

10Nm AngleHead Prototype

德發實業股份有限公司
Mar. 5th

機密

CONFIDENTIAL

4

Tooth Type		Zerol
Number of Pinion Teeth	n	15
Number of Gear Teeth	N	17
Diametrial Pitch	Pd	24.00
Face Width (in.) (Effective)	F	0.157
Pressure Angle (20, 22.5 or 25 degree)	ϕ	25
Spiral Angle (degree)	ψ	0.0
Shaft Angle (degree)	Σ	90

Bevel gear ratio is $17/15$, $D_p=24$.

The other information please refer to drawings, could you please provide the datasheet as shown right? We can update the drawings according to the data sheet of the gear, and hope to know geometry factor I and J.

錐齒輪比為17/15， $D_p=24$ 。其他資訊請參考圖紙，您能否提供如右圖所示的資料表？我們可以根據齒輪的數據表更新圖紙，並希望知道幾何係數I和J。

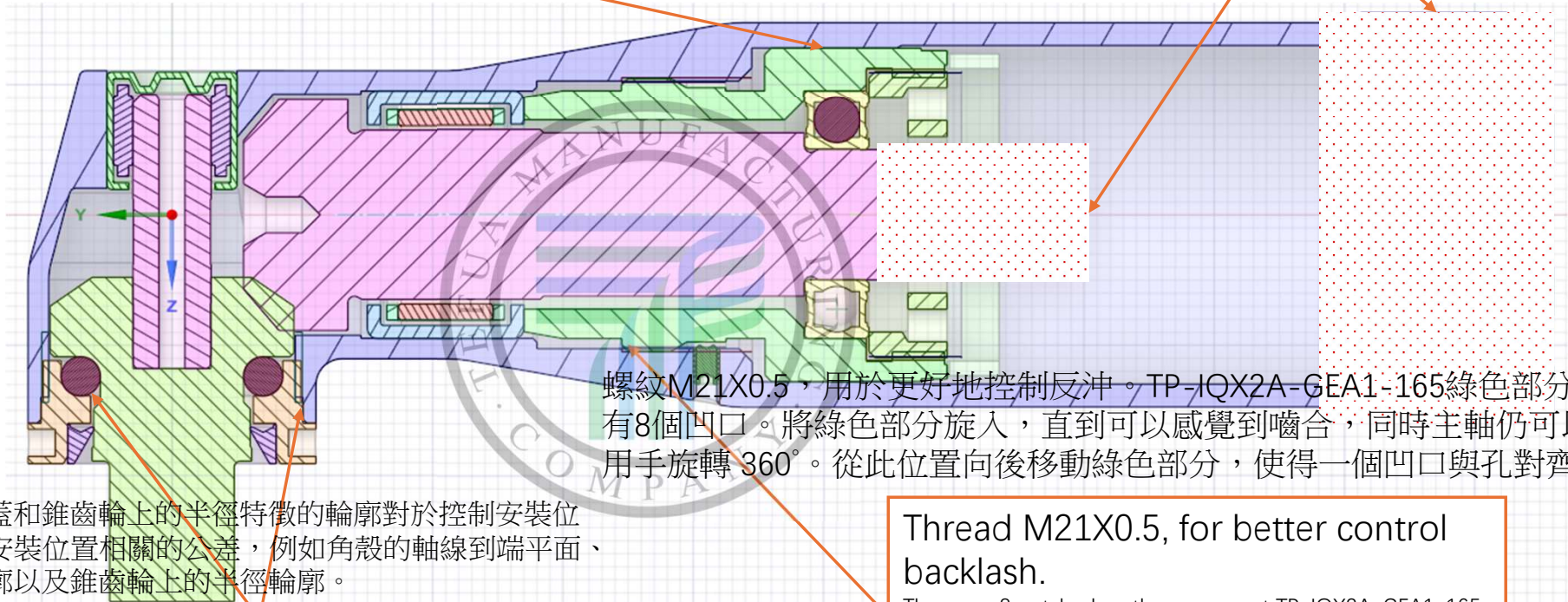
[illegible]

Guide, the tighter tolerance for better true position for position

導向，更嚴格的公差，以獲得更好的真實位置

Pinion interface with gear pack and housing interface are not closed, we are still working on these.

小齒輪與齒輪組的介面以及外殼的介面尚未關閉，我們仍在致力於解決這些問題。



以蓋外徑為指導，蓋和錐齒輪上的半徑特徵的輪廓對於控制安裝位置很重要。控制與安裝位置相關的公差，例如角殼的軸線到端平面、蓋端平面到半徑輪廓以及錐齒輪上的半徑輪廓。

Cap OD as a guide, the profiles of radius features on cap and bevel gear are important to control mounting position.

Control the tolerances related to mounting position such as the axis of angle housing to end plane, cap end plane to radius profiles, and radius profiles on bevel gear.

螺紋M21X0.5，用於更好地控制反沖。TP-IQX2A-GEA1-165綠色部分上有8個凹口。將綠色部分旋入，直到可以感覺到嚙合，同時主軸仍可以用手旋轉360°。從此位置向後移動綠色部分，使得一個凹口與孔對齊。

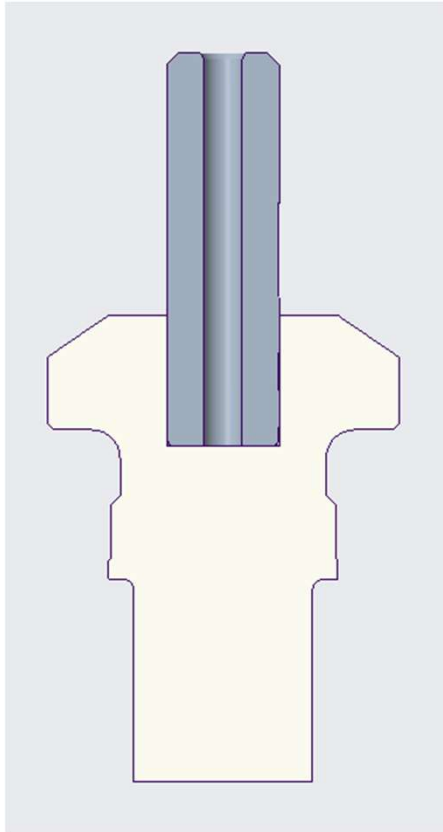
Thread M21X0.5, for better control backlash.

There are 8 notched on the green part TP-IQX2A-GEA1-165. Threading in the green part until cogging can be felt while the spindle can still be rotated 360° by hand. From this position, back off the green part so that one notch aligns with the hole.

機密

CONFIDENTIAL

Bevel gear assembly



使用乾冰將銷釘冷卻至華氏 -200 度，擦去水分，在銷釘上塗抹樂泰 638，然後將銷釘放入錐齒輪上的孔中。

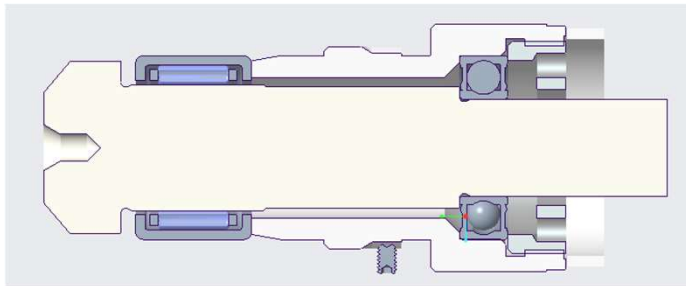
Chill pin to -200 degree F using dry ice, wipe off moisture and apply Loctite 638 on pin and put the pin in the hole on bevel gear.

機密

CONFIDENTIAL

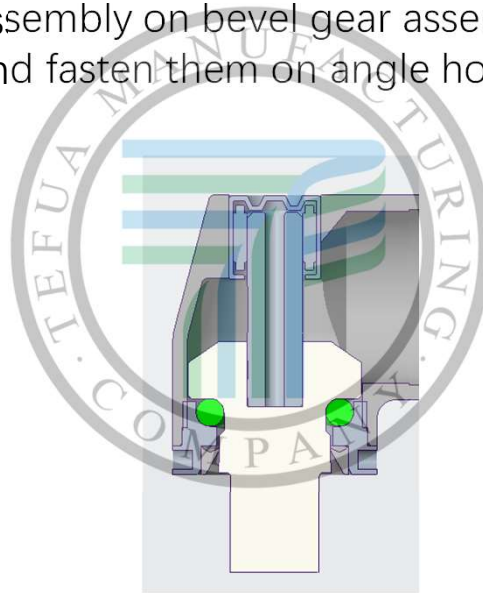
Assemble Process

Step 1: Press ball bearing in the white part, assemble needle bearing on pinion, and then assemble white part with ball bearing on pinion and fasten the cap.



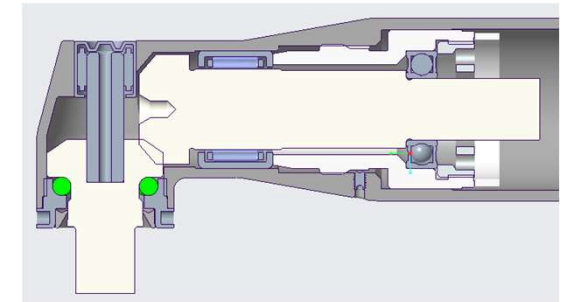
步驟1：將滾珠軸承壓入白色部分，將滾針軸承組裝在小齒輪上，然後將白色部分與小齒輪上的滾珠軸承一起組裝，並擰緊蓋子。

Step 2: Press seal in the cap, put balls on bevel gear assembly with grease, assemble the cap assembly on bevel gear assembly and fasten them on angle housing.



步驟2：將密封件壓入蓋中，將帶有油脂的球放在錐齒輪組件上，將蓋組件組裝在錐齒輪組件上，並將其緊固在角殼上。

Step 3: Threading in pinion assembly, adjust backlash, and fasten the set screw.



步驟3：將小齒輪組件旋入螺紋，調整齒隙，並鎖緊固定螺絲。

機密
CONFIDENTIAL