



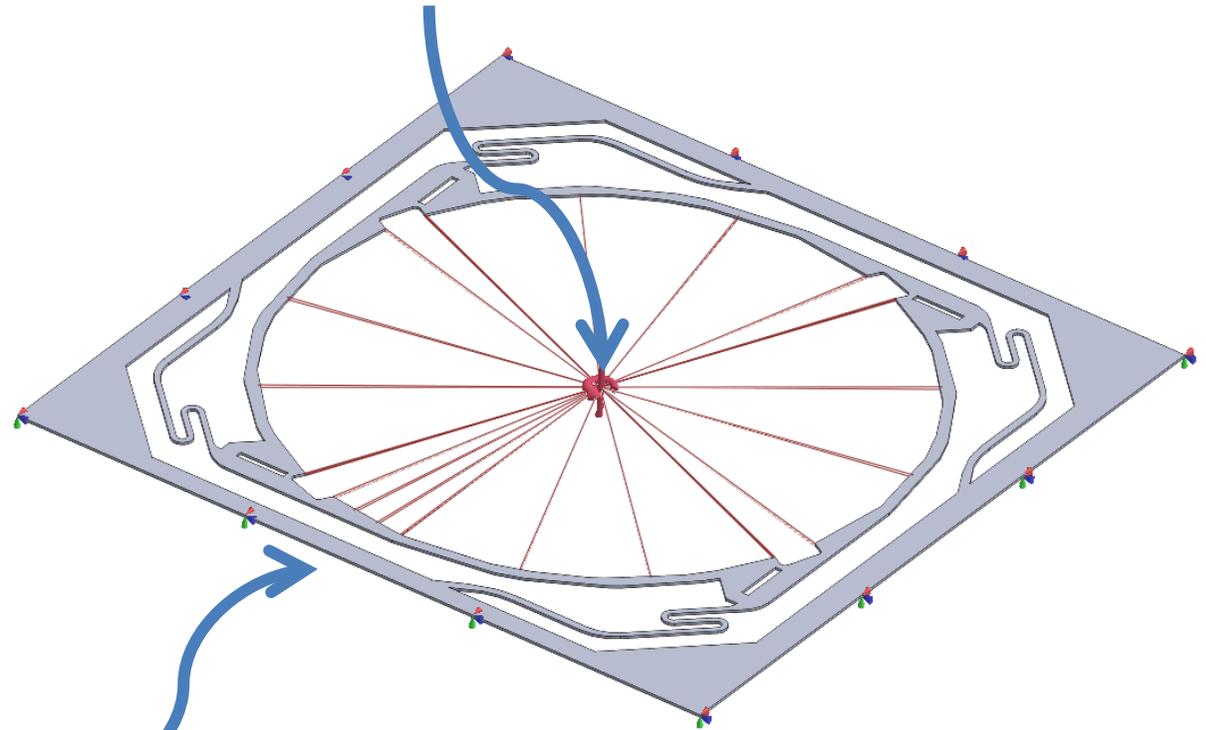
VCM彈片_線性結構強度分析

Simple, but Everything.





Bending Moment=0.5N-mm

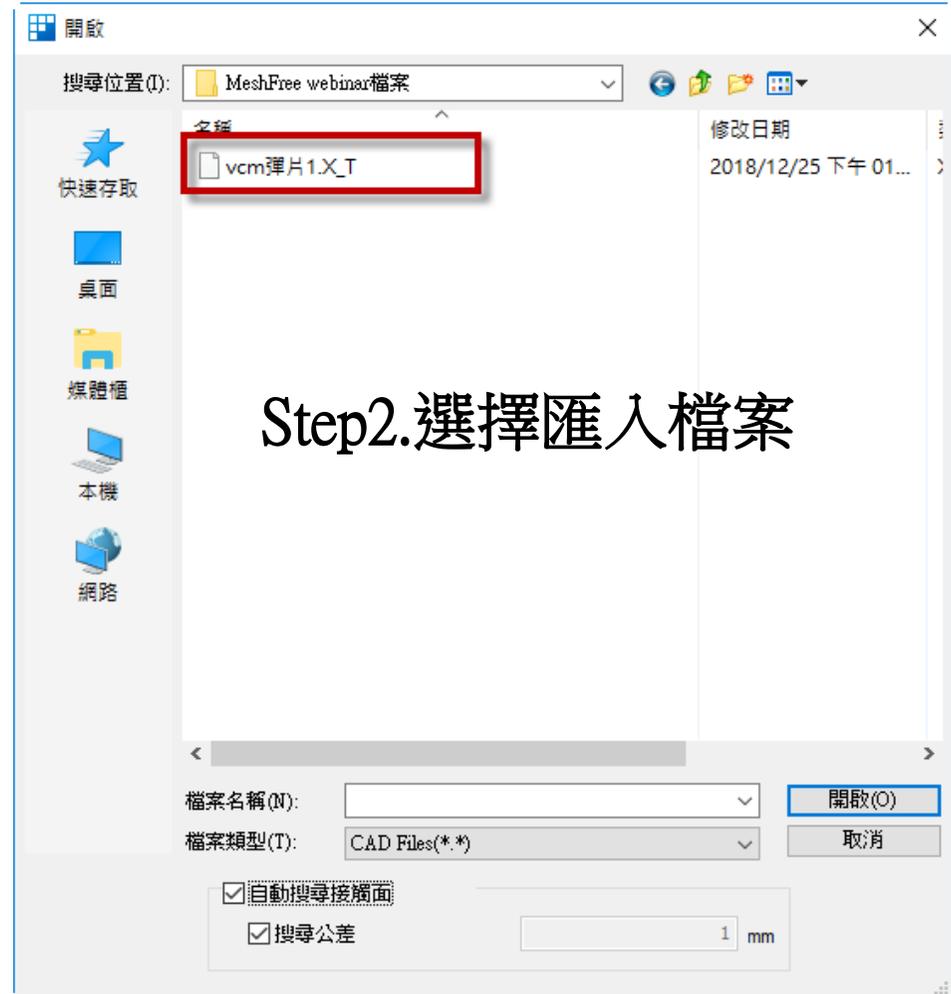


彈片周圍
固定X,Y,Z

材料: AISI 1008



Step1.匯入3D 模型



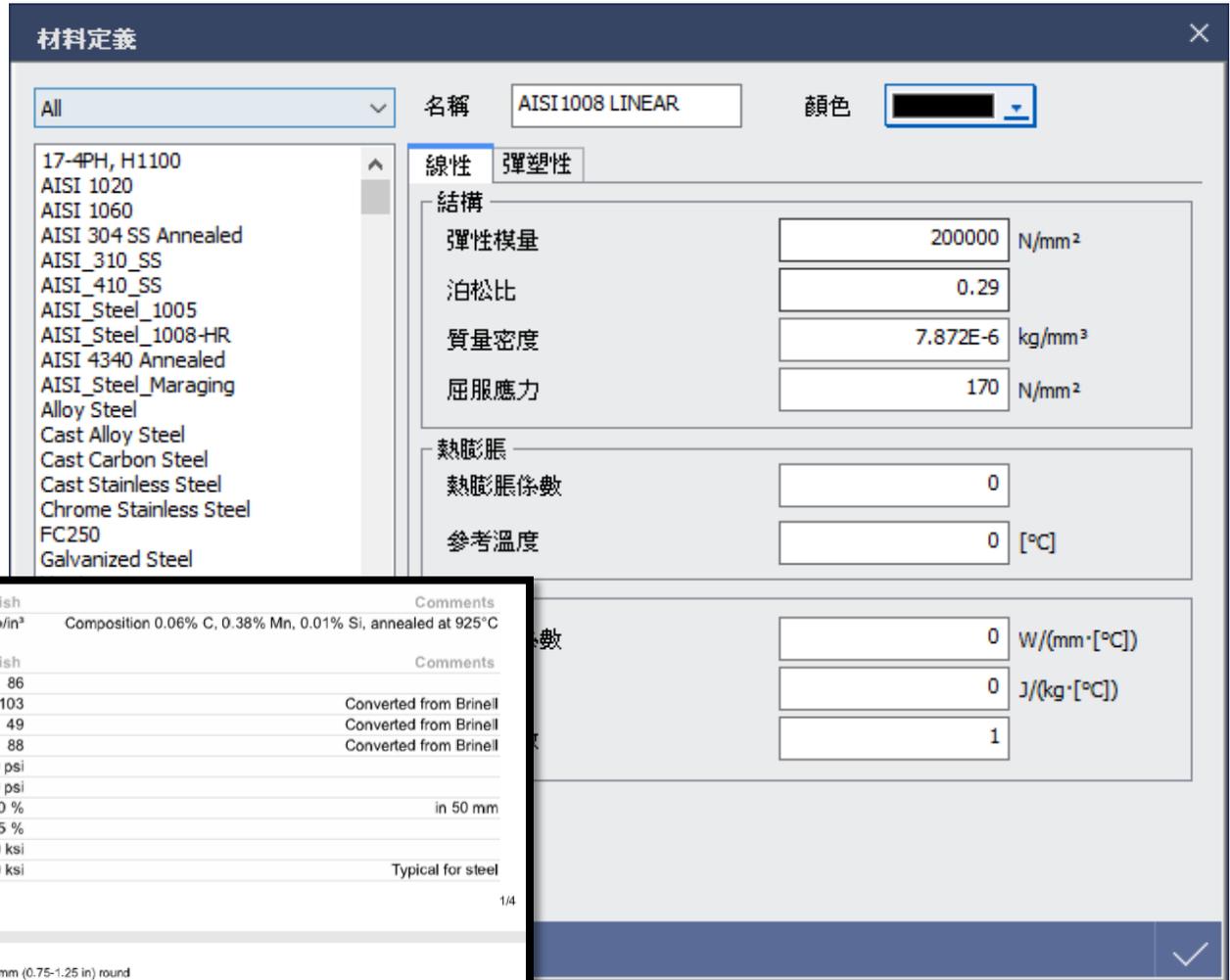
Step2.選擇匯入檔案

MeshFree支援各類CAD 格式

Parasolid (9 - 29) Files (*.x_t;*.xmt_txt;*.x_b;*.xmt_bin)
 ACIS (R1 - 2017 1.0) Files (*.sat;*.sab;*.asat;*.asab)
 STEP (AP203, AP214, AP242) Files (*.stp;*.step)
 IGES (Up to 5.3) Files (*.igs;*.iges)
 Pro-E (16 - Cren 3.0) Files (*.prt;*.prt.*;*.asm;*.asm.*)
 CATIA V4 (CATIA 4.1.9 - 4.2.4) Files (*.model;*.exp;*.session)
 CATIA V5 (V5R8 - V5-6R2016) Files (*.CATPart;*.CATProduct)
 Solid Works (98 - 2017) Files (*.sldprt;*.sldasm)
 Unigraphics (11 - NX11) Files (*.prt)
 Inventor Part (V6 - V2017) Files (*.ipt)
 Inventor Assembly (V11 - V2017) Files (*.iam)
 Solid Edge (V18 - ST9) Files (*.par;*.asm;*.psm)



新增材料(AISI 1008)



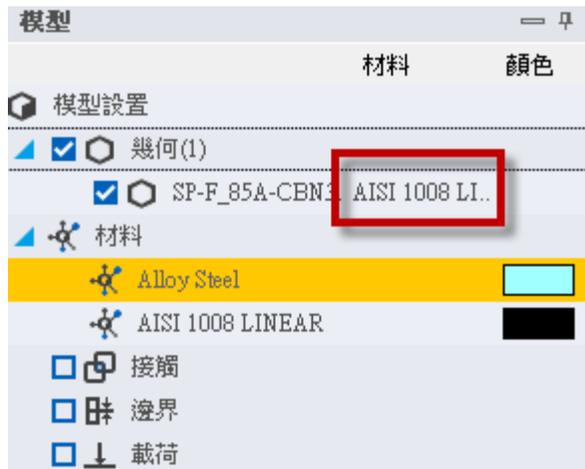
Physical Properties	Metric	English	Comments
Density	7.872 g/cc	0.2844 lb/in ³	Composition 0.06% C, 0.38% Mn, 0.01% Si, annealed at 925°C
Mechanical Properties	Metric	English	Comments
Hardness, Brinell	86	86	
Hardness, Knoop	103	103	Converted from Brinell
Hardness, Rockwell B	49	49	Converted from Brinell
Hardness, Vickers	88	88	Converted from Brinell
Tensile Strength, Ultimate	305 MPa	44200 psi	
Tensile Strength, Yield	170 MPa	24700 psi	
Elongation at Break	30 %	30 %	in 50 mm
Reduction of Area	55 %	55 %	
Modulus of Elasticity	200 GPa	29000 ksi	
Bulk Modulus	160 GPa	23200 ksi	Typical for steel

2018/12/26 AISI 1008 Steel, hot rolled bar, 19-32 mm (0.75-1.25 in) round
 Poissons Ratio 0.29 0.29 Typical For Steel

AISI 1008材料係數_參考 www.matweb.com



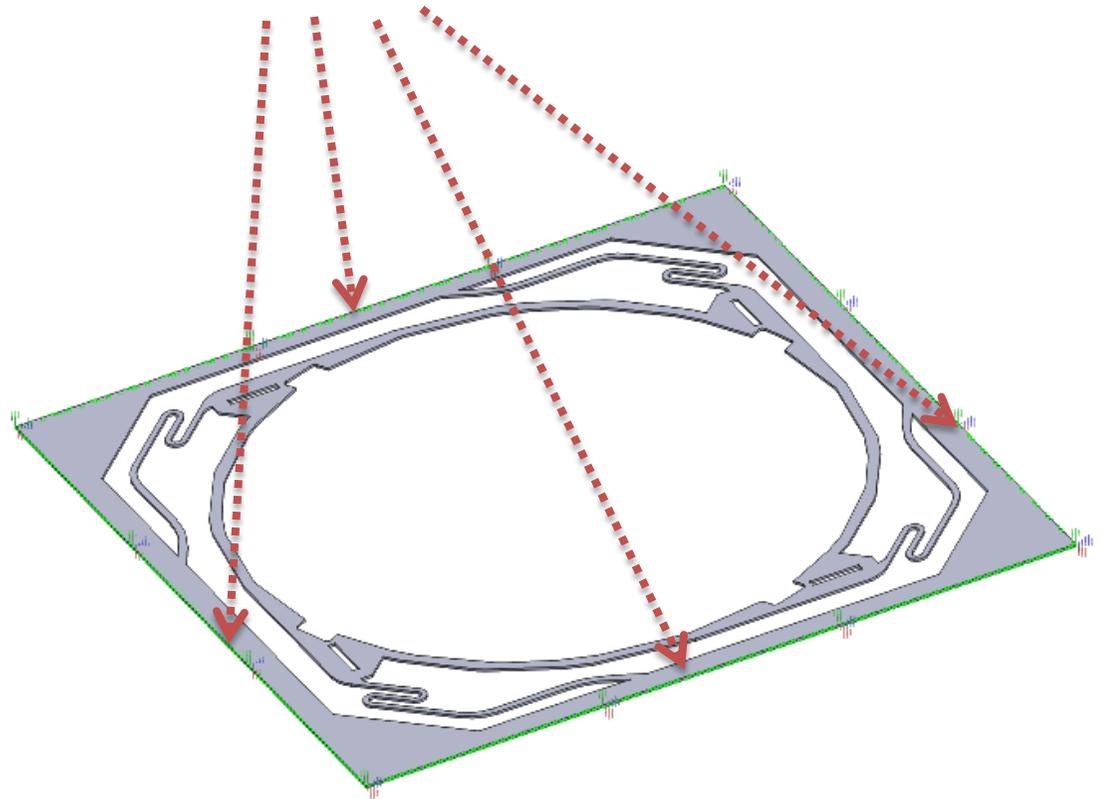
滑鼠右鍵,材料定義



模型樹會顯示指定的材料

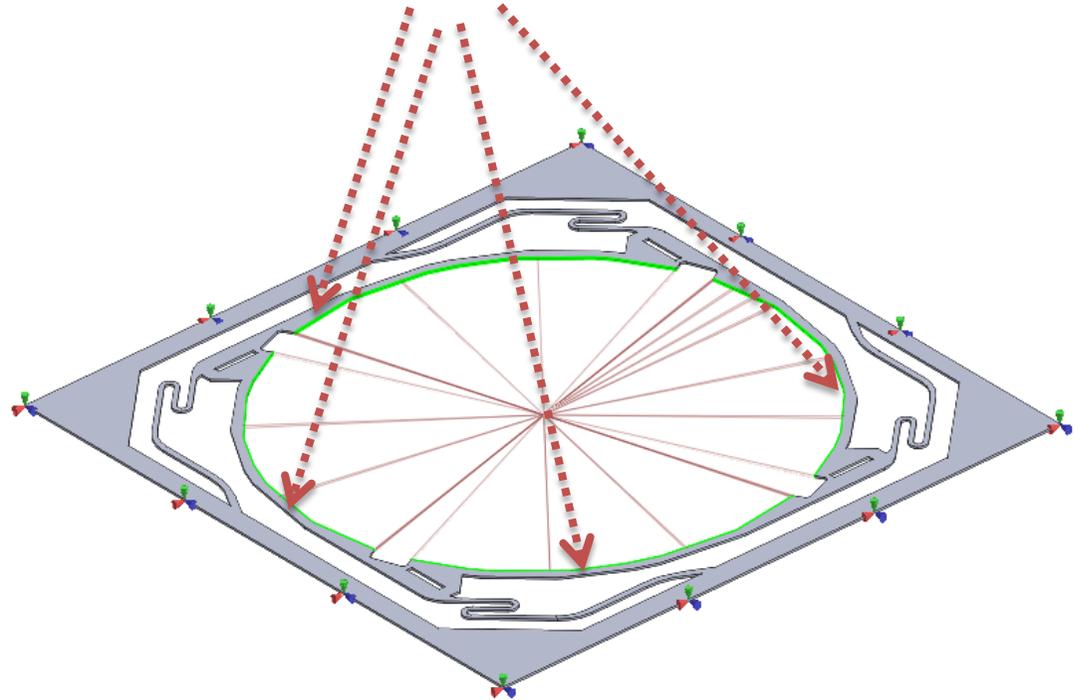


選取四周特徵拘束





選取孔內徑特徵



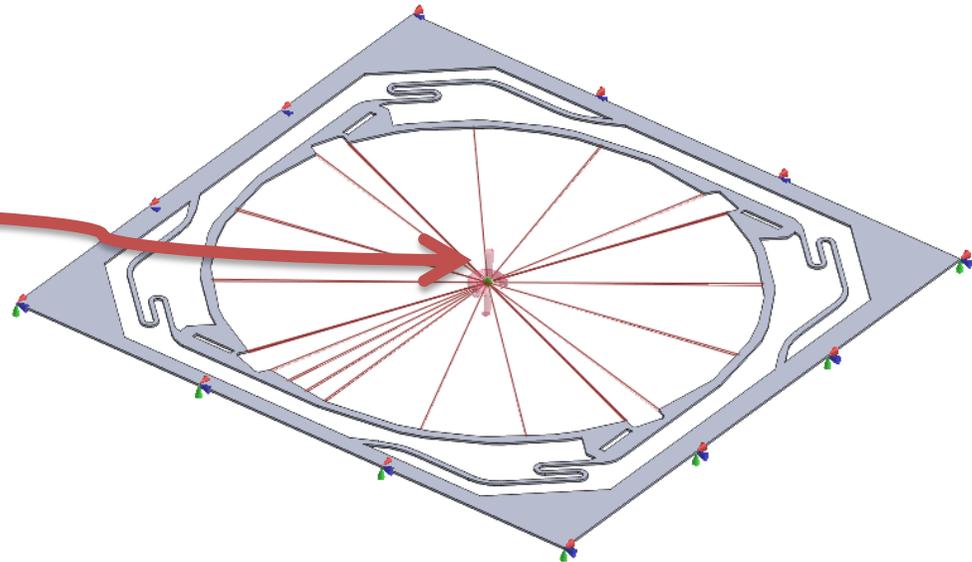


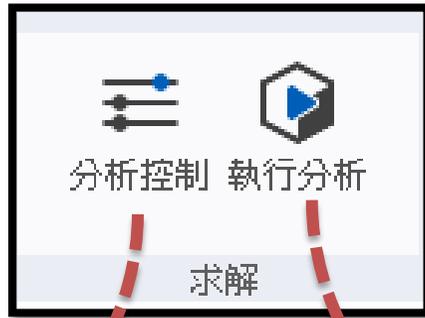
載荷



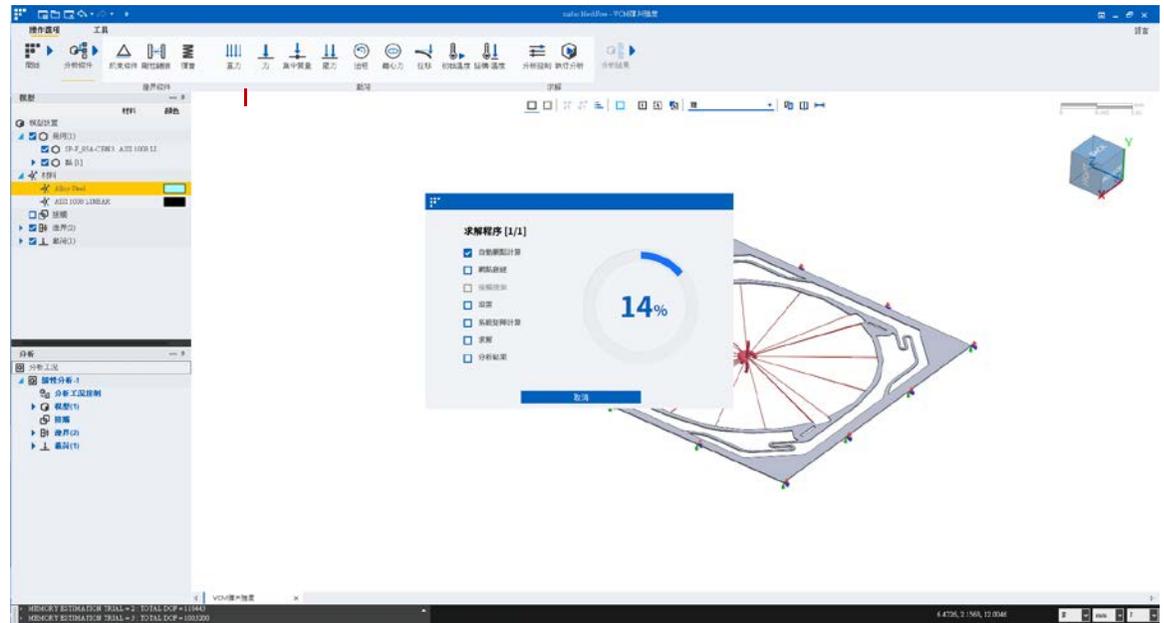
施加 bending moment

施加剛體中心點





記憶體大小
1.計算速度
2.分析準確性



分析時間14sec
(採2G Ram)

```
> MAXIMUM TRANSLATION : -4.0680E-002(T3:578878), MAXIMUM ROTATION : 9.6119E-003(R2:1)
> ANALYSIS WALL CLOCK TIME : 9.344 sec
> ANALYSIS COMPLETED
>
> [SYSTEM INFO]
> NUMBER OF THREADS : 8
> MAXIMUM MEMORY USAGE : 1829 MB
> AVAILABLE MEMORY : 12568 MB
> TOTAL CPU TIME : 55.499 sec
> WALL CLOCK TIME : 14.042 sec
> TOTAL WARNINGS : 0
>
```

VCM彈片強度

分析類型 靜態分析 1
結果 DISPLACEMENT-YZ

