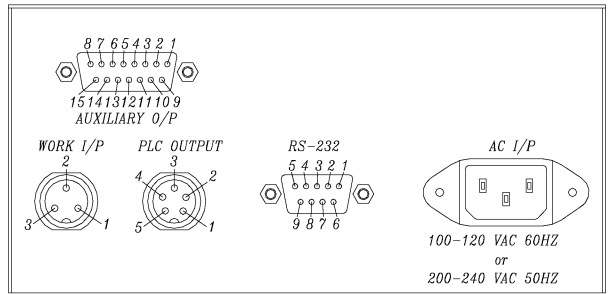
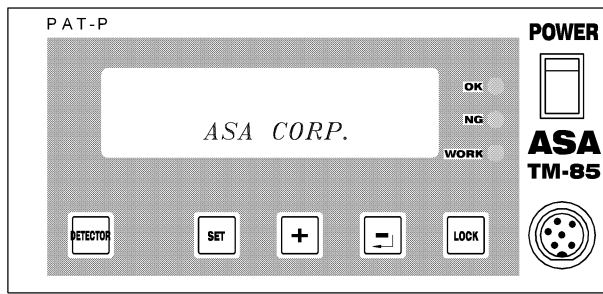


# ASA TM-85 螺絲鎖付數位化管理系統操作說明書

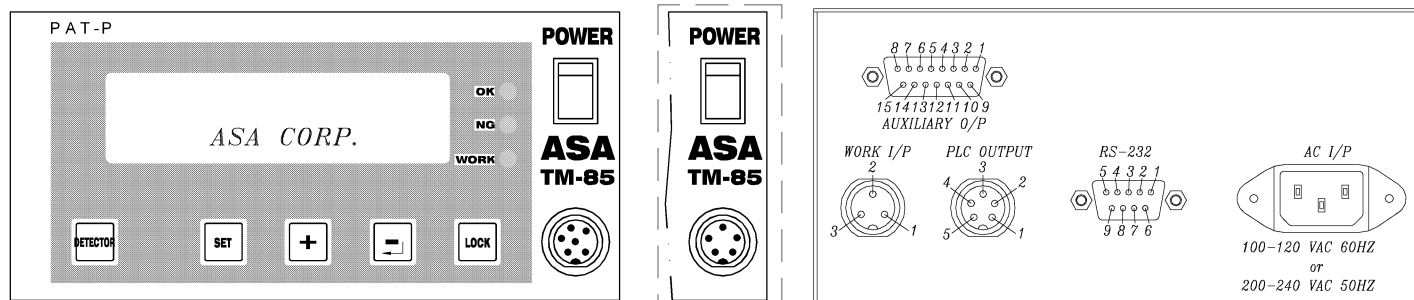


6P 或 5P

適用機種: ASA-8500, 9000 系列

畫面	螢幕顯示	各畫面功能說明及操作方式:	操作方法
1.	+OK: 0 0/I +NG: 0 0/I	鎖付作業中第一畫面,顯示鎖付完成品 OK 與 NG 之累積數量 當操作在退出螺絲時(即反轉)會被紀錄在 NG 數內	1. 以 5P 或 6P 連接線將起子與控制器連接 2. 插上電源(注意工作電壓 110V 或 220V) 3. 打開電源開關
2.	STD: 0.00 s +10% 1 DET: 0.00 s -10%	鎖付作業中第二畫面,顯示鎖付之設定標準時間和誤差值及實際鎖付時該次鎖付時間,右上方"1"表示模組呼出時之組別代號	4. 等待約 3 秒鐘後顯示畫面(1) 5. 按 <b>SET</b> 鍵進入密碼輸入畫面,如畫面(3)
3.	SETTING MODE PASSWORD: ±±±± <b>SET DET</b>	進入模組設定畫面,進行樣品時間取樣,記憶,儲存等 14 項功能設定或呼叫已存入之程式組別	6. 輸入密碼 <b>1 1 1 1</b> <b>SET</b> <b>DETECTOR</b> 後 進入畫面(4),若輸入密碼錯誤,會重回畫面(3)
4.	1-1 MEMO RECALL 1:0.00sec 0 pcs	模組呼出設定(最多 10 組) 按 <b>1</b> 鍵可循環選擇模組,按 <b>1</b> 代表 ENTER 確認鍵,按 <b>SET</b> 鍵表換頁	7. 畫面(4)呼叫既存之儲存檔案,按 <b>1</b> 鍵找尋 所要呼叫模組編號,再按 <b>1</b> 鍵確認,(除非 有新機種或變更製程才需再重新設定)
5.	1-2 MEMO SAVE 1:0.00sec 0 pcs	模組儲存設定(最多 10 組) 按 <b>1</b> 鍵可循環選擇模組,按 <b>1</b> 代表 ENTER 確認鍵,按 <b>SET</b> 鍵表換頁	8. 畫面(5)欲將目前操作中的記數記憶,則 先按 <b>1</b> 鍵找尋所要儲存模組編號,再按 <b>1</b> 鍵確認,或當新增,修改,參數設定完成後, 選擇欲儲存檔案位置編號,再按 <b>1</b> 鍵確 認即完成,並重回畫面(2)
6.	2 CLEAR ALL CNT [+] : YES [-] : NO	該模組鎖付次數(OK,NG,PASS)紀錄歸零鍵 按 <b>1</b> 鍵表清除,按 <b>1</b> 鍵表不清除,按 <b>SET</b> 鍵切換下一頁畫面	9. 畫面(6)每要設定新的模組或參數,則需 先清除目前畫面模組下已被記數的記憶, 才不會將目前的記數儲存到新模組
7.	3-1 SAMPLE TIMES 10	設定新被鎖物鎖付時間之取樣次數,最多取樣 99 顆 按 <b>1</b> 鍵表遞增,按 <b>1</b> 鍵表遞減,按 <b>SET</b> 鍵表確認及切換下一頁畫面	10. 畫面(7)設定取樣螺絲數,再按 <b>SET</b> 鍵確 認進入下一畫面(8)
8.	3-2 SAMPLES 0/10 0.0 0S (OK: + NG: -)	顯示實際取樣之鎖付時間及取樣累積計數 按 <b>1</b> 鍵表確認,按 <b>1</b> 鍵表取消,按 <b>SET</b> 鍵表確認及切換下一頁畫面	11. 畫面(8)對被鎖工件進行實際鎖螺絲動 作,當鎖付扭力到達時,起子停止,此時螢 幕會出現剛剛鎖螺絲所測得時間,並要 你確認此數值是否為有效值,若是有效 的,則按 <b>1</b> 鍵(若是無效的,則按 <b>1</b> 鍵),接著 繼續做取樣鎖螺絲動作,當到達(7)所設 定數量時,則會跳至下一畫面(9)
9.	4-1 RANGE RATE +10%	設定取樣鎖付時間之上限百分比,最高可增加到樣品讀取平均時間 的 99% 按 <b>1</b> 鍵表遞增,按 <b>1</b> 鍵表遞減,按 <b>SET</b> 鍵表確認及切換下一頁畫面	12. 畫面(9)~(15)步驟則按所需求功能依序 做參數設定,功能及操作方式請參考"各 畫面功能說明及操作方式"說明,每設 定完成後按 <b>SET</b> 鍵進入下一畫面
10.	4-2 RANGE RATE -10%	設定取樣鎖付時間之下限百分比,最低可降低到樣品讀取平均時間 的 1% 按 <b>1</b> 鍵表遞增,按 <b>1</b> 鍵表遞減,按 <b>SET</b> 鍵表確認及切換下一頁畫面	13. 若要再做下一組設定,則依上述 5~12 步 驟設定再重新設定即可。
11.	5 PCS/UNIT 1	設定每單一工件所欲鎖付螺絲數量,最多 99 個 按 <b>1</b> 鍵遞增,按 <b>1</b> 鍵遞減,按 <b>SET</b> 鍵表確認及切換下一頁畫面	14. 若不再設定,則按 <b>DETECTOR</b> 離開設 定狀態,回到工作畫面如(1),若再按一 次 <b>DETECTOR</b> 可進入工作畫面(2)
12.	6 OK CNT DIR +	鎖付合格螺絲(或工件)總數量統計方式(遞增/遞減) 按 <b>1</b> 鍵表正數計數統計,按 <b>1</b> 鍵表倒數計數統計,按 <b>SET</b> 鍵表確認及切 換下一頁畫面	15. WORK 功能: 15-1: 與生產線連線: 當要有監控功能時,需藉 WORK I/P 插座上(在背面)插入一連接頭 A(附屬 品)及滾輪開關(外接)將生產線定位檢 知信號傳導至控制器,才有監控功能,此 時面板上 WORK 燈亮,當工件到達鎖 付位置後,若螺絲鎖付未達到設定值時 (即鎖付扭力,深度,數量)就將工件放行, 則本機將發出警告聲,通知作業者注意, 假使是工件不良,無法達到設定值,則可 於放行後按 <b>1</b> 鍵取消警告音,重新進入 待命狀態,而此放行工件數量將會被紀 錄於(16)畫面,以利管理者管理。
13.	7 CYCLE TIME 0.0	可預設每鎖付一次工程所需時間,當預設時間到達,而鎖付尚未完成 時,會發出警報聲通知操作者,從 0~99.9 秒可任意設定 按 <b>1</b> 鍵遞增時間,按 <b>1</b> 鍵遞減時間,按 <b>SET</b> 鍵確認及切換下一頁畫面	15-2: 獨立工作站使用: 當要操作時必須插入一連接頭 B(附屬 品)於 WORK I/P 插座上(在背面),此時 面板上 WORK 燈亮即表有監控功能
14.	8-1 SET +OK LMT 60000 (#6 設定為 "+" 時)	當(12)項設定為 "+" 時,鎖付合格螺絲總數(遞增)設定,當到達所設定 數量,會發出警報聲(長音)通知操作者,最多可設定 60000 顆 按 <b>1</b> 鍵表遞增,按 <b>1</b> 鍵表遞減,按 <b>SET</b> 鍵表確認及切換下一頁畫面	16. 設定完成後,只要操作電動起子即可做 螺絲鎖付動作計數與品質控制
15.	8-1 SET -OK CNT 60000 (#6 設定為 "-" 時)	當(12)項設定為 "-" 時,作為鎖付合格數之負向遞減計數統計,當遞減 到 "0" 時,會發出警報聲(長音)通知操作者,最多 60000 顆 按 <b>1</b> 鍵遞增,按 <b>1</b> 鍵遞減,按 <b>SET</b> 鍵表確認及切換下一頁畫面	
16.	8-2 ADJ STD TMR 0.00sec	取樣鎖付時間平均值之補償修正,最多可達 9.99 秒 按 <b>1</b> 鍵遞增時間,按 <b>1</b> 鍵遞減時間,按 <b>SET</b> 鍵表確認及切換下一頁畫面	
17.	8-3 ADJ PASS CNT 0	單位物件不良造成無法完成鎖付程序,強制放行時之累計數顯示畫 面,最多 60000 單位	
備註: 1. 模組刪除方法: (1) 電源 ON/OFF 開關處於 OFF 狀態 (2) 同時按 <b>1</b> 和 <b>1</b> 鍵,再啟動電源(即按 ON/OFF 鍵)約 3 秒鐘,當液晶顯示板已有顯示出現並聽見嗶一聲後手放開,此時所有 模組記憶即被刪除"DELETE". 2. LOCK 鍵功能: 按下 LOCK 鍵則控制器輸入被鎖定,但輸出不受影響,可防止暫停使用時因外界不當操作起子,而影響紀錄 的真實性。 3. 警聲分類: 單件工件鎖付完成: 嗶一聲 單件工件鎖付滑牙或鎖付異常: 嗶-嗶-嗶急促短聲三聲 單件工件鎖螺絲完成數未達設定數即放行: 嗶一聲長聲[按 <b>1</b> 後方可解除] 鎖螺絲完成數到達預設鎖螺絲數: 嗶-嗶-嗶三聲 預設 CYCLE TIME 時間已到達而尚未完成該次鎖付動作: 嗶---嗶間斷長聲[按 <b>1</b> 後方可解除] 4. 訊號輸出方式: RS232 - 可輸出鎖付螺絲 OK 與 NG 統計值(PIN 2 for Tx 輸出, PIN 3 for Rx 輸入, PIN 7 for COM) PLC OUTPUT- 可輸出每次鎖付螺絲 OK(PIN 2, PIN 5)與 NG(PIN 4, PIN 5)與總數 OK(PIN 1, PIN 5)無電壓 接點信號 5. 不正常顯示處理: 當產生亂碼或不規則顯示時將本機電源開關後重新開機即可恢復正常 6. WORK I/P 接線方式: 當 WORK 功能為與生產線連線時,其 I/P 連接頭 A(3P)接點為 PIN 1, PIN 3 與外接滾輪開關接點連接			

# Operation Manual Of ASA Digitalized Management System for screw tightening



6P OR 5P  
Available models: ASA-8500,9000 Series

Screen	Screen Indication	Discription and Function of Each Display Screen	Operation Method
1.	+ OK : 0 0/1 + NG : 0 0/1	In the screw tightening operation, the first display screen indicates the accumulation numbers of OK and NG of screw tightening for the finished product	1. Connect 5P or 6P cable between the screwdriver and the controller.
2.	STD : 0.00 s +10% 1 DET : 0.00 s -10%	In the screw tightening operation, the second display indicates the set standard screw tightened time, tolerance and actual screw tightening time. "1" on the upper right stands for the mold code which was called out for operation.	2. Plug up the power supply (pay attention to the working voltage, 110V or 220V.)
3.	SETTING MODE PASSWORD : + + + + SET DET	After entering the mold setting screen, it permits to perform 14 tasks, such as sampling time, memory and save or to call out a specified program.	3. Turn on the power switch.
4.	1-1 MEMO RECALL 1:0.00sec O pcs	Mold calling out setting (the maximum is 10 settings) Press <input type="button" value="SET"/> to continue the selection, press <input type="button" value="ENTER"/> standing for ENTER and confirmation, press <input type="button" value="SET"/> to shift to the next display screen.	4. The display screen (1) will appear after 3 seconds
5.	1-2 MEMO SAVE 1:0.00sec O pcs	Mold saving setting (the maximum is 10 settings) Press <input type="button" value="SET"/> to continue the selection, press <input type="button" value="ENTER"/> standing for ENTER and confirmation, press <input type="button" value="SET"/> to shift to the next display screen.	5. Press <input type="button" value="SET"/> to enter password setting screen (3)
6.	2 CLEAR ALL CNT (+) : YES (-) : NO	Mold clear setting (OK、NG、PASS counted datum will be cleared) Press <input type="button" value="SET"/> to clear the counting, press <input type="button" value="NO"/> not to clear, press <input type="button" value="SET"/> to shift to the next display screen.	6. Key in the password <input type="button" value="1"/> <input type="button" value="1"/> <input type="button" value="1"/> <input type="button" value="1"/> <input type="button" value="SET"/> <input type="button" value="DETECTOR"/> to enter another display screen (4). If password keyed in is wrong, it automatically returns to the display screen (3).
7.	3-1 SAMPLE TIMES 10	Setting screw tightening time for number of sampling in the new work piece (the maximum sampling number is 99 pieces.) Press <input type="button" value="SET"/> to increment, press <input type="button" value="NO"/> to decrement, press <input type="button" value="SET"/> to shift to the next display screen.	7. In the display screen (4), call out the files from the storage, press <input type="button" value="SET"/> to search the stored mold code, press <input type="button" value="SET"/> to confirm the selection. (It requires no resetting unless for the new model or process changed.)
8.	3-2 SAMPLES 0/10 0.0 0S (OK:+ NG:-)	Display the actual screw tightening time for sampling and total of sampling Press <input type="button" value="SET"/> to confirm the setting, press <input type="button" value="NO"/> to delete, press <input type="button" value="SET"/> to shift to the next display screen.	8. Now in display screen (5). If you want it to memorize the count, press <input type="button" value="SET"/> to select the mold code first, then press <input type="button" value="SET"/> to confirm and save them. When there are new additions, modifications, new parameters setting, select the file number and press <input type="button" value="SET"/> to confirm and return to display screen (2).
9.	4-1 RANGE RATE +10%	Setting up the upper limit of ratio for sampling screw tightened average time, the maximum permits increment ratio is up to 99%. Press <input type="button" value="SET"/> to increment, press <input type="button" value="NO"/> to decrement, press <input type="button" value="SET"/> to confirm and shift to the next display screen.	9. The display screen (6) is for clearing old count (OK、NG、PASS) datum before new mold or new parameters were set. The old settings and parameters have to be entirely cleared up to avert the mixing new parameters with old count datum.
10.	4-2 RANGE RATE -10%	Setting up the lower limit of ratio for sampling screw tightened average time, the maximum decrement ratio time is down to 1%. Press <input type="button" value="SET"/> to increment, press <input type="button" value="NO"/> to decrement, press <input type="button" value="SET"/> to confirm and shift to the next display screen.	10. The display screen (7) is to set the sample screw number. Press <input type="button" value="SET"/> to enter the display screen (8).
11.	5 PCS/UNIT 1	Setting the tightening screw for one single work piece. The maximum is 99 screws. Press <input type="button" value="SET"/> to increment, press <input type="button" value="NO"/> to decrement, press <input type="button" value="SET"/> to confirm and shift to the next display screen.	11. The display screen (8) shows the process of tightening screw operation. While the tightened torque reaches the set torque, the screwdriver stops turning, the screen display the measured time obtained for tightening the screw and ask you to confirm whether the time value is effective or not. If it is effective, you press <input type="button" value="SET"/> to acknowledge; if not, press <input type="button" value="NO"/> to continue operation. When the screws as specified in screen (7) are completed, it skips to the next display screen (9).
12.	6 OK CNT DIR +	Selecting the statistics of total qualified tightened screws (work pieces) (increment/decrement) Press <input type="button" value="SET"/> to illustrate the positive statistics, press <input type="button" value="NO"/> to illustrate the inverted statistics, press <input type="button" value="SET"/> to confirm and shift to the next display screen.	12. The procedures illustrated in the display screens (9) through (15) are for parameters setting, please refer to the "Description and Function of Each Display Screen." After every setting, press <input type="button" value="SET"/> to shift to the next display screen.
13.	7 CYCLE TIME 0.0	It permits to preset the total time required for finishing one block operation. When the preset time is up, but the work is not finished yet, it activates an alarm to notify the operator to reset the time, the preset time ranges from 0(no limit) to 99.9 seconds. Press <input type="button" value="SET"/> to increment time, press <input type="button" value="NO"/> to decrement time, press <input type="button" value="SET"/> to confirm and shift to the next display screen.	13. If it requires resetting, please repeat the procedures stated in Sections 5 - 12.
14.	8-1 SET +OK LMT 60000 (when #6 was set "+")	In Item 12 above, when <input type="button" value="SET"/> is pressed, the total qualified tightened screws statistics is set in the incremental mode. When the total reaches the set quantity, it activates an alarm (long sound) to notify the operator. The maximum is 60000 screws. Press <input type="button" value="SET"/> to increment, press <input type="button" value="NO"/> to decrement, press <input type="button" value="SET"/> to confirm and shift to the next display screen.	14. If it requires no setting at all, press <input type="button" value="DETECTOR"/> to leave the setting mode and return to screen (1), press <input type="button" value="DETECTOR"/> once more to enter the work screen (2).
	8-1 SET -OK CNT 60000 (when #6 was set "-")	In Item 12 above, when <input type="button" value="SET"/> is pressed, the total qualified tightened screws statistics is set in the decremented mode. When it comes to zero, it activates an alarm (long sound) to notify the operator. The maximum is 60000 screws. Press <input type="button" value="SET"/> to increment, press <input type="button" value="NO"/> to decrement, press <input type="button" value="SET"/> to confirm and shift to the next display screen.	15. Work function
15.	8-2 ADJ STD TMR 0.00sec	Compensate the sample screw tightened average time, the maximum is 9.99 sec. Press <input type="button" value="SET"/> to increment time, press <input type="button" value="NO"/> to decrement time, press <input type="button" value="SET"/> to confirm and shift to the next display screen.	15-1: Linking with the production line For monitoring purpose, plug the 3P connector A (open type, accessory) into the socket WORK I/P on the back and link the roller switch for transmitting the sensed position signal to the controller and the WORK indication lamp will light on the control panel. When the work piece arrives at the lock position, if the screw tightening operation fails to fulfill the set parameters (such as tightened torque, depth and quantity), the machine will activate an alarm to notify the operator.
16.	8-3 ADJ PASS CNT 0	In case that the work piece is of poor quality, there is no way to complete the screw tightening operation, but it allows a forced release. The maximum forced release is 60000 units	In the event that the work piece has not now to achieve the set parameter, the operator is in the position to press <input type="button" value="SET"/> to make a force release and the eliminate the alarm, rendering the machine in readiness. The forced release quantity will be display on the screen (16) for easy management.
Remarks:			15-2: Used as an Independent Work Station It is necessary to plug the 3P connector B (close type, accessory) into the socket WOTRK I/P on the back, and the WORK indication lamp will light; it implies the monitoring function is on.
1.	Method to delete the mold code (1) Turn the power switch to OFF position (2) Press and hold <input type="button" value="SET"/> <input type="button" value="NO"/> simultaneously, turn on the power switch for 3 seconds, when the LCD displays and a "buzz" sound is heard, release hands, all mold codes are hereby deleted.		16. Upon completion of setting, simply operate the electric screwdriver to perform the screw tightening operation; the machine will carry out the counting and quality assurance.
2.	Lock Button: Press LOCK button to lock up the input from the control, but not influence the output. This way would prevent losing the authenticity of parameters interfered by improper operation of screwdriver.		
3.	Classification of alarm sound: Completing screw tightening operation on one single work piece, one long buzzes. Skid thread or abnormal tightening on one single work piece, three short buzzes. Failure to tighten but force release is required. One long buzz continues until the <input type="button" value="SET"/> is pressed. The screw tightening mission is completed, three short buzzes. The cycle time is up, the screw tightening is not completed yet, an intermittent buzzes continues until the <input type="button" value="SET"/> is pressed.		
4.	Signal output: RS 232 outputs the totals of OK screws and NG screws(pin no.2 for Tx,no.3 for Rx,no.7 for com). PLC output transmits the tightened OK screws signal(pin no.2,5),tightened OK total screw signal(pin no.1,5)and tightened NG screws signal(pin no.4,5) no contact voltage signal.		
5.	It will be counted into "NG" tank when operated on reverse function.		
6.	Disposition of abnormal display: When it displays gabbles and irregularities, turn off the power and turn it on again, it will resume normal operation.		
7.	WORK I/P Connection: When lining with the production line, the 3P connector A connects with pin 1 and pin 3 linking to the roller switch.		