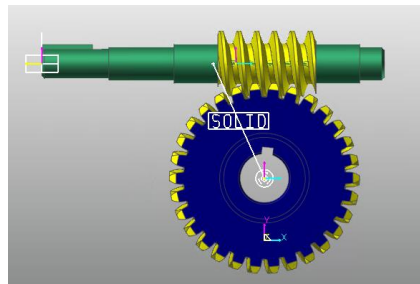


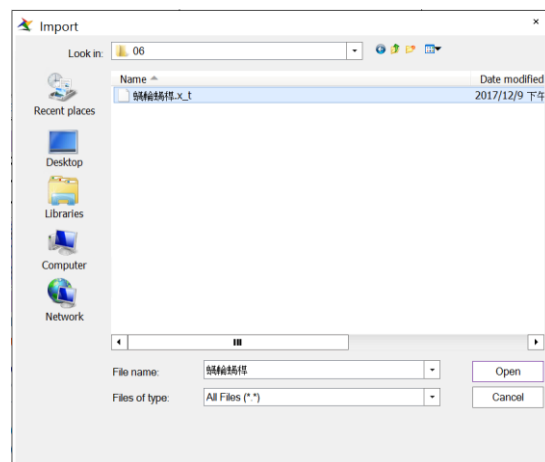
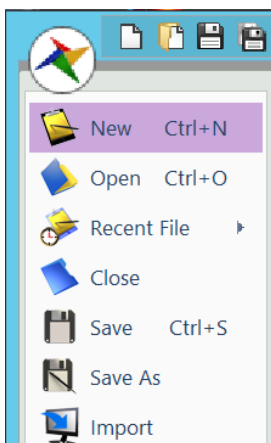
第X章 蝸桿蝸輪動力學分析

X.1 蝸桿蝸輪

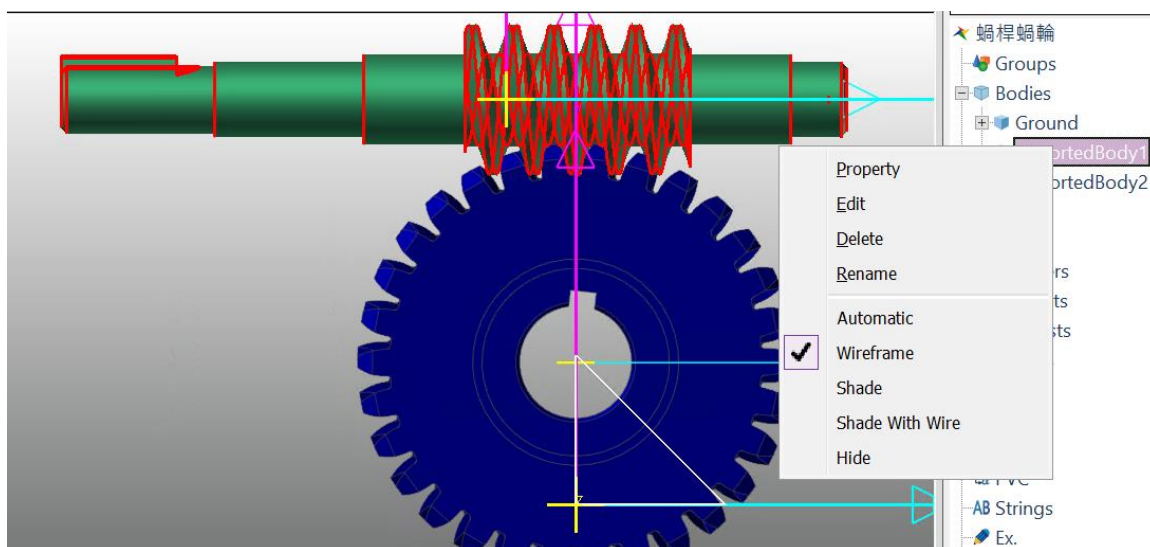
在本範例中，吾人模擬一組蝸桿蝸輪旋轉動力學問題。



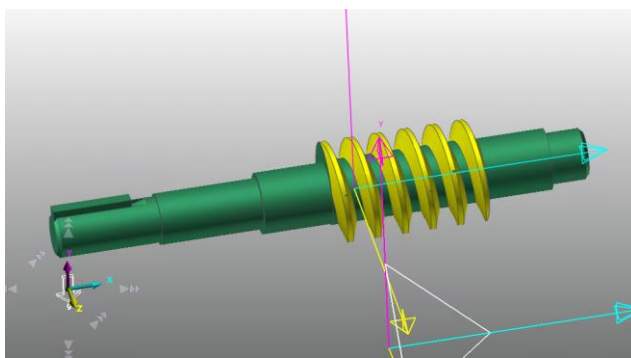
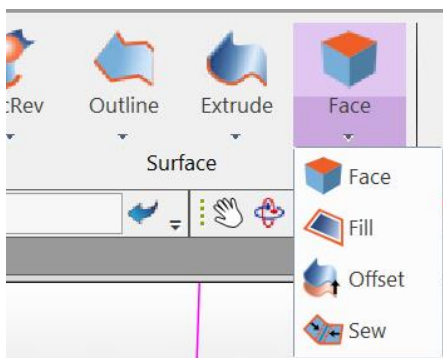
1. 開啟 RecurDyn 軟體
2. 輸入想要的檔名(蝸桿蝸輪)並且選擇單位(MMKS)和重力單位(-Y)
3. 點選 Import —> 蝸桿蝸輪.x_t



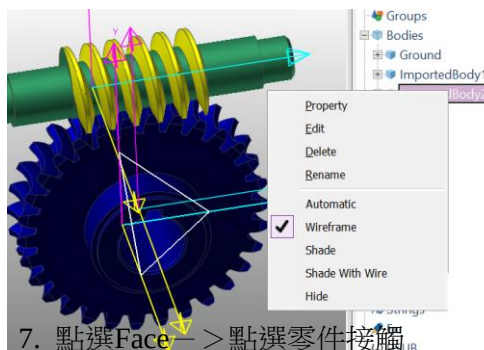
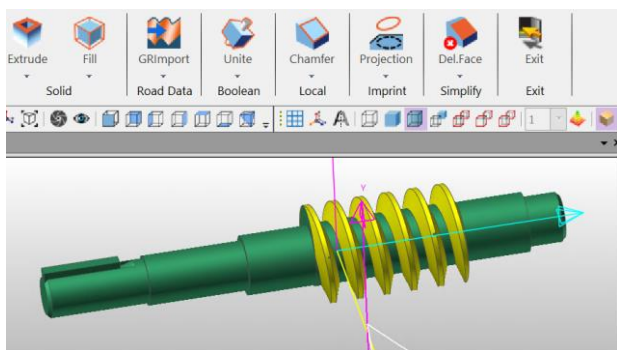
4. 在右側表單處點選Edit進入蝸桿零件編輯



5. 點選Face—>點選零件接觸處

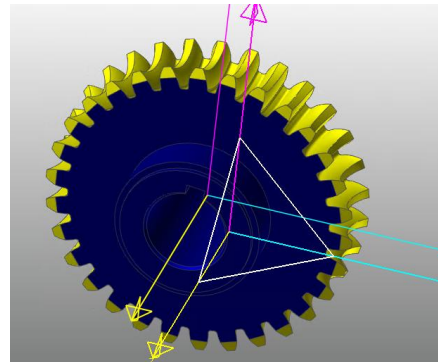
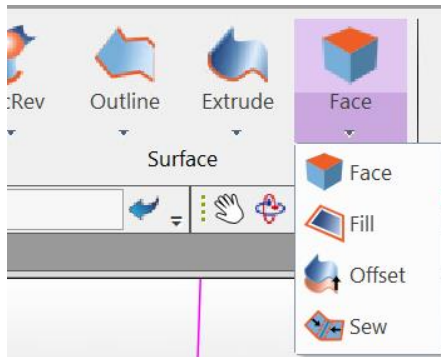


6. 再次點選右上角的Edit離開零件編輯，同理進入蝸桿編輯。

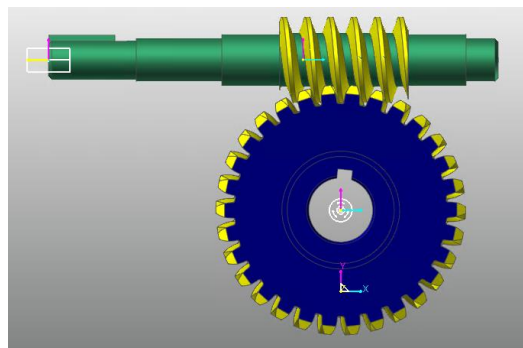


7. 點選Face—>點選零件接觸處

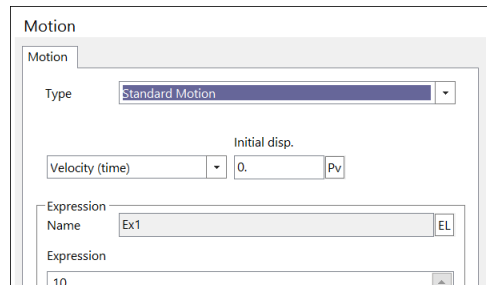
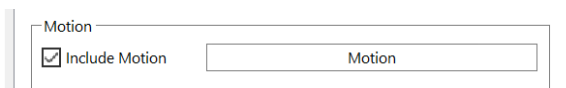
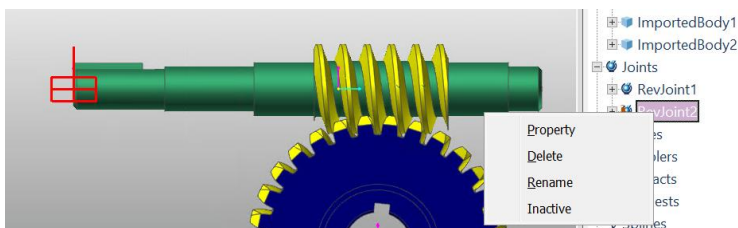
處，再次點選右上角的Edit離開零件編輯。



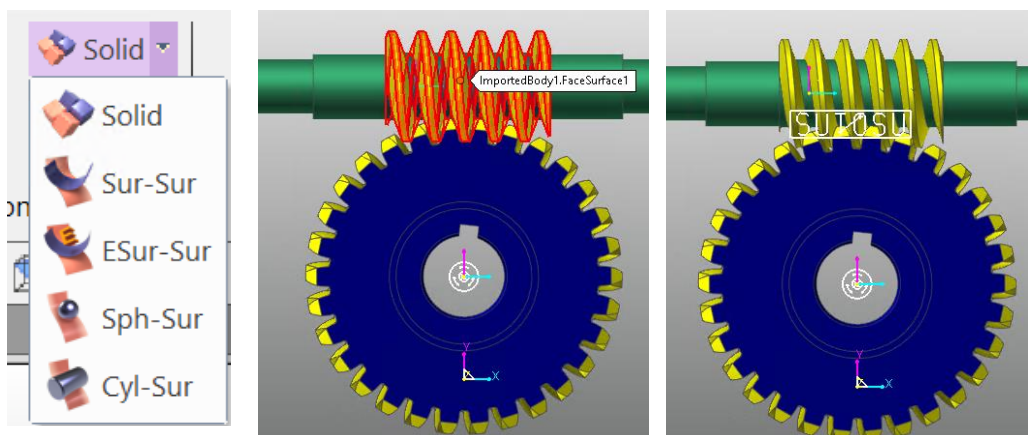
8. 點選 Joint → Revolute，設置兩格旋轉接頭分別在蝸桿蝸輪。



9. 點選 接頭2進入屬性 → 勾選Motion → 設定速度。



10. 按Surface to Surface再點選蝸桿蝸輪。



11. 選取動力學分析進行分析。



Dynamic/Kinematic Analysis

General
Parameter
Initial Condition

End Time
5
Pv

Step
100.
Pv

Plot Multiplier Step Factor
1.
Pv

☐ Output File Name

Include

☐ Static Analysis

☐ Eigenvalue Analysis

☐ State Matrix

☐ Frequency Response Analysis

☐ Hide RecurDyn during Simulation

☐ Display Animation

Gravity

X
0.
Y
-9806.65
Z
0.
Gravity

Unit
Newton - Kilogram - Millimeter - Second

Simulate
OK
Cancel