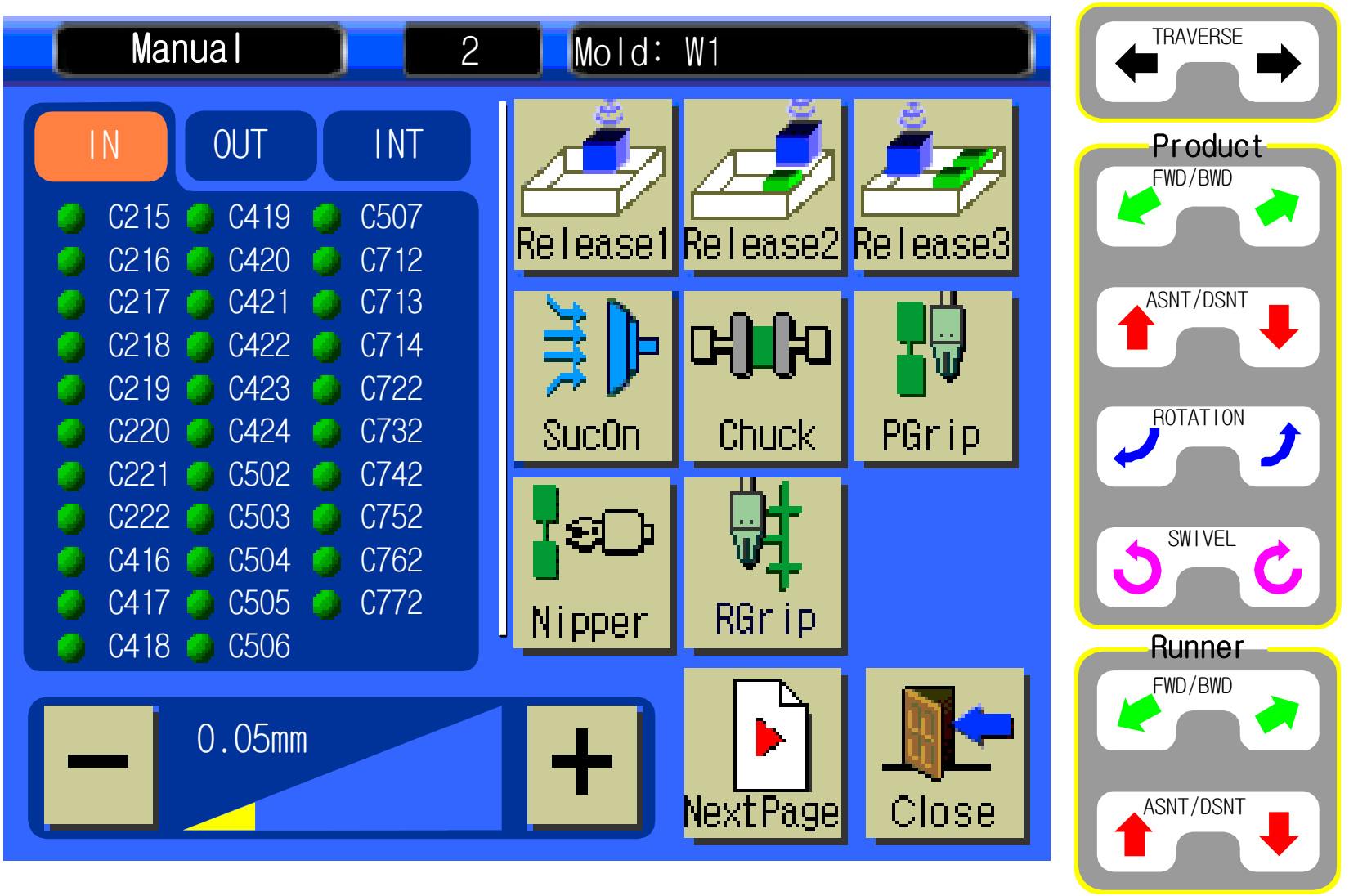
3. Manual Screen



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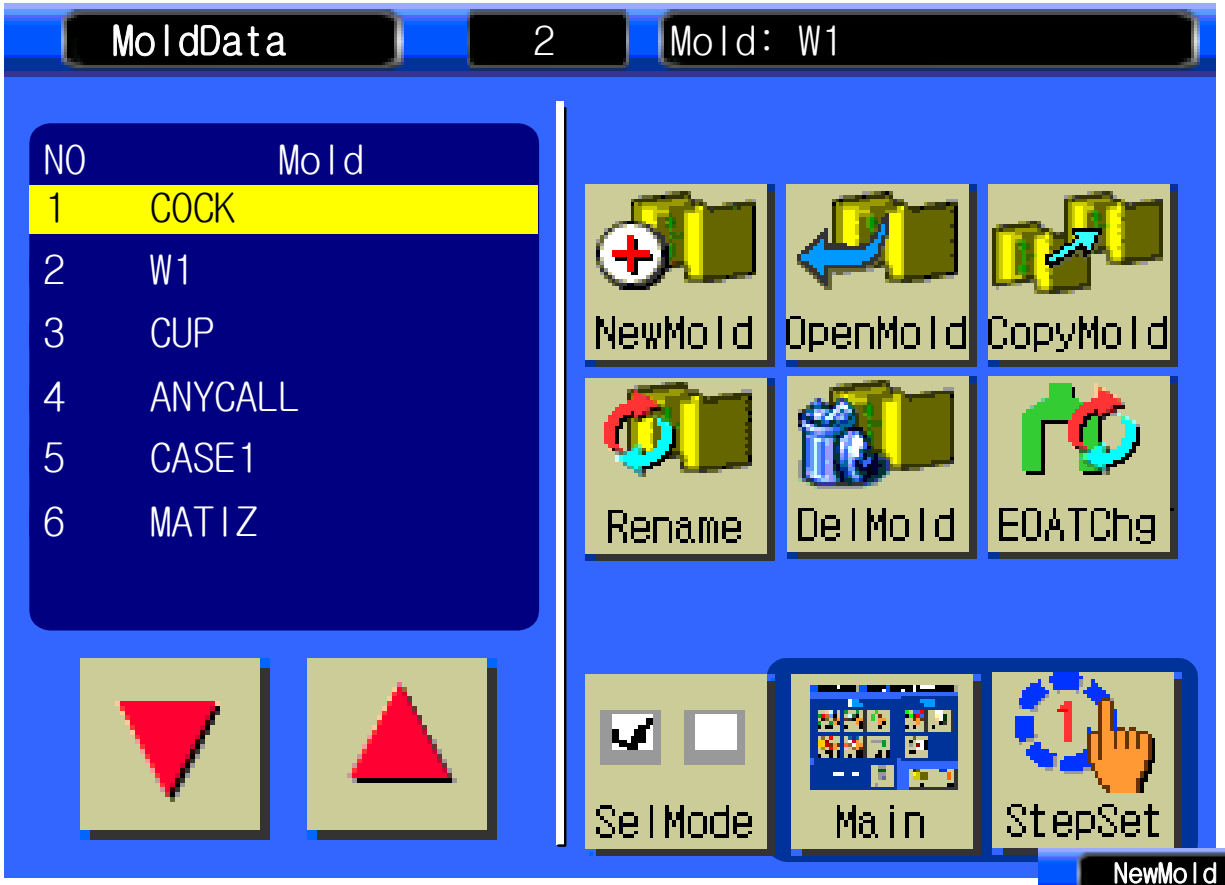
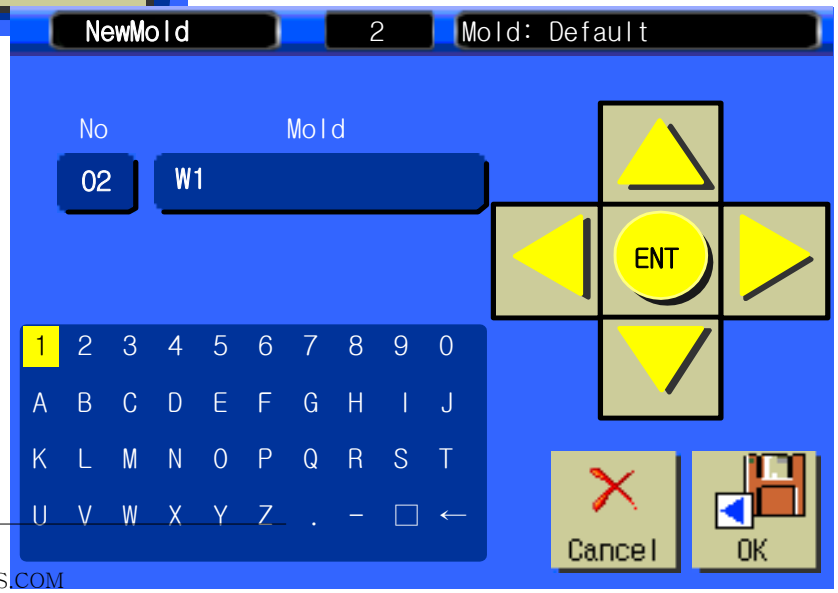
4. Mold Data Screen





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5. Step Setting Screen

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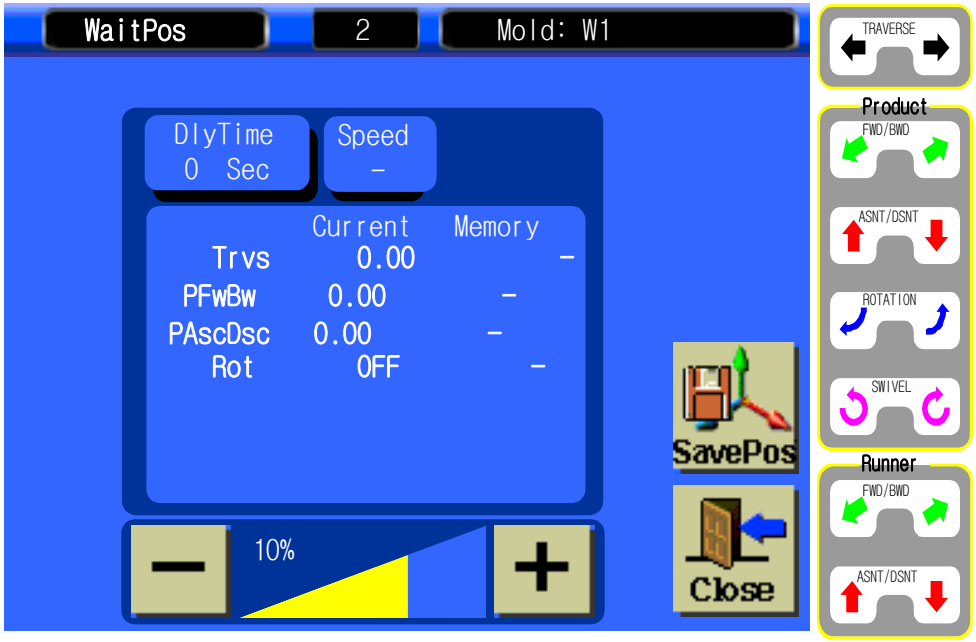
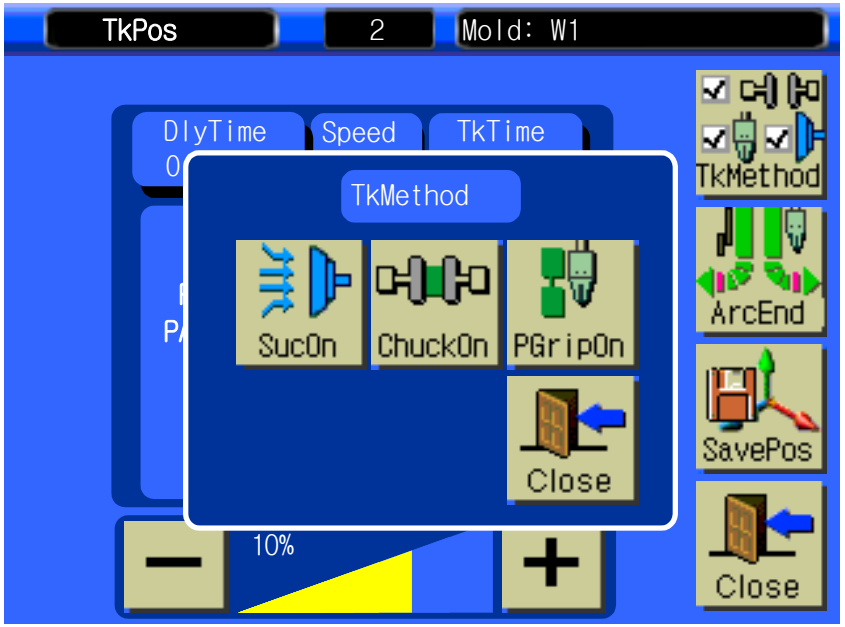
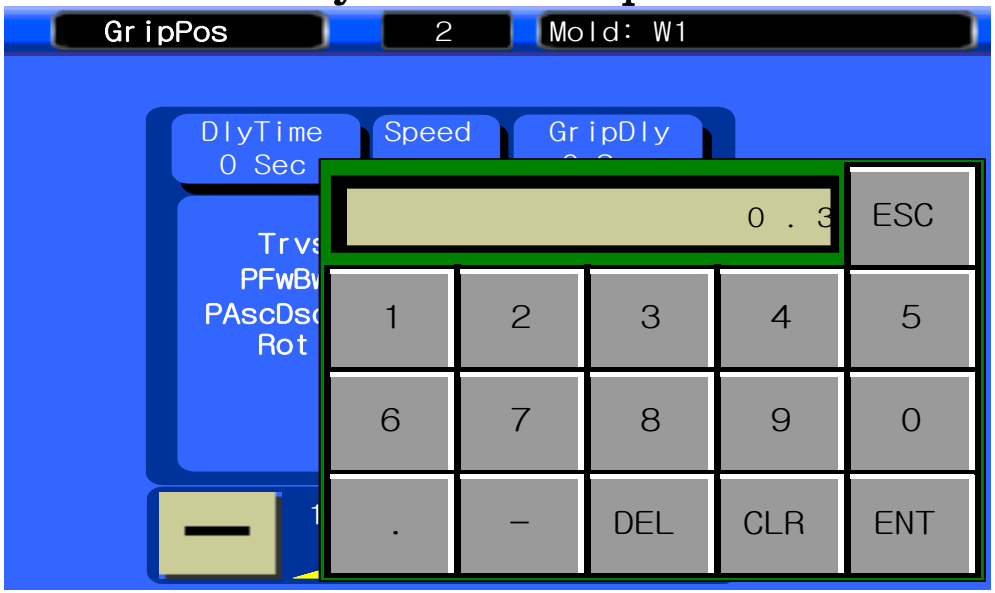
6. Positing Setting



7. Take Out Method



8. Delay Timer Input



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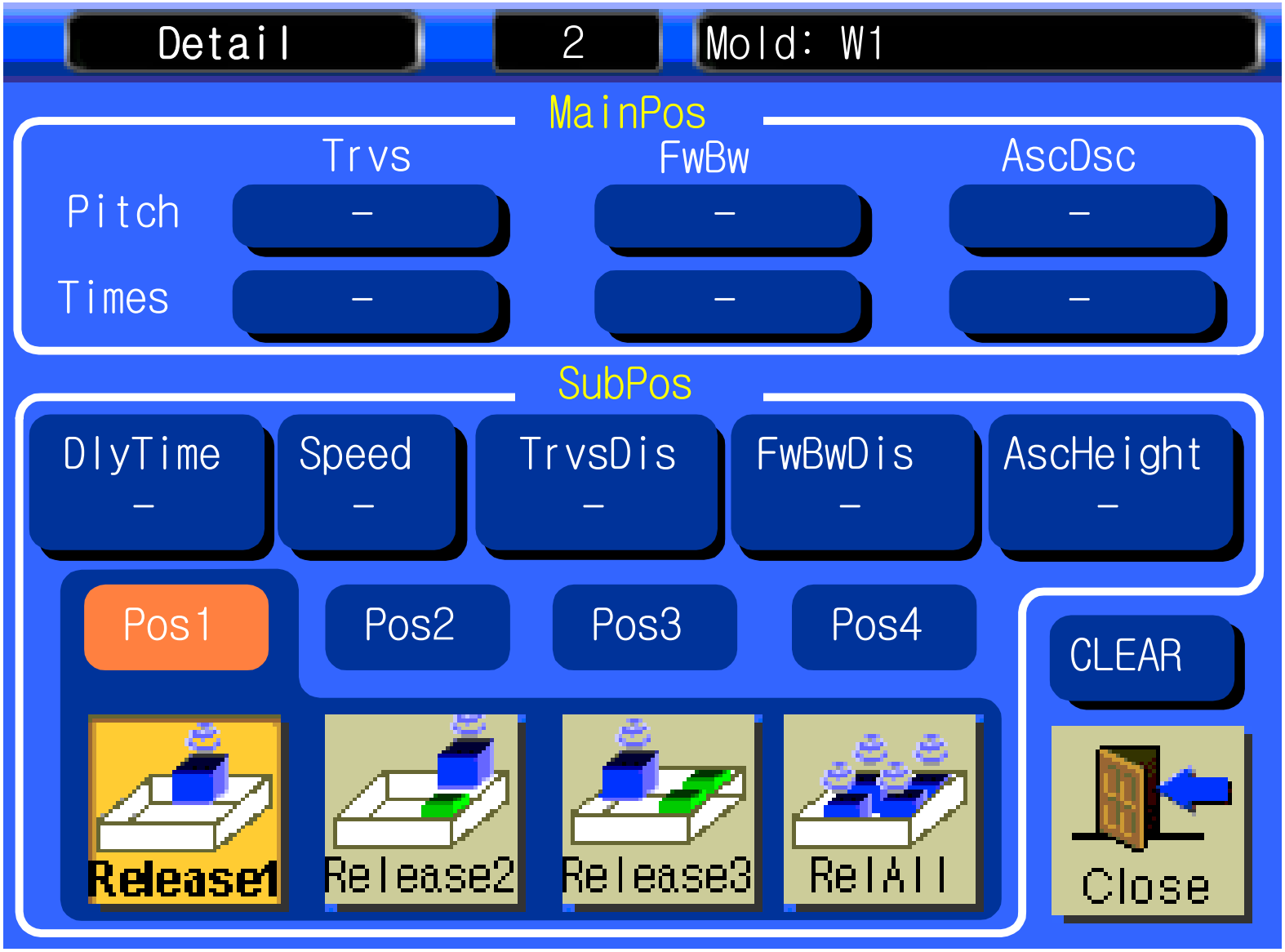
8. Stacking in Release Screen



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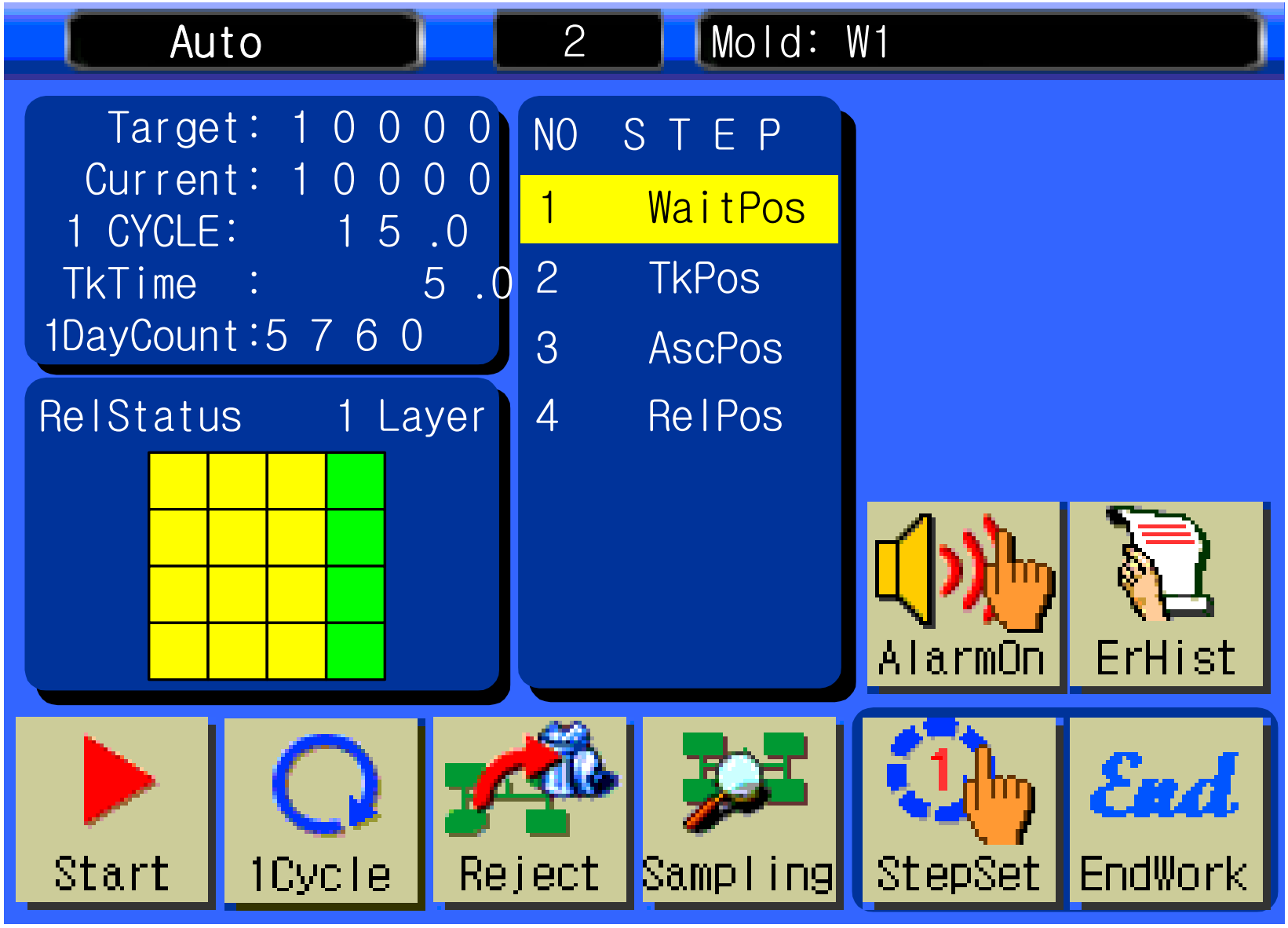
9. Automatic Production Screen



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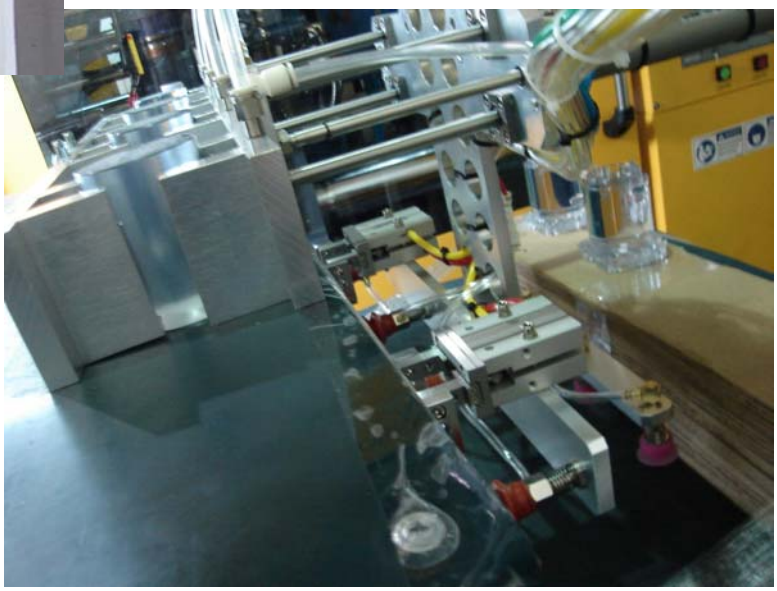
Insert Molding System with HYRobotics NEXIA Robot

Project & Problems.

- IMM : 500 Tons
- Parts : Special Base for Electronics Products
- Mold : 4 Cavity
- Insert : Four Bar need to be inserted.
- Problem : Operator can't pick up molded parts by hand because it's too far from door. Also need do Insert parts, Temperature sensitive material , Consistency required. No finger prints allowed.
- Semi Insert Molding to minimize investment cost.
- Customer build insert pickup station by manually on



Equipment :

- Robot : NEXIA-600SY : 3 Axis Servo
- EOAT : 4 Suction cups with one Gripper for finished parts 8 Suction cups for Insert. Insert Sliding Units.
- Insert Pick up station. : Hand made by customer.
- After robot release parts, Operator Put insert in the position and pick up parts.
- HYRobotics runs robot with slow speed for outside of molding area until customer build safety gate or full automation system.

Result :

- Robot Pick up Insert and Go to wait Position.
- Mold open and Robot go to wait position and pick up parts
- Robot move back and go down and insert position and release insert in the mold.
- And Robot move back and up
- Robot move to traverse out and release parts and move to insert pick up station and pick up parts.
- Operator Pick up finished parts and put insert in position for next cycle and inspect finished parts.
- Customer was able to save over 60% with other fully automated insert molding automation units but still supplying high quality products to customer.

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Insert Automation Step with NEXIA Robot in 1/2 Hour

	Robot Basic Step	Added Step For Insert Molding	Description
1	Wait Position		Robot Waiting Position until Mold Open
2	Take Out Position		Take Out Position to Pick up Parts
3		Kick Back	Added Position : Ffter Vacuum or Chucking Parts
4		Insert Loading Position	Added Position : For Insert Loading
5		Off Valve of User Output	Added Motion or Added User Output : For Valve for Insert Holding
6		Move Back	Added Position : For After Insert Loading
		...	Additional position : Can be added to insert push repetition
7	Rotation Position		Molding Machine start Position: Mold Start to Close
8		Outside Position	Add Position : Position before release the molded parts
9	Release Position		Parts Release position on conveyor or stacking.
10		Insert Grip Waiting Position	Add Position : Wait Position for insert is ready
11		Wait User Input	Add User input : Wait any signal for insert is ready
12		Approach to Insert	Add Position : Close to Insert
13		Insert Grip or Suction Position	Add Position : Insert Grip or Vacuum Position
14		Insert Grip or Suction	Add Spare Output or User Output : Insert Grip or Vacuum
15		Little Move up after Insert Grip	Add Position : Position to confirm Insert Confirm
16		Insert Confirm	Add Spare Input : Insert Grip or Vacuum confirm
17		All the way up	Add Position : Before to go to Waiting Position

- Press Step forward will move robot arm go to Wait Position with Insert Grip. One dry cycle need to run without molding machine in Auto.
- And robot will grip insert on End of Arm tooling and put one insert in manually in molding machine and put in in Auto, and Robot is in Auto will make Insert molding automation.
- Up to 80 Step can be added and also robot can stack on release position and insert can grip horizon stacked parts one by one with Insert Grip Step (Special Step : Input required)
- When add additional position, there are one axis step movement and multi axes simultaneous movement. This will allow operator use optimum motion pattern without going all the way up and minimize cycle time.
- If you have any question for Insert Molding Programming , please feel free to contact us : samlee@hyrobots.com Tel : 1-636-578-6059
- End of arm Tooling for Insert Grip recommended Location male pin along with female location bushing or hole in Mold and Insert Grip Location.

HYROBOTICS CORP
5988 MID RIVERS MALL DR. ST.LOUIS MO 63304
TEL : 1-636-578-6059, Fax : 1-866-232-5594
WWW.HYROBOTS.COM , Email : Sales@hyrobots.com

Short Shot Inspection System with HYRobotics ZEST Robot

Project & Problems.

- IMM : 1999 Nissei 120 Tons (Old Machine)
- Parts : Vehicle Number Plates Holder
- Mold : 4 Cavity
- Problem : Randomly, Edge of Parts (Triangle) has short shot for any cavity.
- Sprue separate required.
- Need to be packaged 400 good parts only

Equipment :

- Robot : ZEST-200SY : 3 Axis Servo
- EOAT : 8 Suction cups with one Gripper
- Testing Station : 4 Set of Fiber Sensor for edge of 4 Cavity. (Send reject signal to Robot)
- Bin changing system : 400 good Shot and change a bin.
- Robot separate sprue and rejected parts from inspection system and send signal for each good shot.

Result :

- Robot pick molded parts and drop sprue.
- Go to Inspection system and Activate inspection.
- If no reject signal go to Bin changing machine and release parts to Bin and send signal to Bin Changing Machine.
- If robot get reject signal , robot move to desired position to drop rejected parts to separate.
- Each bin has fully inspected 400 parts , after receive 100 signal , machine change the bin automatically.

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Inspection Automation Step with NEXIA , ZEST Robot in 1/2 Hour

	Robot Basic Step	Added Step For Inspection	Description
1	Wait Position		Robot Waiting Position until Mold Open
2	Take Out Position		Take Out Position to Pick up Parts
			Additional position : Can be added to if required
3	Rotation Position		Molding Machine start Position: Mold Start to Close
4		Move to Middle Traverse	Add Position to top of inspection station.
5		Add User Input	Add User Input : wait any signal if inspection station is ready
6		Down to Inspection Station	Add Position to go down to Inspection Station
7			Add user out put if required any additional Vacuum release or Grip
8		Add User Output	Add User Output : To send signal to Inspection Machine
			Inspection Start (Fiber Sensor or Visual Sensor , ETC)
			Add user out put if required any additional Vacuum or Grip
9		Reject Signal Input Position (X103) (Reject Position need to be set up : Robot O Volts need to go to X103 through Inspection System to Activate)	Add Position before robot go to release position, this step robot will check signal for reject and decide to go to release or reject position. Need to be all the way up and before step of Release position.
11	Release Position		Parts Release position on conveyor or stacking or go to reject positon.

- Inspection Auxiliary Machine required to do this process, like Fiber sensor (Short Inspection) or Visual Sensor (PLC Programming might be required)
- Up to 80 Step can be added and also robot can stack on release position (Special Step : Input required)
- When add additional position, there are one axis step movement and multi axes simultaneous movement. This will allow operator use optimum motion pattern without going all the way up and minimize cycle time.
- If you have any question for Inspection Molding Programming , please feel free to contact us : samlee@hyrobots.com Tel : 1-636-578-6059
- This process will help quality control when there is no operator next to molding machine.

Better Quality Control , More Customer's Rewards.

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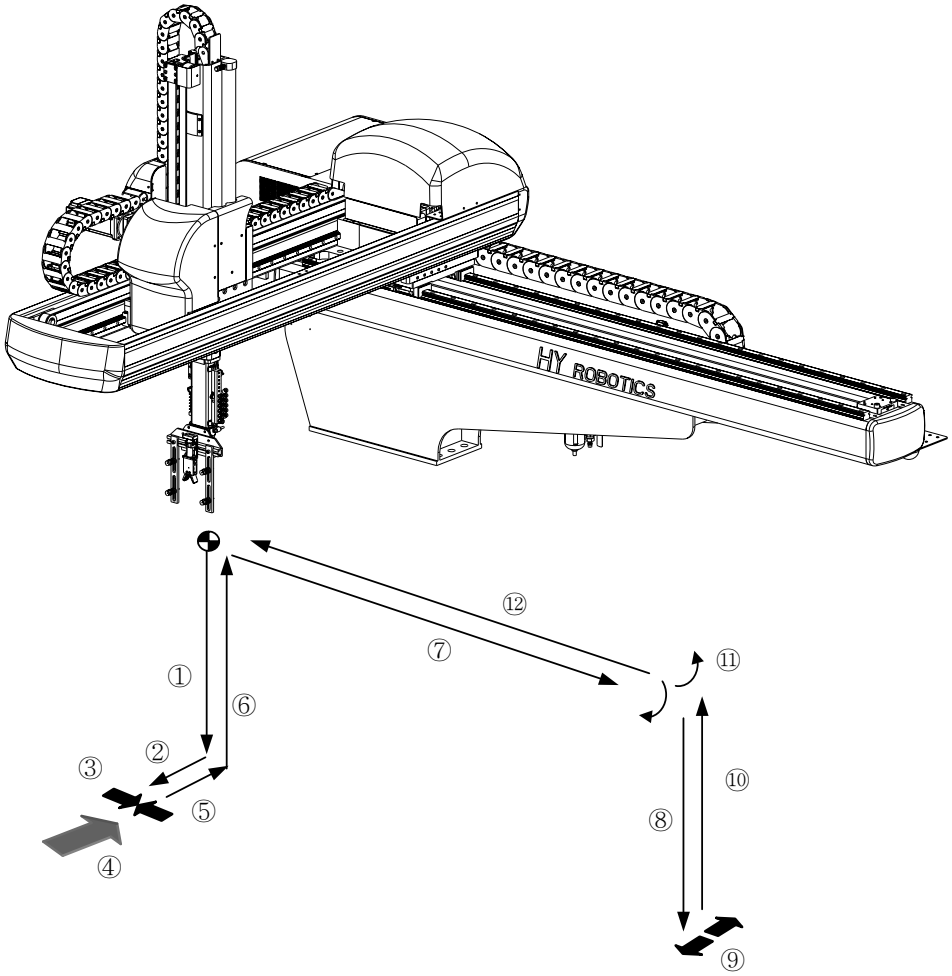
5.Follow-up

5.1 Setup Motion



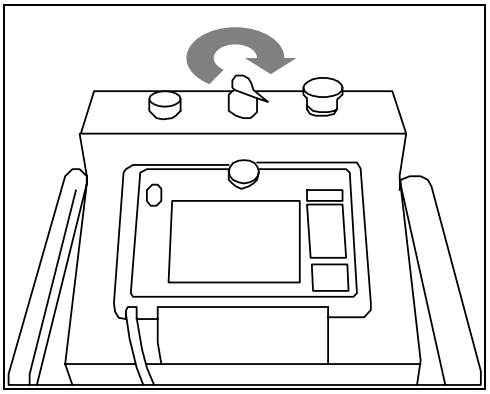
①. Waiting Position

②. Take-out Position

③. Ascent Position

④. Release Position

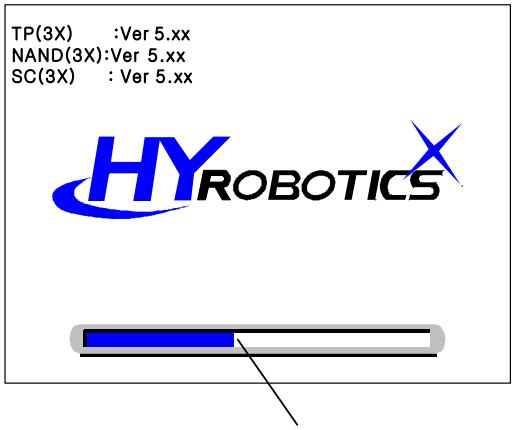
5.2 Start up



● **STEP 1**

Turn On Power.

Power lamp becomes on.



Loading state bar

● **STEP 2**

Log screen appears, and loading state bar indicates data loading level.

In case loading state bar is all full, move to origin searching screen.

5.3 Searching Origin

NOTICE

Confirm Robot is not interfere with any obstacle.

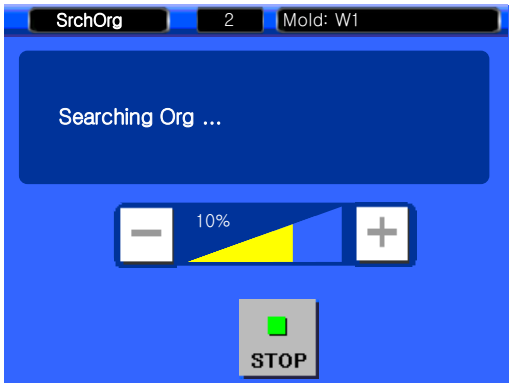
Move robot arm with manual button.

- **STEP 3**

Confirm Robot is not interfere with any obstacle and

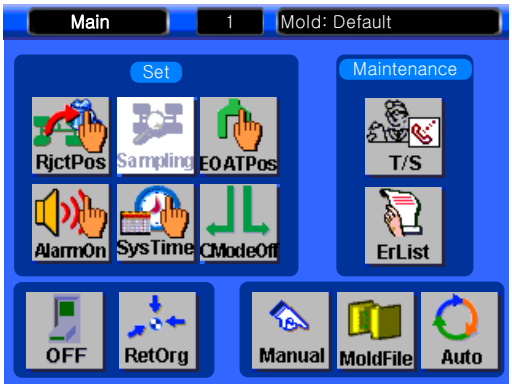
Press 

to homing position



After finished homing, robot will back to main screen.

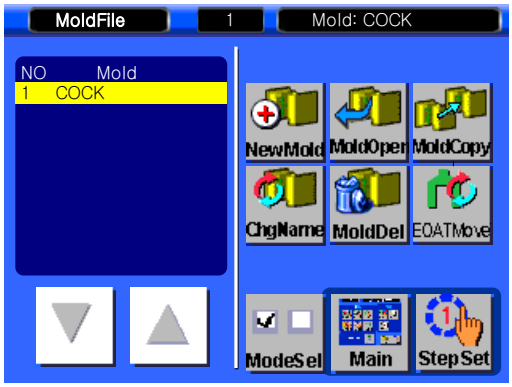
5.4 Creat New mold



- **STEP 4**

Press 

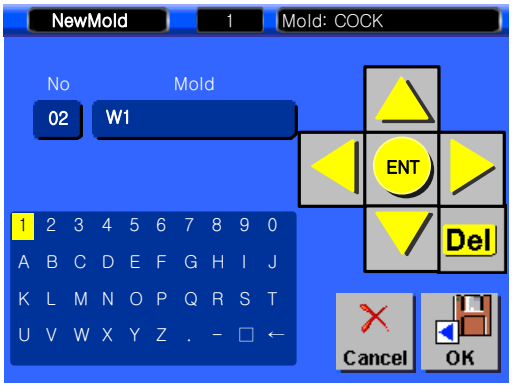
to set up mold.



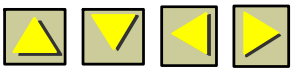
- **STEP 5**

Press 

to creat new mold.



- **STEP 6**

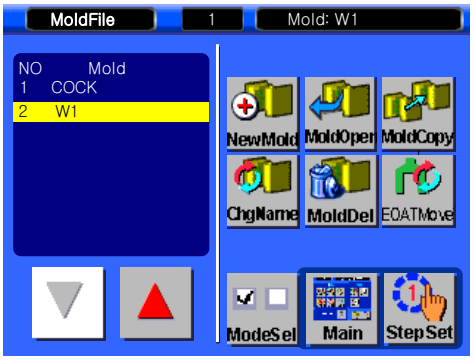
Press  to move cursor to desired text, press 

to input.

Press 

to move back to mold manager screen.

5.5 Step Setting.



● **STEP 7**

Press 

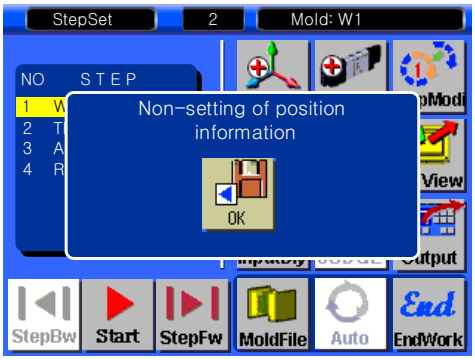
to move to Step Setting screen.

● **STEP 8**

Press 

to Forward [No Setting of position]

Display if there is no information.



Press 

to close.

● **STEP 9**

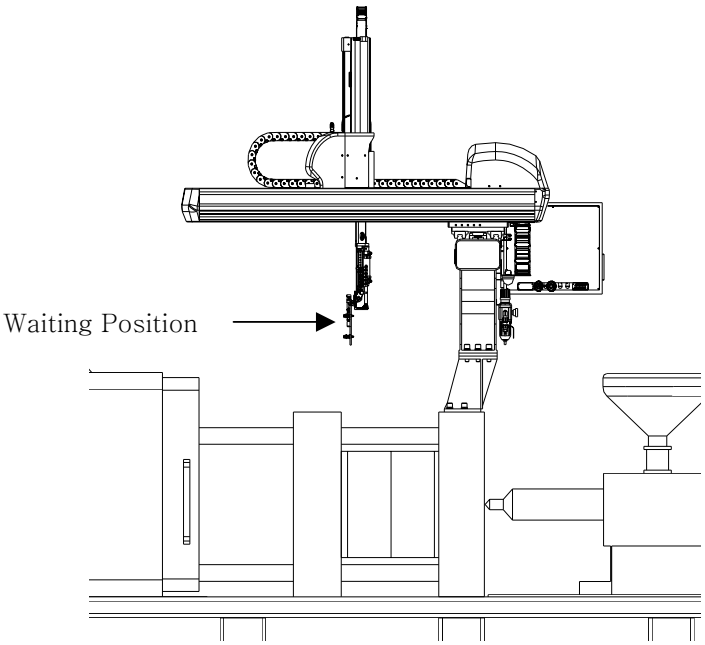
Cursor moved to WaitPos..

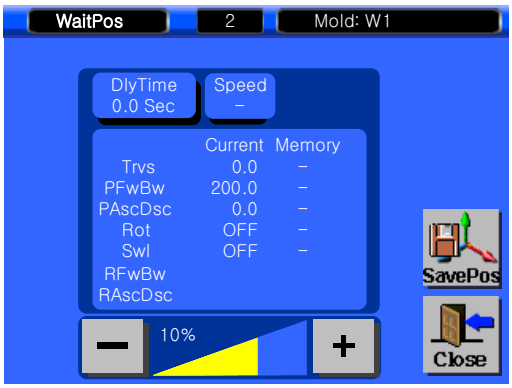
Press 

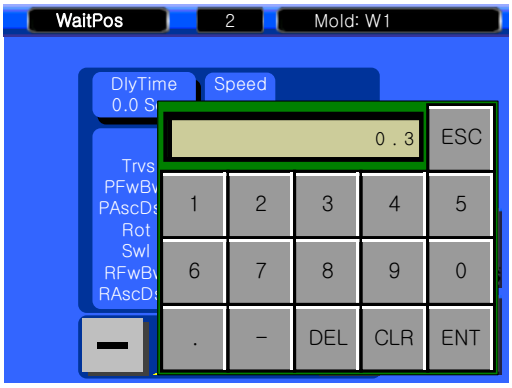
to input WaitPos (Waiting Position)

Wait Position is only can be changed Step Modification.

5.6 Setting Waiting Position







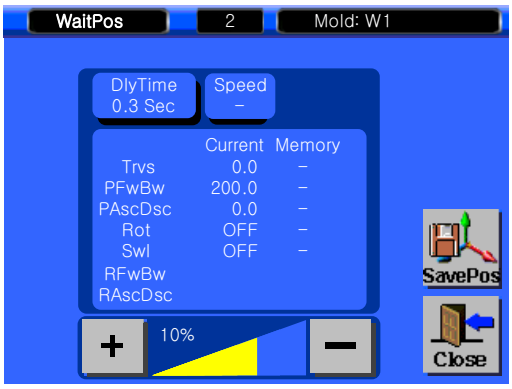
● **STEP 10**

[Delay time 0.3 Sec before move to Waiting Pos,]

Press DlyTime 0 .0 Sec and display numeric keypad.

(This is for delay time from last step to current step)

Press 0 . 3 , Press ENT to save and close.

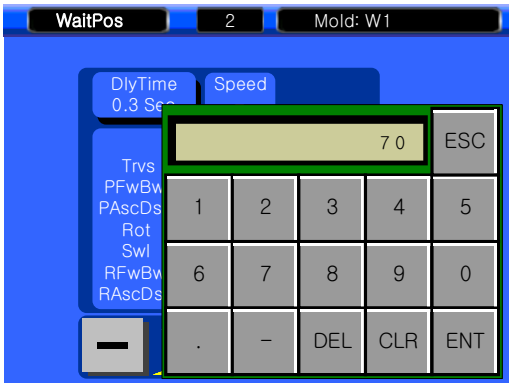


● STEP 11

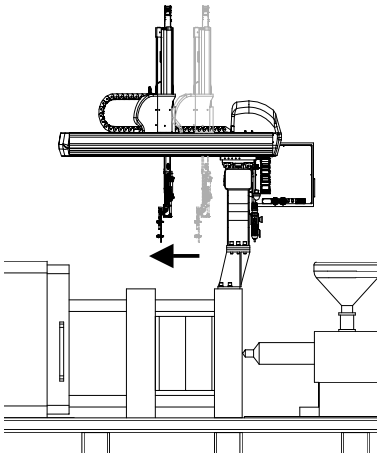
[Speed Setting 70%]

Press Speed – to input Speed Setting.

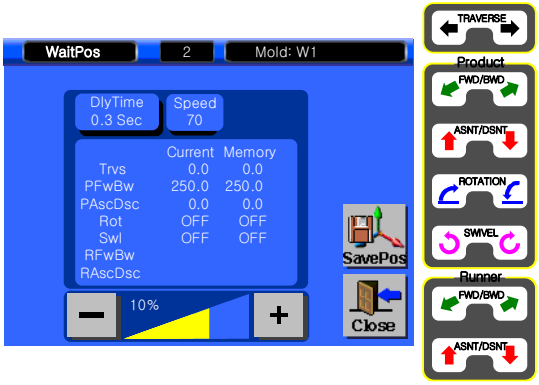
100% is maximum speed.



Press 7 0 , Press ENT to save and close windows.



Position		
Axis	Origin	Waiting
Traverse	0 mm	0 mm
PFwBw	200 mm	250 mm
PAscDsc	0 mm	0 mm
Rot	OFF	OFF



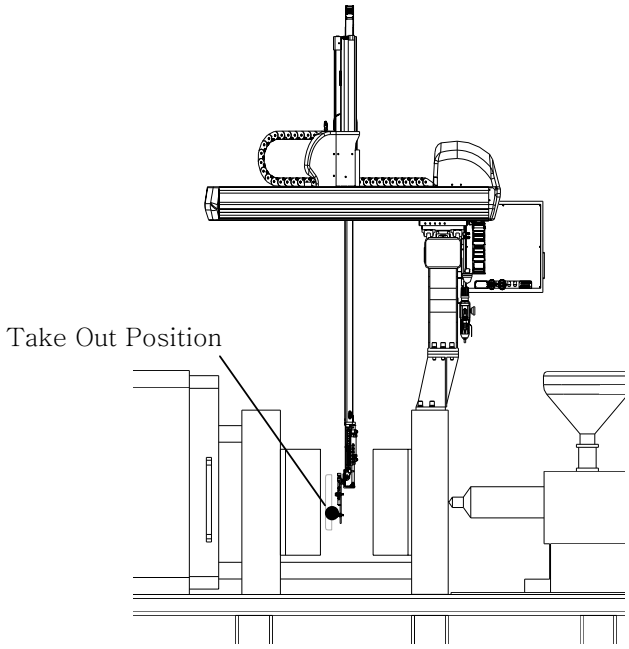
● STEP 12

[Setting Waiting Position to Traverse 0mm, Kick, 250 mm, Up and Down is 0 mm, Rotation OFF로 설정]

Move robot arm with manual button until you get current position as desired number and press

SavePos to save and close.

5.7 Take Out Position Setting



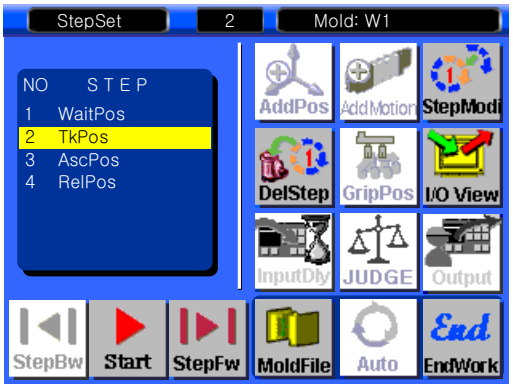
- **STEP 13**

Press 

and display Non Data Setting..

Press 

to close



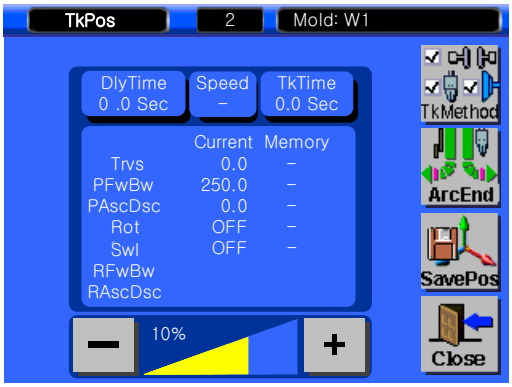
- **STEP 14**

Step Cursor moved to TkPos

Press 

and move to set up Take out position

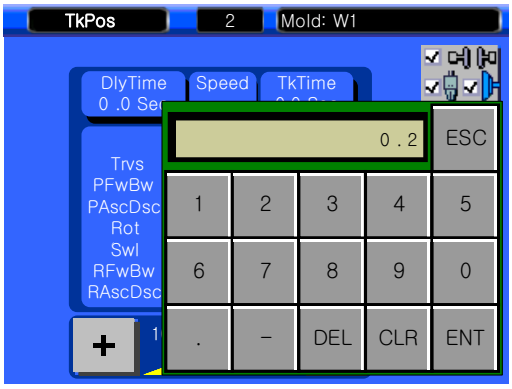
Take out position can be set up in Step Modification.



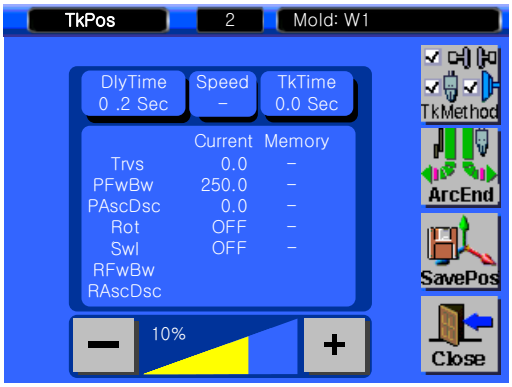
● STEP 15

[Set Delay Time to 0.2]

Press DlyTime 0 .0 Sec to have delay time after mold is open.



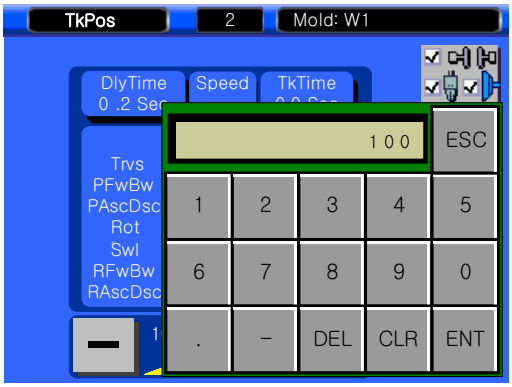
Press 0 . 2 and Press ENT to save.



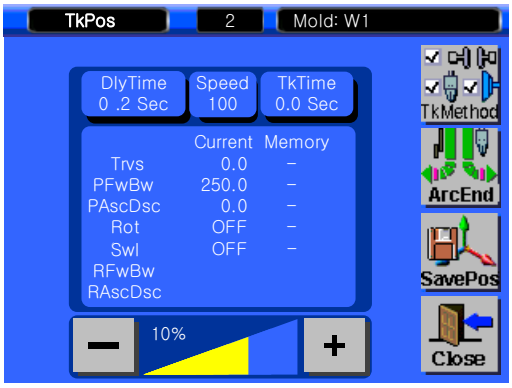
● STEP 16

[Speed 100%]

Press Speed –



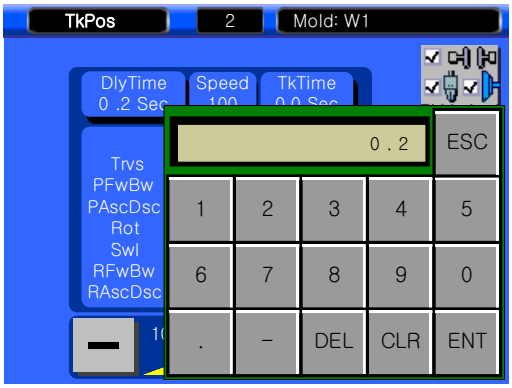
Press 1 0 0 to set speed 100%, Press ENT to save and close.



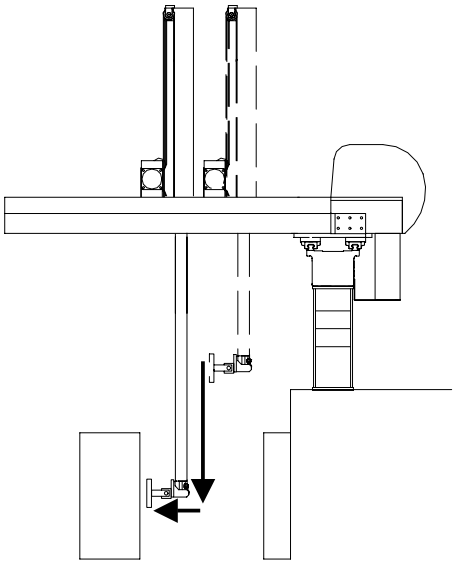
● STEP 17

[Take out Time Delay]

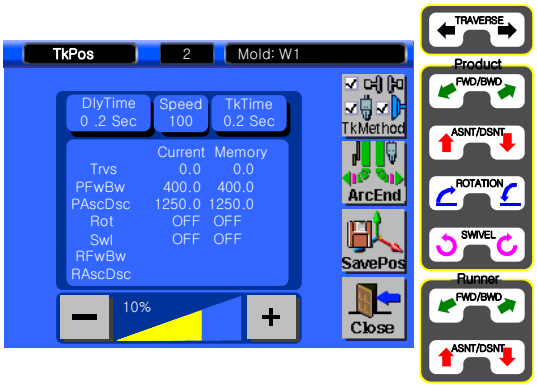
Press TkTime 0.0 Sec to have delay time to take out operation.



Press 0 . 2 , Press ENT to close.



Position		
Each Axis	Waiting Position	Take out Position
Traverse	0 mm	0 mm
Kick	250 mm	400 mm
Up/Down	0 mm	1250 mm
Rotation	OFF	OFF



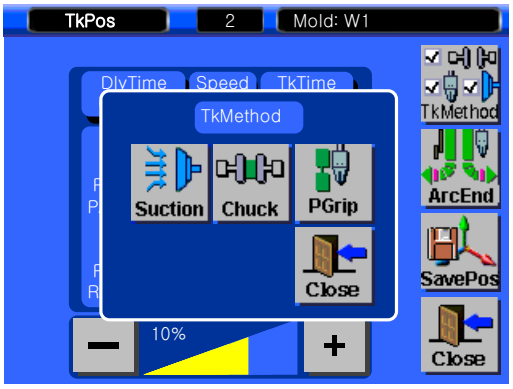
● STEP 18

[To set take our position for Traverse 0mm, Kick 100mm, Up/Down 1250mm, Rotation OFF]

Move robot arm with manual buttong until current position can be Traverse 0mm, Kick 100mm, Up/Down 1250mm, Rotation OFF

Press 

to save.



● STEP 19

[Take Out Method]

Press 

to displays take out method, press 

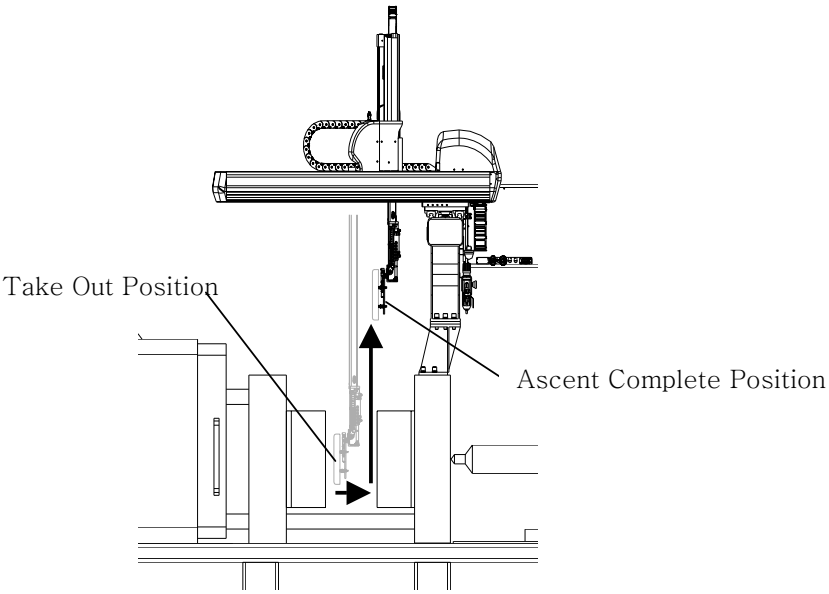
to operate suction,, press 

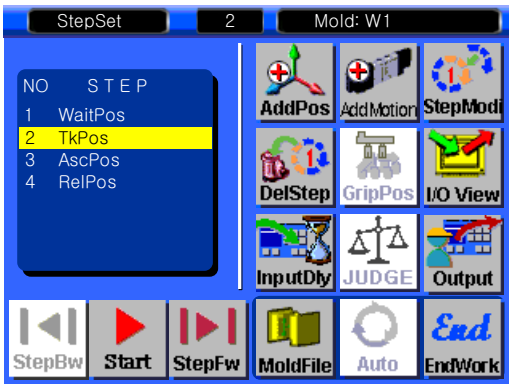
to close. Press 

to save.

Reference	Take out cycle time delay time is from take out position and receive ejector forward complete signal to chuck operation. Suction operation will be start after moving to take out position and chucking operation will be start after Take out cycle delay time complete

5.9 Ascent Position Setting (IMM Operate next cycle)





- **STEP 20**

Press 

, display [no setting].

Press 

to close.

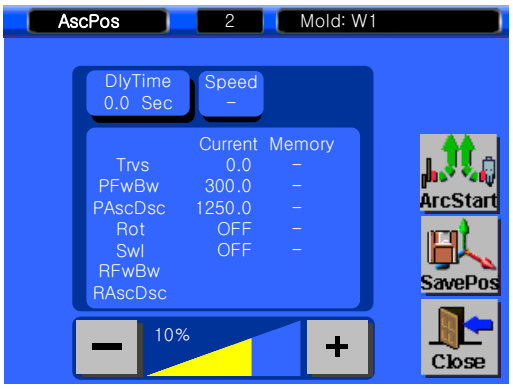
- **STEP 21**

Cursor located on AscPos..

Press 

to setting Ascend Position..

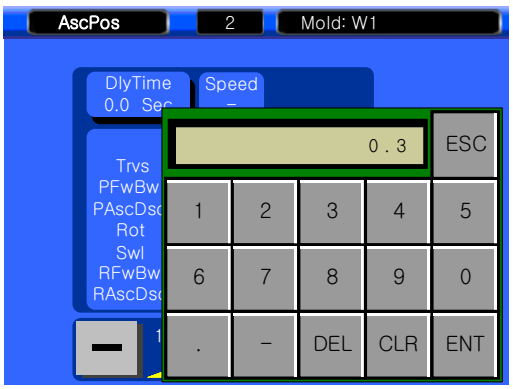
AscPos can be set up only in StepMod (Step Modification)



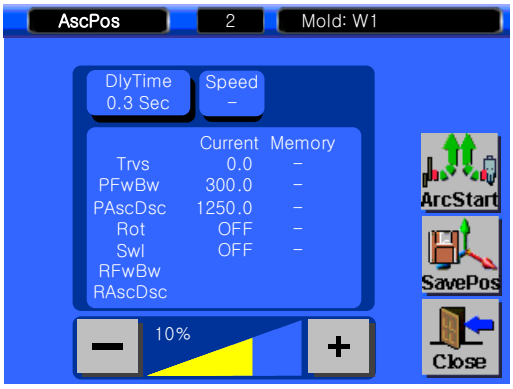
● STEP 22

[Delay time 0.3 Sec]

Press DlyTime 0.0 Sec to set delay time to up complete position.



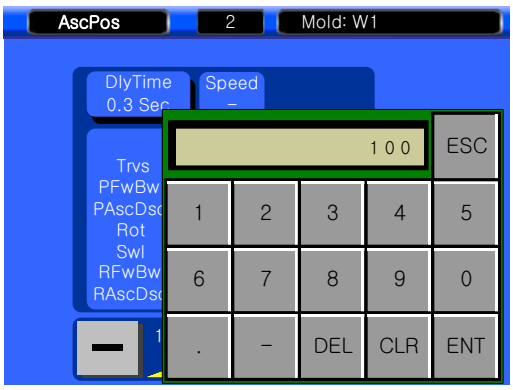
Press 0 . 3 and press ENT to save.



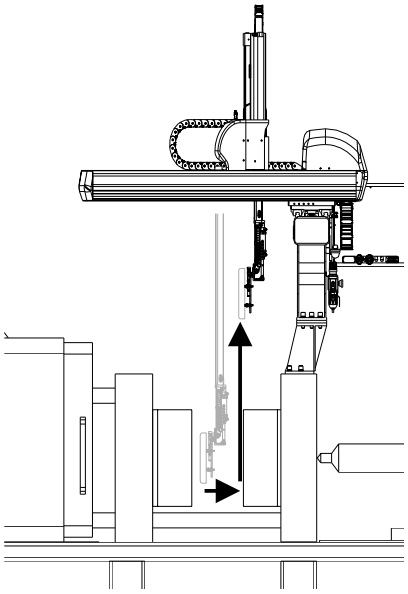
● STEP 23

[Speed setting 100%]

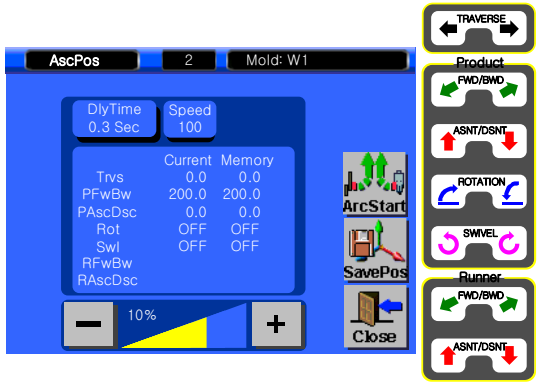
Speed setting to move up position, press Speed –.



Press 1 0 0 and press ENT to save and close.



Position		
Each Axis	Take out	Ascent
Traverse	0 mm	0 mm
Kick	300 mm	200 mm
Up/Down	1250 mm	0 mm
Rotation	OFF	OFF



● **STEP 24**

[Set Ascent Complete position to Traverse 0mm, Kick 0mm, Up/Down 0mm, Rotation OFF]

Press manual button to Traverse 0mm, Kick 0mm, Up/Down 0mm, Rotation OFF.

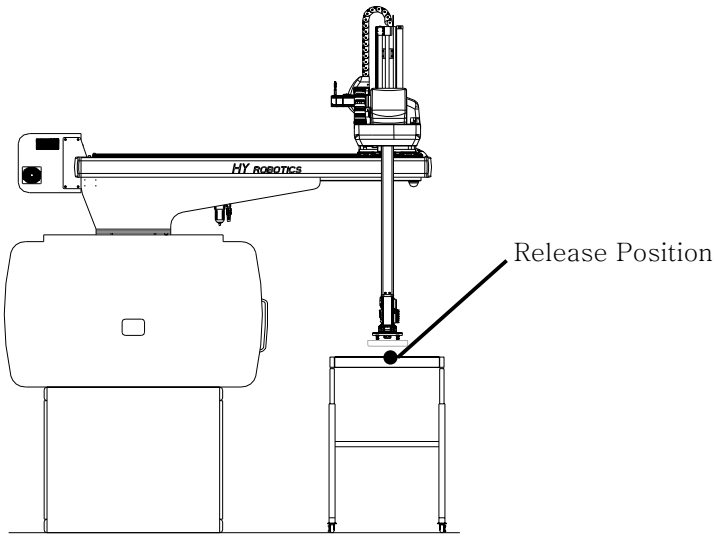
Press 

to save position

Press 

to close.

5.10 Release Position



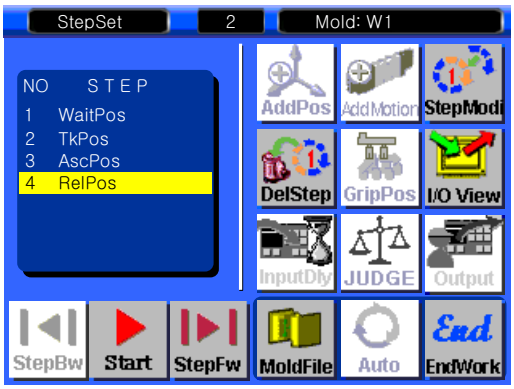
● STEP 25

Press 

display No Step info.

Press 

to close



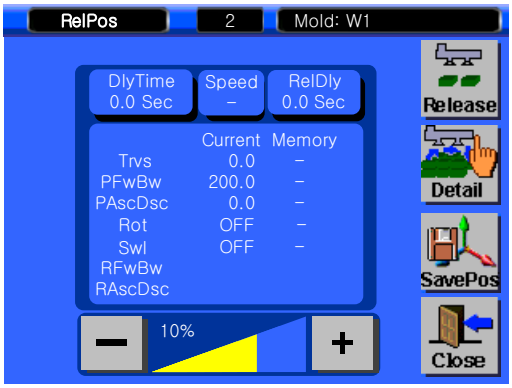
● STEP 26

Step cursor is located on RelPos (Release Position).

Press 

to move to setting screen.

RelPoss can be set up only in StepMod (Step Modification)

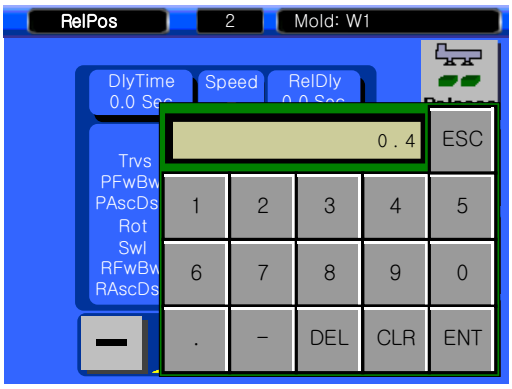


● STEP 27

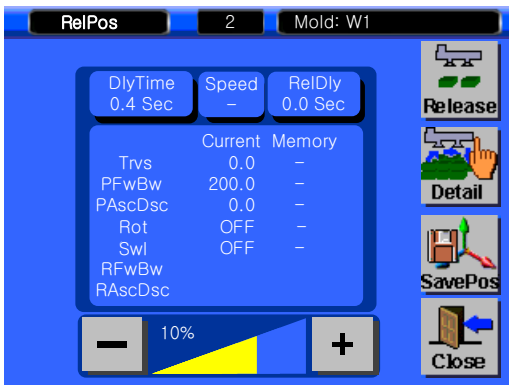
[Delay Time 0.4 Sec]

To set delay time to move to release position, Press

DlyTime
0 Sec
.



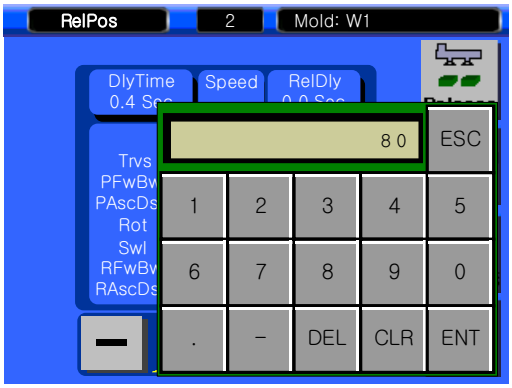
Press 0 . 4 and press ENT to save and close.



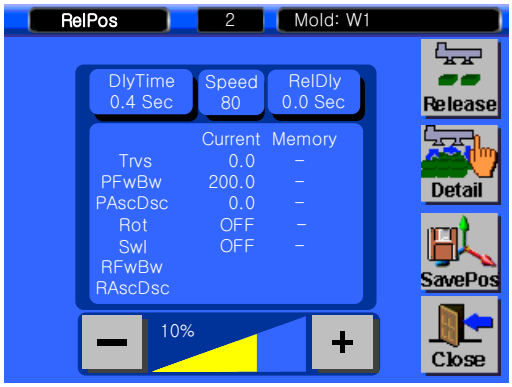
● STEP 28

[Speed setting with 80%]

Press Speed
–



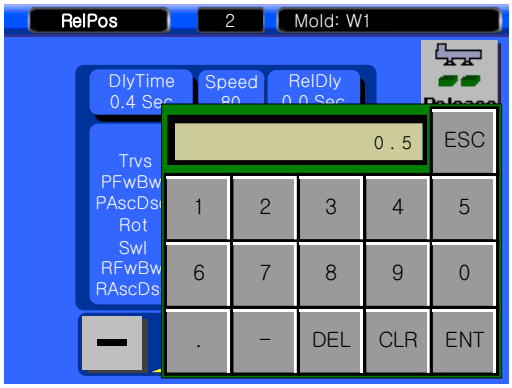
Press 8 0 and Press ENT to save.



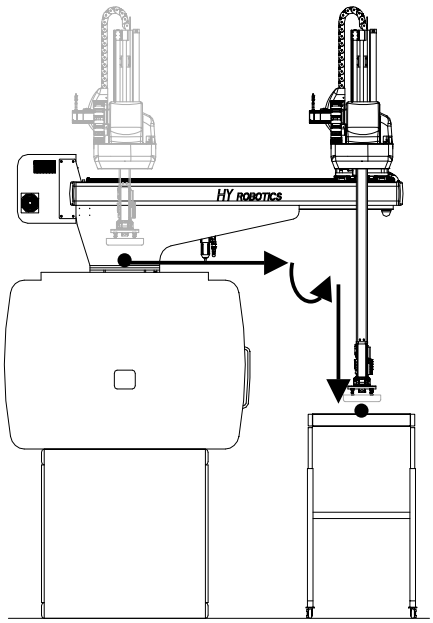
● STEP 29

[Release Delay 0.5 Sec]

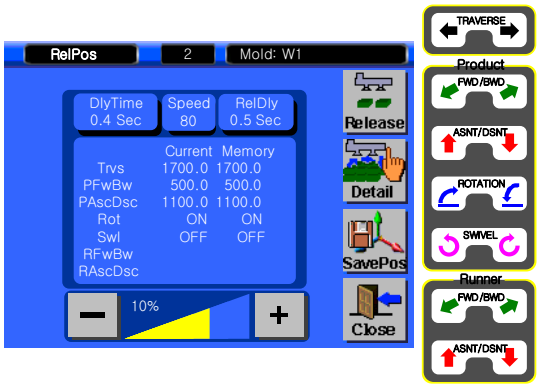
To set Release Delay time , press RelDly 0.0 Sec



Press 0 . 5 and press ENT to save.



Position		
Each Axis	Ascent Position	Release position
Traverse	0 mm	1700 mm
Kick	200 mm	500 mm
Up/Down	0 mm	1100 mm
Rotation	OFF	ON



● STEP 30

[To set release position to Traverse 1700mm, Kick 30mm, Up/Down 1100mm, Chuck Rotation ON]

Press manual button to move robot arm to Traverse 1700mm, Kick 30mm, Chuck Rotation ON
And then move robot arm Down 1100mm

Press 

to save.

Press 

to release all position

Press 

.

WARNING	IN SAFETY ZONE, ROBOT ARM NEED TO UP COMPLETE TO MOVE TRAVERSE AXIS

5.11 Step Operation

- **STEP 31**

Press 

to run robot go to next step.

After RelPos set up, press StepFw will finish one cycle and go back to first cycle.

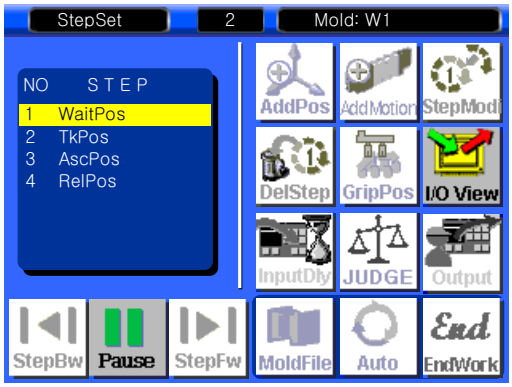
- **STEP 32**

Run Step by Ste to confirm all position and setting is right.

Press 

will run step with slow speed.

will be changed to 



- **STEP 32**

During Step operation

Press 

will stop operation

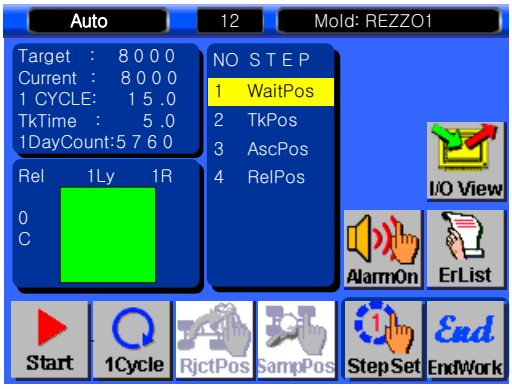
will be changed to 

Press 

to run in Fully Automatic Mode

will not activate until finish the 1 step operation (after change mold, or reboot system)

5.12 Auto Runs

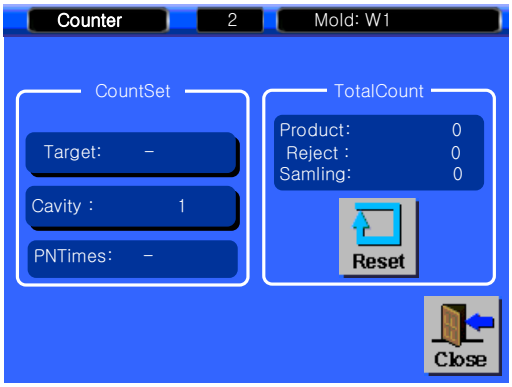


● **STEP 33**

To Set Target

Press 

move to setting screen.



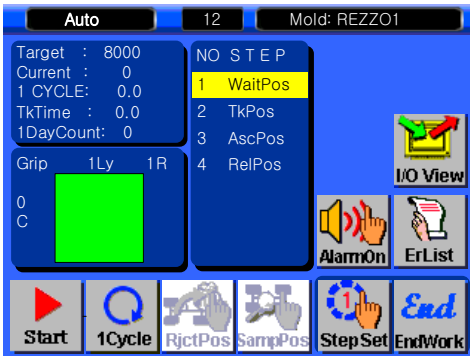
[Set 8000]

Press 

, input 8000.

Press 

move back to Auto

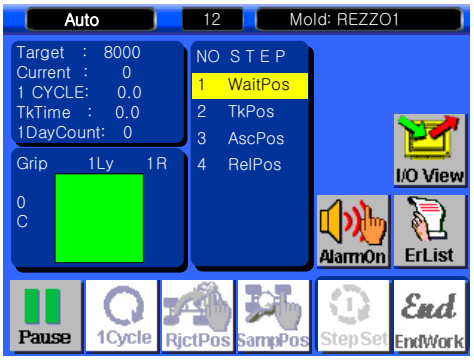


● **STEP 34**

Press 

, start Automatic Operation

will be changed to 



● **STEP 40**

Press 

, robot stops, 

will be changed to 

.

Press 

to finish Job, move to Mold Manger screen

NEXIA ROBOT CERTIFICATION PROGRAM

WELCOME TO HYROBOTICS NEXIA SERIES ROBOT TRAINING PROGRAM !

Time : Reservation Required.
(Mon ~ Fri. Sat is available)
Robot : NEXIA-100S with HYNC-700
(Shown Double Arm Model)

What this robot can do for your molding

1. *Basic Take out operation.*
2. *Manual, Step by Step, Full Auto.*
3. *J Motion in Mold.*
4. *Position / Speed Change in Auto.*
5. *Add Position in Step.*
6. *Add Motion in Step.*
7. *Add Spare Output.*
8. *Add User Input.*
9. *Add User output.*
10. *Insert Molding .*
11. *Stacking.*
12. *Cooling.*
13. *Inspection and Separation.*

* 80 Step Program per Mold can be created with 99 mold memory

TRAINING COURSE	Level 4. Basic Operation Course , Simple , Intermediate and High end Set up Course			
	Level 3. Basic Operation Course , Simple Set Up and Intermediate Set up Course			
	Level 2. Basic Operation Course with Basic Set Up course			
	Level 1. Basic Operation Course			
TRAINING SUBJECT	Power on	Basic Structure of Robot Program	J Motion in Mold	Add User Output
	Open Mold File	Standard Take out Motion, 4 Step	Add Position	Add User Input
	Step Cycle	Manual	Add Motion	Insert Molding
	Edit Step	Step Cycle	Edit/Delete Step	Stacking
	Auto	Auto	Position Change in Auto	Cooling
	Stop	I/O Check		Inspection / Separation.
		Stop		
		Error Recovery		
		IMM Inteface		
DAY REQUIRED.	2 Hours Required	1 Day Required	1 1/2 Day Required	2 Day Required
COST / PERSON	Call us			
	Call us			
	Call us			
	Call us			

Each Class will supply certification after finished and tested by instructor. Level 1 only require attendant and level 2 required test with demo units and robot, Level 3 require test with mold and actual set up, Level 4 requires interface with 2ndary automation.

All information is subject to change without notice.

HYROBOTICS CORP. (www.hyrobots.com)
5988 MID RIVER MALL DR. ST.LOUIS MO 63304, USA
Tel : 1-636-447-6440,636-578-6059, Fax : 1-866-232-5594