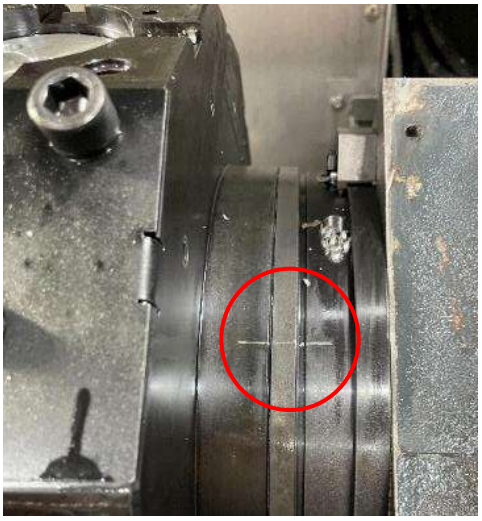
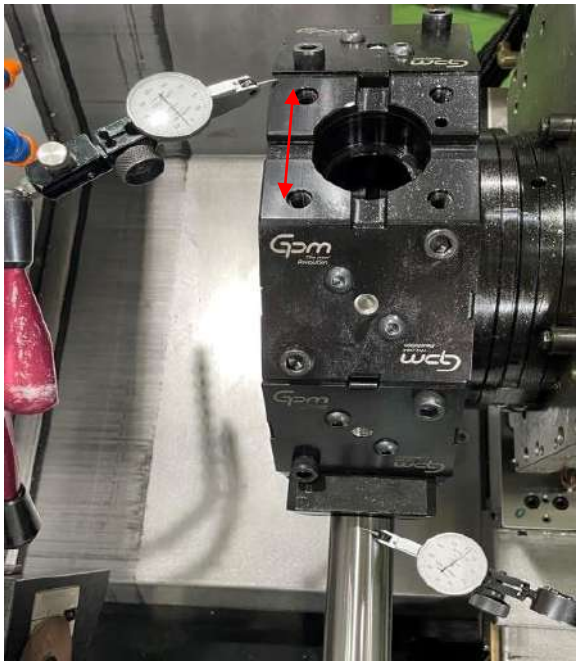
齒輪頭精度調整 Gearhead adjustment

調整時請先移除刀盤上之刀座以策安全，刀塔油壓 50kg 並有 S8 夾緊訊號，確認刀盤在原點記號位置及精度是否在 0.01mm 內。

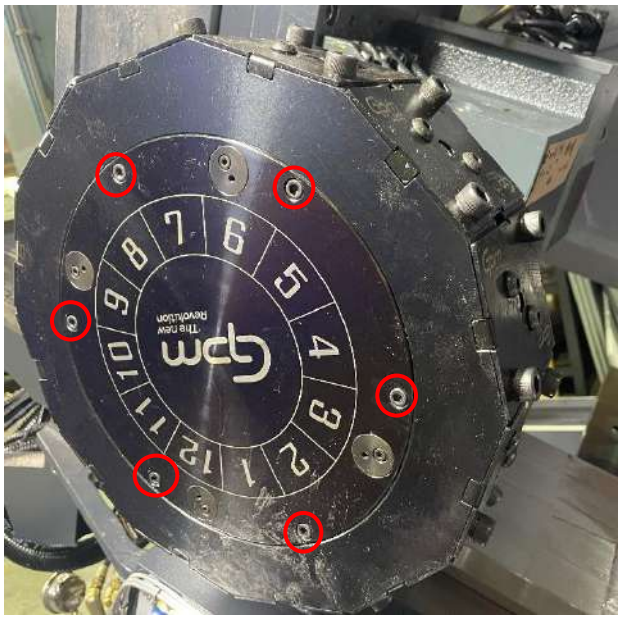
Remove all tool holders when doing gearhead adjustment. Confirm the hydraulic pressure is 50KG, and S8 clamping signal works well. Confirm the tool disc is at its origin position aligned with the mark line , and confirm the accuracy is within 0.01mm.





步驟 1. 將刀盤前蓋 6 顆螺絲拆卸

Step1. Remove 6 screws located on the front cover of the tool disc.



步驟 2. 拆卸刀塔本體左側之塞頭螺絲 (請注意板金是否蓋住，若蓋住請拆卸板金)

Step2: Remove the plug screw located on the side of the turret housing. (if the plug screw is covered by sheet plate, please remove the sheet plate first.)

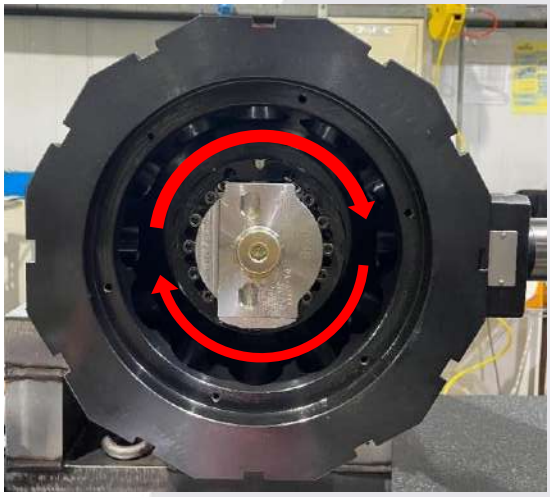
步驟 3. 使用扭力板手, 從左側孔放鬆齒輪頭迫緊塊固定螺絲。該螺絲依型號分 M10 扭力為 77Nm; M6 扭力為 16Nm，裝回時也務必上妥扭力。

Step 3. Use a torque wrench to remove the fixing screw of gearhead clamping block from the left hole. 77Nm for M10 screw; and 16Nm for M6 screw.

Please also use the same torque when fastening.

步驟 4. 此時齒輪頭因後方固定螺絲已鬆脫，即可 360 度轉動。

Step 4. The gearhead now can be rotated 360 degrees because the fixing screws at rear side of the gearhead have been loosened.



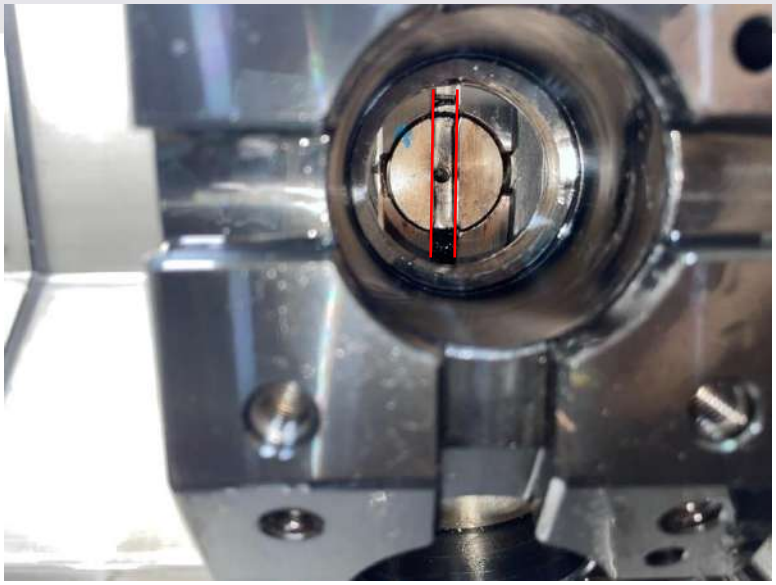
步驟 5. 調整齒輪頭精度在 0.02mm 內，並鎖緊齒輪頭固定螺絲。

Step 5. Adjust the gearhead accuracy within 0.02mm, and tighten the gear head fixing screws.

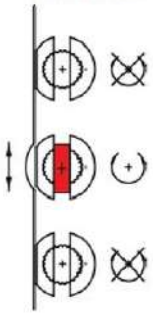
螺絲 screw	M6	M10
扭力 torque	16Nm	77Nm

步驟 6. 齒輪頭調整完確認耦合齒原點位置後，再做換刀及安裝動力刀座。

Step 6. After adjusting the gearhead and confirming the origin position of the coupling, then followed by indexing and installation of driven tool holders.

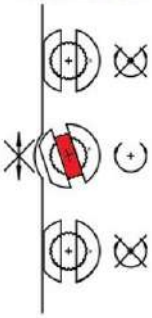


圖示(一):
齒輪頭耦合齒在原點狀態下才可作換刀及旋轉之動作



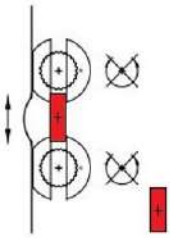
Tool drive in zero - position.
Rotating or indexing is possible.

圖示(二):
齒輪頭耦合齒沒在原點狀態下不可作換刀及旋轉之動作

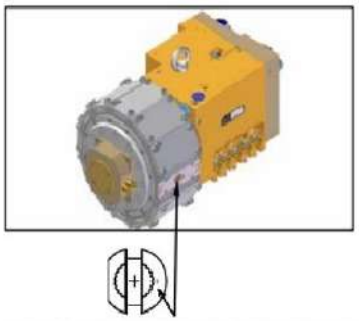


Tool drive not in zero-position.
Rotating or indexing is not possible.

圖示(三):
齒輪頭耦合齒在原點狀態下，但齒輪頭位移不可作換刀及旋轉之動作



Fault case.
Turret in inter position.



Only do indexing and rotating when gear head coupling is at zero position.