



# OPERATION MANUAL PN/HAC/HAD Series

## 空壓增壓壓床操作說明

### PN/HAC/HAD 系列

#### 動作說明/Instruction:

**P N** ● 確定電器控制迴路與氣壓源已接通，處於待機狀態。

● 按鈕式操作方式：

- (1) 無限時控制：同時按下操作按鈕後主軸下降，放開按鈕後，主軸上昇。
- (2) 限時控制：將電氣控制Timer開關切於"ON"位置後，同時按下操作按鈕，則主軸下降，待計時終了，主軸上昇。

**HAC** ● 增壓式壓床操作方式：接上電源，按下啓動開關(START)，使呈待機狀態，同時按下操作按鈕，首段快速行程定位，經時間控制，增壓作動，適當時間設定後增壓完成，主軸上升。遇緊急狀況時，按下緊急停止(EST)按鈕電氣控制斷路，主軸強迫回原點，再次操作時應先解除緊急停止按鈕，再按START使呈待機狀態。

**P N** ● To ensure the electronic controlling cycle and air resource is connected and standing by.

● Operated by a push-button switch controller:

- (1) Non-timing control: Push and hold the button, the Z-axis punches; Release the button, the Z-axis returns.
- (2) Timing control: Turn the timer of electronic controller on, push the button, the Z-axis punches; when the timer count over; the Z-axis returns.

**HAC** ● Operation sequence: Conn power, push start button, the machine is standing by. Then push the operation button, the first stage of quick stroke is in dead position. The punching time and returning time controlled by the timing controller. If there comes emergency, push the EST button and the power would be broken off, the Z-axis could be back to primary position. Release the EST button before retrying, then push the start button for standing by.

#### 操作與維護重點/Operation and maintenance:

- 主軸之下降速度可由速度控制閥調整。如需快速上升，可指定使用快速排氣閥。
- 增壓式壓床之調速有一定之限制（20~25次/分），出廠前已調至適當速度。如需快速型請先洽本公司。
- 三點組合之潤滑油請使用ISOVG-32或相當之規格並適度調整注油器之油量。
- 接上空壓源時，請將使用之配管清潔，除去其中之水分、砂塵等。
- 出力之調整，可由減壓閥（三點組合中）調節之。壓力值如所附之壓力錶所示。

- The punching speed can be controlled by the speed control valve. If you need fast punch, please apply the quick exhaust valves.
- Speed limitation (20~25 times/min), the speed is factory set before delivery. Quick stroke is upon customers' request.
- Lubricant for F.R.L. to use ISO VG32 or equivalent.
- Clean the air tubes before connecting to air resource.
- Pressure output can be adjusted by the control valve of F.R.L. The pressure will show on the pressure gauge.

#### 注意事項/Attention:

- 採用簡易之安全操作迴路設計，符合壓床之安全規格要求。如需進一步之安全設施請洽本公司。
- 型錄所載之出力為理論值，實際出力約為理論出力之80%，並需考慮廠內壓力源之壓力值大小。
- 使用時所需之空間高度，應考慮模具與工件之高度。
- 空油增壓壓床所使用之增壓缸，其油桶之注油量約為80%滿，採用油壓缸專用之作動油(ISO VG32)。使用500,000次後或半年後請更換油壓作動油，若油壓作動油有乳化現象時應予以更換。
- 應注意三點組合之排水功能是否正常，若失效，則用手動方式定時排水或更換新品。
- 下班停機時，應將壓床之壓力釋放。

- Easy and safe to operate. Match the requirement on safety.
- The output of the air/hydraulic press in the catalogue are theoretical volume, the actual output is 80%. The volume of compressed air can also affect the actual output.
- Height and width can be custom designed. Special specification is also available upon request.
- The oil used by the cylinder is also available. Please replace the oil after running 500,000 cycle or half a year.
- Ensure the auto drain of F.R.L. is functioning inefficient, exhaust the water periodic manually or replace it.
- Release the pressure of cylinder when it is switch off.