Electrical Operation Manual

Welcome to use GOANWIN press, please read this operation manual carefully before use the press. Do not operate this press unless you have been properly trained and have read the press manual in its entirety.

GOANWIN presses are adopt TN-S power supply system, Please ensure that the Earth and Null connection are securely fastened. Only the qualified electrical professionals allowed to connect power and electrical operations. The operators must be accept proper training, with basic skills in operation and maintenance.

Please do not installing high-power interferon-source equipment within 5 meters around the punch, such as welder, transformer. And avoid interference source in power supply.

1. RUN STATION T-STAND INSTRUCTIONS

1><u>Two Hand Run Buttons</u>: Two Hand Run Buttons are monitored by both Dual PLC's and Solid State Safety Relay to assure safe press operations. Both Run Buttons must be pressed at the same time in order to engage clutch and start slide movement.

2>Operation Mode Selector Switch: "OFF-INCHING-SAFETY

3><u>PRIOR ACTION Button</u>: Light illuminates when press PRIOR ACTION button, machine enter CONTINOUS operation, light turn off after 5 seconds.

4><u>CONT STOP Button</u>: When the CONT STOP Button is pressed during any position of stroke, slide will complete the stroke and stop at or near TDC, Top Dead Center.

5><u>RESET Button</u>: When a fault or error occurs, slide will stop and fault will show on HMI Screen. Follow steps for corrective action, Inch slide back to TDC area and press the RESET Button. You may then resume press operation. A fault screen is provided in the HMI that will show FAULTS in Red and RESETS in Green.

6><u>SLIDE ADJ Button</u>: Turn the slide adjustment selector switch to ON, you can then push the UP or DOWN button to adjust slide to desired height. NOTE: Press will not operate with Slide Adjust Selector in the ON position.

<u>7>SLIDE UP Button</u>: With the Slide adjustment Key selector in the ON position, you can then press the UP button and slide will move UP. Be sure not to Over-Travel maximum upper die height range for your press.

<u>8>SLIDE DONWN Button</u>: With the Slide adjustment selector in the ON position, you can then press the DOWN button and slide will move DOWN. Be sure not to Over-Travel maximum lower die height range for your press and NEVER compress dies, die springs, or nitrogen cylinders with slide adjustment as this can damage slide adjust motor and worm gear.

9>RAM EMERGENCY STOP Button

CAUTION / WARNING: Note this does not stop the main motor, but does stop slide, de-energizes the DSV valve and activates brake.

RAM EMERGENCY STOP Button WITH YELLOW BASE RING is provided to stop and prevent movement of slide. When RAM EMERGENCY STOP is pressed the button will lock in the down position.

2. MASTER OPERATION STATION

1><u>HMI</u>: Displays OK Monitor, Main Motor Direction, Angle, SPM, Mode Selector Position, Fault, Preset Counter & Current Counter.

2>Power Switch: Keyed selector to control power ON/OFF.

3>Main Motor Forward, Reverse selector switch

DO NOT Change Motor Direction until Flywheel comes to a complete stop. When starting the main motor, "Always turn SPM to Minimum Speed". Forward is Clockwise and Reverse is Counter-Clockwise on the HMI Screen.

When Reverse is selected press will only operate in INCH mode and will only operate back to TDC Top Dead Center position. Once at TDC you will need to turn motor OFF, then apply flywheel brake and be sure flywheel comes to a complete stop. Then turn SPM speed adjust knob counter-clockwise to lower speed, turn motor direction key to forward position and then restart main motor by pushing the Green motor start button.

4><u>Main Motor Start</u>: be sure the SPM Speed Adjust knob is turned counter-clockwise to slow speed before starting main motor. The Mode-Selector switch, which is located in the Run Station T-stand, must be in the OFF position in order for main motor to start. Flywheel Brake will release automatically when main motor starts.

5><u>Main Motor Stop</u>: Press the Red stop button, the motor will stop and Flywheel Brake will automatically engage.

6> Main Motor Speed Adjustment: Allowing the operator to adjust motor speed. Be sure to turn counter clockwise to minimum speed when starting main motor.

7><u>Emergency Stop</u>: A Red Emergency Stop Button WITH YELLOW BASE RING is provided. When pressed it will stop slide movement and turn off all motors and Emergency Stop will be shown on HMI Screen. In order to reset, you must turn to release the button, press control reset at Run Station T-Stand and then you can restart

8>Power Indicator Light: white light, Light illuminates when power turn ON.

9>Main Motor Status Indicator: Green light, Light illuminates when the main motor is running.

10><u>ALARM</u>: Red light, Light illuminates when a fault or error occurs happened.

11><u>Ground light</u>: Green light, Light illuminates when the grounding system is normal.

12>Safety Light Curtain Status Indicator

13><u>HOLP Keyed Relief Switch</u>: HOLP pump must have air solenoid that can be turned ON/OFF via Key Selector at Master Operation Station . This permits freeing of stuck dies near BDC.

3. HMI SCREENS INSTRUCTIONS

1>SAFETY WARNING SCREEN

This screen will appear as control is booting up.

Operator must acknowledge that they have been trained and read the press manual. If you agree press the "I Agree" button.

WARNING / CAUTION	
DO NOT OPERATE THIS PRESS UNLESS YOU HAVE BEEN PROPERLY TRAINED A READ THE PRESS MANUAL IN IT'S ENTIRETY	AND 7.
IT IS THE SOLE RESPONSIBILITY OF THE END USER TO MAKE SURE.	
THAT PRESS IS IN OPTIMUM CONDITION AND TH REGULAR SUGGESTED MAINTENANCE HAS BEE PERFORMED AND DOCUMENTED.BE SURE THAT POINT OF OPERATION GUARDS ARE IN PLACE A FUNCTIONING.	IAT EN ALL AND
SAFETY FIRST	
	I AGREE

2>MAIN RUN SCREEN

a. ALARM button: enter fault indication screen.

b. MONITOR button: enter input/output and clutch status monitor screen.

c. CAM button: enter die specification setting screen, include die item no, description, electronic cam, blowing, misfeed, safety light curtain.

d. PARAMETER button: enter specification setting screen.

e. ATTENTION button: enter instructions and conditions screen.

f. MODE display: The current mode status display corresponds to the Run Station T-

g. TOTAL COUNTER: Total Stroke Counter, Tap the ON/OFF Field for mode you want, In the ON position, the counter will function. Tap and Hold RESET Field and Current Value will go to "0".

h. RESET COUNTER: White box show current stroke counter, blue box show desired stroke counter. Slide will stop at top and show desired stroke counter reached on top right screen. In the ON position, the counter will function. Tap and Hold RESET Field and Current Value will go to "0".

i. Light Reset button: Tap the button when safety light curtain abnormal happened. Same function shows in die specification setting screen.

j. OK MONITOR: Display the abnormal information, mode information, normal information, etc.

k. Slide Angle Indicator: pointer show slide angle on turnplate.

l. Total Counter

m. Current time display: hh:mm:ss

n. Manufacturer LOGO



- 3> ALARM: read operatin instruction.
- a. NEXT PAGE: enter alarm details.
- b. RETURN: enter to main screen.

HH:MM:SS	OK MONITOR
	READ OPERATING INSTRUCTIONS PLEASE
	NEXT PAGE RETURN

4>ALARM RECONRD: scrolling display alarm reconds. the earliest alarm reconds will be cleared.

a. ALRM: enter alarm detail screen.

b. RETURN: enter to main screen.

yy.mm.dd	(ALARM	RECORD	H	H:MM:SS
0000 hh:mm mm.dd				Δ
4				⊽ ⊳
ALARM				RETURN

5>ALARM: display all alarms

a. ALARM: Red light illuminates when fault or error occurs. Tap the light enter detail screen. Total 17 detail alarm buttons show on the screen.

b. RETURN: tap button enter main screen.

c. ALARM RECONRD: tap butte	on enter alarm reconds screen.
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ALARM RECORD	(ALA	RETURN	
EMERGENCY STOP	MISFEED 01	RAM EMERGENCY STOP	PRESS STOP BUTTON
INVERTER	MISFEED 02	CLUTCH RELAY	LIGHT CURTAIN
ENCODER	REAR DOOR OPEN	OVERLOAD	SAFETY BLOCK
AIR PRESSURE	LUB- RICATION	MODE SWITCH	D-HANDS
OVERRUN			

6>LARM detail screen

a. display solution in details.

b. For example: MOP EMERGENCY STOP, detail solution display on it.

MOP EMERGENCY STOP	
1. If the "MOP EMERGENCY STOP" button was	6
pressed, please clockwise rotation to solve.	STOP .
2. If the "EMERGENCY STOP" button is normal,	
check line "X05".	
F	RETURN

7> MONITOR

- a. INPUT, tap "INPUT" enter PLC input monitor screen.
- b. OUPUT, tap "OUTPUT" enter PLC output monitor screen.
- c. C&B MONITOR, tap "C&B MONITO" enter C&B MONITORT screen.
- d. RETURN: tap "RETURN" enter main screen.

	[MONITOR]			
OUTPUT	C&B MONITOR			
	OUTPUT			

8>INPUT

a. NEXT PAGE: tap button enter PLC next input monitor screen. Red circle light illuminates when connection.

b. OUTPUT monitor, tap button enter PLC output monitor screen.

c. RETURN: tap "RETURN" enter main screen.

NEXT PAGE	【INPUT】	OUTPUT
X00 ENCODER A	X10 MISFEED01	X20 OPERATE B
X01 ENCODER B	X11 MISFEED02	X21 PRESS STOP
X02 ENCODER Z	X12 AIR PRESSURE	X22 SLIDE ADJ.
X03 OVERRUN	X13 LOADGARD	X23 RESET
X04 INV. PULSE	X14 MODE INCHING	●X24 L-CURTAIN
X05 EMERGENCY	X15 MODE SINGLE	X25 MODE OFF
X06 CLUTCH	X16 MODE CONT.	X26 SPACE
X07 INV. ALARM	X17 OPERATE A	X27 GREASE
		RETURN

a. PREVIOUS PAGE: tap button enter PLC previous input monitor screen. Red circle light illuminates when connection.

b. OUTPUT, tap button enter PLC output monitor screen.

c. RETURN: tap "RETURN" enter main screen.

PREVIOUS PAGE	(INPUT)	OUTPUT
X30 ACB OIL LEBEL	OX40 MOTOR REV.]
X31 ACB PRESSURE	X41 MAIN MOTOR FWD.	
X32 LMC2 SAFETY RELAY	X42 MOTOR START	
X33 RAM EMERGENCY STOP	X43 MOTOR STOP	
X34 REAR DOOR	X44 SPACE]
X35 SAFETY BLOCK	X45 SPACE	
X36 PRIOR ACT	X46 SPACE	
X37 FLYWHEEL BRAKE	X47 SPACE	
		RETURN

10>OUTPUT

a. NEXT PAGE: tap button enter PLC next output monitor screen. Red circle light illuminates when connection.

b. INPUT, tap button enter PLC output monitor screen.

c. RETURN: tap "RETURN" enter previous screen.

NEXT PAGE	COUTPUT	INPUT
Y00 CLUTCH01	Y10 CUTTING	01
Y01 CLUTCH02	Y11RELEASE	THE UPPER DIE
Y02 SLIDE ADJ.	Y12RELEASE	THE LOWER DIE
Y03 LOADGARD	Y13 RISE DI	E LIFTER
Y04 LUBRICATION	• Y14 CAM01	
Y05 SPACE	• Y15 CAM02	
() Y06 EJECTOT 01	● Y16 CAM03	
Y07 ALARM	Y17 MOTOR R	EVERSE
		RETURN

11>OUTPUT monitor

a. PREVIOUS PAGE: tap button enter PLC next output monitor screen. Red circle light illuminates when connection.

b. INPUT, tap button enter PLC output monitor screen.

c. RETURN: tap "RETURN" enter main screen.



12>C&B MONITOR

a. C&B BRAKE SLIP ANGLE: Shows the number of degrees each time slide stops at TDC. This is considered a safety device to monitor brake lining wear and brake

b. C&B BRAKE SLIP TIME: Measures the time from when the DSV Safety Valve is de-energized, to the actual time slide comes to a complete stop.

c. C&B BRAKE START TIME: Measures the time when the DSV Safety Valve in energized, to the actual time that the slide starts movement.

d. RETURN: tap "RETURN" enter main screen.



13> DIE SEETING

a. DIE DATE NO: Setting the die information when slide stop, die specification appear when select die no.

b. DIE DATA NAME: Setting the die name for each die, Six characters can be constitute by letters and numerals.

c. NEXT PAGE: enter die specification detail setting screen.

d. RETURN: tap "RETURN" enter main screen.



14>PARAMETER

- a. PRESET COUNTER: tap button enter preset counter setting screen.
- b. CAM PARAMETER: tap button enter can parameter setting screen.
- c. LIGHT CURTAIN:tap button enter safety light curtain setting screen.
- d. AIR EJECTOR: tap button enter air ejector setting screen.
- e. CUTTING: tap button enter cutting setting screen.
- f. MISFEED: tap button enter misfeed setting screen.
- g. RETURN: tap "RETURN" enter previous screen.

	(PARAMETER)	
PRESET COUNTER	CAM PARAMETER	LIGHT CURTAIN
AIR EJECTOR	CUTTING	MISFEED
		RETURN

15>PRESET COUNTER

a. SET VALUE: tap button enter setting screen, put the desired value. This date will show spefication of each die.

b. ON/OFF: tap button to choose ON/OFF function. Meanwhile it controls preset counter function.

c. PRESENT VALUE: Shows the current preset counter.

d. RESET: Tap PRESET button Present Value will go to "0".

e. MANUAL RESET: tap button choose manual reset/automatic reset function. When in automatic reset function, SET VALUE & PRESET VALUE in same data, Slide will stop at TDC and preset value go to "O". In manual reset function, SET VALUE & PRESET VALUE in same data, Slide will stop at TDC but present value not go to "O".

f. RETURN: tap "RETURN" enter previous screen.

[PRESET COUNTER]				
SET VALUE	#######	STROKE	OFF	
PRESENT VALUE	12345678	STROKE	RESET	MANUAL RESET
				RETURN

16>CAM

a. CAM angle set value, tap button enter setting screen, put the desired angle value. This value is corresponding to each die.

b. ON/OFF: tap button to choose ON/OFF function. This value is corresponding to

c.	RETURN: tap	"RETURN"	enter previous screen.
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(CAM)							
	,	ON	OFF				
C	AMO1	###	###	OFF			
C	AM02	###	###	OFF			
C	AM03	###	###	OFF			
				RETURN			

17>LIGHT CURTAIN

b. MANUAL RESET: tap button choose manual reset/automatic reset function. When in automatic reset function, system recover automatically when ALARM happened; When in manual reset function, need to manual recover.

LIGHT C	URTAIN	
	SAFETY L	IGHT INVALID
MANUAL RESET	ON	###
	OFF	###
		RETURN

c. RETURN: tap "RETURN" enter previous screen.

18>EJECTOR

a. Ejector angle setting value: tap button enter to setting screen, put the desired value. This value is corresponding to each die.

b. ON/OFF:tap button to choose ON/OFF function. This value is corresponding to each

c. RETURN: tap "RETURN" enter previous screen.



19>MISFEED

a. Misfeed angle setting value: tap button enter setting screen, put the desired valye. This value is corresponding to each die.

b. ON/OFF:tap button to choose ON/OFF function. This value is corresponding to each

c. Misfeed type change: tap button to choose NO/NC, meanwhile it controls misfeed signal normal open/normal close detection function. This value is corresponding to each

d. Misfeed Stop Mode: tap button to choose EMERGENCY STOP/TOP STOP, meanwhile it controls slide stop position when misfeed alarm happened. This value is corresponding to each die.

e. RETURN: tap "RETURN" enter previous screen.

		(MISFE	ED 🛛	
	ANG ON	LE OFF	MISFEED TYPE CHANGE	MISFEED STOP MODE
MISFEED 01 OFF	###	###	N. 0.	EMERGENCY STOP
MISFEED02 OFF	###	###	N. O.	EMERGENCY STOP

20>SYSTEM PARAMETER

a. ENTER PASSWORD: Put the password 5623 to enter system parameter setting

b. LANGUAGE SELECT: tap butoon enter language setting screen. Chinese/English available.

c. RETURN: tap "RETURN" enter previous screen.

	ENTER POSSWORD		
	#####		
	LANGU	JAGE SELECT	RETURN

21>SYSTEM PARAMETER

a. GEAR DATE: tap button enter gear data setting screen.

- b. TOP STOP DATA: tap button enter top stop setting screen.
- c. C&B DATA SET: tap button enter C&B data setting screen.
- d. LANGUAGE SELECT: tap buttoon enter language setting screen.
- e. GREASE LUBRICATION: tap button enter grease lubrication setting screem.
- f. MAINTENANCE COUNTER: tap button enter maintenance counter setting screen.
- g. RETURN: tap "RETURN" enter main screen.



22>PARAMETER

a. SPEED: The display value is consistent with the actual speed after setting MODULUS 1 & MODULUS 2.

b. SPEED MAX: put the max speed as manufacturer specification.

c. SPEED MIN: put the min speed as manufacturer specification.

d. MODULUS 01: bsed operation needs, put the required value, in accordance with MODULUS 02, adjust the SPEED. The bigger the value, the quicker the SPEED.

e. MODULUS 02: bsed operation needs, put the required value, in accordance with MODULUS 01, adjust the SPEED. The bigger the value, the slower the SPEED. f. ANGLE: shows current angle.

g. CORRECT ANGLE: put two times data of actual Angle data that X3 connecting when in forward rotation, so that Angle display is consistent with actual Angle.

h. CORRECT ANGLE 2: put two times data of the actual Angle data that X3 is connecting when in reversed rotation, so that Angle display is consistent with actual Angle. Normally is 660.



i. RETURN: tap "RETURN" enter previous screen.

23>COUNTINUOUS

a. CURRENT SPEED: 5 samll circles in top line shows different speed. Speed is increasing from left to right.

b. ANGLE: put the 5 agnle data according to the following adjacent display values.

c. MODULUS: put 5 mudulus date according to the following adjacent diaply values.

d. SPEED: Shows current speed.

e. ANGLE: Show current angle.

f. NEXT:tap button enter SAFETY STROKE setting screen.



g. RETURN: tap "RETURN" enter previous page.

24>SINGLE-SAFETY STROKE

a. CURRENT SPEED: 5 samll circles in top line shows different speed. Speed is increasing from left to right.

- b. ANGLE: put the 5 agnle data according to the following adjacent display values.
- c. MODULUS: put 5 mudulus date according to the following adjacent diaply values.
- d. SPEED: Shows current speed.
- e. ANGLE: Show current angle.
- f. PREVIOUS:tap button enter COUNTINUOUS setting screen.
- g. RETURN: tap "RETURN" enter previous screen.



25>C&B SETTING

a. MAX.BRAKE SLIP ANGLE: With the SPM Speed at maximum the max allowable slip angle value: 120°, machine will stop and alarm when exceed this angle.

b. MAX.BRAKE SLIP TIME: The max brake slip time 0.5 seconds, machine will stop and alarm when exceed this time.

c. MAX. START TIME: This is the allowable time for the DSV safety solenoid valve and clutch to engage, the maximum allowed time difference is: 0.5 seconds, machine will alarm when exceed this value.

d. RETURN: tap "RETURN" enter previous screen.



26>LANGUAGE

a. Tap the button under the flag to Select language, screen display Chiese or English.

b. RETURN: tap "RETURN" enter previous screen.



27>GREASE LUNRICATION

a. TIME INTERVAL: Grease lubrication interval. 90minutes interval normally.

b. Time interval: display the last lubrication finish to current time.

c. OPERATION TIME: put Lubricating time value, it will stop when finish working. Normally 30 seconds is enough.

d. PUMP INCHING: tap button lubricating in function; release button stop lubricating.

e. GREASE PUMP: Green light illuminates when in function, turn gray when not in function.

GREASE LUBRICATION							
				GREASE	PUMP		
				4: 			
TIME INTERVAL	##	MINUTE	OPERATE TIME	####.#	SEC		
	1	2	· •		_		
]					
PIMP	1						
INCHING				RETU	RN		

f. RETURN: tap "RETURN" enter previous screen.

28>COUNTER

a. PRESET: display preset counter valuye, times/thousand times.

b. SETTING: Put the desired value, slide will stop at TDC when preset counter reach setting counter, require to do maintenance or reset the value.

c. RESET: tap button, put password 66666666 as required, the setting value go to "0".

d. LIFESPAN COUNTER: display total strokes when press start working.

e. HOUR COUNTER: display total hours when press srart working.

g. RETURN: tap "RETURN" enter previous screen.

		COUNTE	ER	
		1234 TIMES		
MAINTE -NANCE COUNTER	PRESENT	1234 THOU -SAND	RESET	
	SETTING	##### THOU —SAND		
LIFESPAN COUNTER		1	234567891	
HOURE COUNTER			123456	
<u>P.</u>	2			RETURN

29>ACB LUBRICATION-Balancer Oil Lubrication

a. TIME INTERVAL: oil lubrication interval. 10minutes interval normally.

b. Time interval: display the last lubrication finish to current time.

c. OPERATION TIME: put Lubricating time value, it will stop when finish working. Normally 30 seconds is enough.

d. PUMP INCHING: tap button lubricating in function; release button stop lubricating.

e. ACB LUB. PUMP: Green light illuminates when in function, light turn gray when not in function.

f. RETURN: tap "RETURN" enter previous screen.

	[ACB LUBRICATION]							
					ACB LUB.	PUMP		
					<u></u>			
	TIME INTERVAL	##	MINUTE	OPERATE TIME	####.#	SEC		
i		12]i	L	J	li		
	DIMD							
	INCHING				RETU	RN		